

Status Codes



3174 Establishment Controller

GA27-3832-08

Status Codes

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Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page vii.

Ninth Edition (June 1994)

This major revision obsoletes and replaces GA27-3832-07. This edition applies Configuration Support C Release 5, and later Configuration Support C releases and modifications until otherwise indicated in new editions.

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Contents

| | |
|---|------|
| Notices | vii |
| Special Notices | vii |
| | |
| Preface | ix |
| Who Should Use This Manual | ix |
| How to Use This Manual | ix |
| Choosing the Right Book from the 3174 Library | x |
| Other Related Publications | xii |
| | |
| What Is New in This Book | xiii |
| | |
| Chapter 1. 3174 Status Codes | 1-1 |
| Status Code Description | 1-1 |
| How to Use the Status Code Chart | 1-2 |
| How to Display Status Codes | 1-4 |
| 3174 Status Code Chart | 1-5 |
| | |
| Chapter 2. Status Code Reference Information | 2-1 |
| Alt 1 IML Procedure | 2-1 |
| Alt 2 IML Procedures for Testing the 3174 | 2-3 |
| Procedure A – Testing the 3174 | 2-3 |
| Procedure B – Testing the 3174 | 2-3 |
| Bootstrap Write Procedure | 2-4 |
| Fixed Disk Media Tests | 2-5 |
| Restore Data List | 2-6 |
| Fixed Disk Full Format | 2-9 |
| Restoring Your Data | 2-10 |
| How to Load the Test Monitor | 2-12 |
| Loading the Test Monitor from Diskette Drive 1 | 2-12 |
| Loading the Test Monitor from Diskette Drive 2 | 2-12 |
| Loading the Test Monitor from Fixed Disk | 2-13 |
| Status Code 399–21 Failure | 2-14 |
| Type Numbers | 2-15 |
| Hardware Group Numbers | 2-18 |
| Microcode Level Support | 2-19 |
| X.25 Cause and Diagnostic Codes | 2-21 |
| Diagnostic Codes from the DCE | 2-24 |
| SNA Diagnostic Codes from the DTE | 2-25 |
| ISO Diagnostic Codes from the DTE | 2-28 |
| Diagnostic Code Modifiers | 2-30 |
| X.21 Error Completion Modifier Bits | 2-31 |
| Call Progress Signal Code | 2-32 |
| Possible Data Chain Errors | 2-33 |
| Port Control Area Bit Definitions | 2-34 |
| Communication Adapter Cable Part Numbers | 2-35 |
| Token-Ring Status Codes | 2-36 |
| LAN Return Codes | 2-37 |
| Link States | 2-40 |
| SNA Sense Codes | 2-41 |
| DFT Device Program Error Codes | 2-67 |

Glossary of Terms and Abbreviations X-1

Tables

| | | |
|-------|--|------|
| 2-1. | Alt 1 IML Selection Parameters | 2-2 |
| 2-2. | Recovering Fixed Disk Subdirectories | 2-7 |
| 2-3. | 3174 Type Numbers | 2-15 |
| 2-4. | Features Supported by Microcode Support Level | 2-19 |
| 2-5. | X.25 Cause Codes Received from the DCE (Clear Request Packet) | 2-21 |
| 2-6. | Cause Codes Received from the DCE (Reset Request Packet) | 2-22 |
| 2-7. | Cause Codes Received from the DCE (Restart Request Packet) | 2-22 |
| 2-8. | Cause Codes Sent by the 3174 (Clear, Reset, and Restart Indication Packets) | 2-22 |
| 2-9. | Table Directory for Clears (when a virtual call has not been established) and Restarts | 2-23 |
| 2-10. | Table Directory for Clears (when a virtual call has been established) and Resets | 2-23 |
| 2-11. | Diagnostic Code Fields Received from DCE | 2-24 |
| 2-12. | Diagnostic Code Fields Generated by IBM (SNA) DTE | 2-25 |
| 2-13. | ISO Diagnostic Code Fields from the DTE | 2-28 |
| 2-14. | X.25 Diagnostic Code Modifiers | 2-30 |
| 2-15. | Error Completion Modifier Bits | 2-31 |
| 2-16. | Call Progress Signal Code | 2-32 |
| 2-17. | Port Control Area Bit Definitions | 2-34 |
| 2-18. | Communication Adapter Part Numbers | 2-35 |
| 2-19. | Token-Ring Status Codes | 2-36 |
| 2-20. | Common Return Codes | 2-37 |
| 2-21. | Transmit and Receive Return Codes | 2-38 |
| 2-22. | Direct Interface Return Codes | 2-38 |
| 2-23. | DLC/IEEE 802.2 Interface Return Codes | 2-39 |
| 2-24. | Link Primary and Secondary States | 2-40 |
| 2-25. | Program Error Codes | 2-67 |

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Notice to 8250 Workstation Networking Module Users

The 8250 Workstation Networking Module (8250/8260 Feature Code 3174) provides 3174 functions and connectivity for both the 8250 and the 8260 Multiprotocol Intelligent Hubs. In the context of this manual, the 8250 WNM is functionally equivalent to 3174 Models 21R or 23R. Refer to the *Token-Ring Workstation Networking Module Installation and Customization Guide*, GA27-4002 or the *Token-Ring Workstation Networking Module Problem Determination and Service Guide*, SY27-0342 for any exceptions and detailed information.

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Preface

Chapter 1 provides descriptions and recovery actions for 3174 status codes.

Chapter 2 provides reference information that defines some of the additional fields in the status codes. It also provides some of the commonly used procedures, such as Alt 2 IML, Fixed Disk Media Tests, Fixed Disk Full Format, and Restoring Your Data.

Who Should Use This Manual

This manual is for anyone who needs to determine what a 3174 status code means and how to recover from a particular problem.

How to Use This Manual

Customers

Use the first part of Chapter 1 to learn how to use the status code chart. The first part explains the format of the status codes, how to display the status codes, and some of the commonly used abbreviations in the status codes.

Most of Chapter 1 is devoted to the status codes themselves. When you locate a particular status code, you will find a description of the code and a list of actions. Perform the actions one at a time until you find the statement "**For Service Personnel Only.**" The actions following this statement are intended for trained service personnel only.

Chapter 2 contains reference information that you may need. This information is provided to support the status code chart and you will be directed to this information from the status code chart. This chapter is included to minimize the number of times you might need to go to another manual.

Service personnel

All of the statements about the status codes stated above apply. It is recommended that you verify that the customer has performed customer actions, and find out the results. For example, sometimes the customer is directed to do an Alt 2 IML. Find out whether the Alt 2 was successful. This will save you time because you will not be repeating activities the customer has already performed. For status codes that have the statement "**For Service Personnel Only,**" continue with the remainder of the actions listed. If you complete all of the actions and the controller is still failing, you should contact your next level of support.

Choosing the Right Book from the 3174 Library

The 3174 library contains information for installing, customizing, operating, maintaining, and programming the data stream for the 3174 controller. The following list shows the IBM manuals you need to perform these tasks.

To Find Translations of Safety Notices:

Safety Notices, GA27-3824

To Organize Library Materials:

Binders and Inserts, SBOF-0089

Binder, SX23-0331

Inserts, SX23-0332

To Become Familiar with the 3174:

Master Index, GC30-3515

3174 Introduction, GA27-3850

To Prepare Your Site for the 3174:

Site Planning, GA23-0213

Physical Planning Template, GX27-2999

To Set Up and Operate the 3174:

Models 1L, 1R, 2R, 3R, 11L, 11R, 12L, 12R, 13R and 14R User's Guide, GA23-0337

Models 21H, 21L, 21R, 22L, 22R, 23R, and 24R User's Guide, GA27-3874

Models 51R, 52R, 53R, 61R, 62R, 63R, and 64R User's Guide, GA23-0333

Models 81R, 82R, 90R, 91R, and 92R User's Guide, GA23-0313

To Plan for and Customize the 3174:

Configuration Support A and S

Planning Guide, GA27-3844

Utilities Guide, GA27-3853

Central Site Customizing User's Guide, GA23-0342

ASCII Functions Reference, GA27-3872

Configuration Support B

Planning Guide, GA27-3862

Model 90R Tokenway Planning, GD21-0036

Utilities Guide, GA27-3863

Central Site Customizing User's Guide, GA27-3868

ASCII Functions Reference, GA27-3872

| Configuration Support C

- | *Planning Guide*, GA27-3918
- | *Utilities Guide*, GA27-3920
- | *Central Site Customizing User's Guide*, GA27-3919
- | *ASCII Functions Reference*, GA27-3872

| **To Perform Problem Determination:**

- | *Customer Problem Determination*, GA23-0217
- | *Status Codes*, GA27-3832

| **To Install Features or Convert Models on the 3174:**

- | *Fixed Disk Installation and Removal Instructions*, GA27-3864
- | *Diskette Drive Installation and Removal Instructions*, GA23-0263
- | *Device Control Adapters Installation and Removal Instructions*, GA23-0265
- | *Model Conversion Instructions*, GA23-0295
- | *Token-Ring Network Feature and Ethernet Network Feature Installation and Removal Instructions*, GA23-0329
- | *Storage Expansion Feature Installation and Removal Instructions*, GA23-0330
- | *Communication Adapter Installation and Removal Instructions*, GA27-3830
- | *Asynchronous Emulation Adapter Installation and Removal Instructions*, GA23-0341
- | *Concurrent Communication Adapter and Integrated Services Digital Network Adapter Installation and Removal Instructions*, GA27-3851
- | *Models 21H, 21L, 21R, 22L, 22R, 23R, and 24R Feature Installation and Removal Instructions*, GA27-3875

| **To Use the Asynchronous Emulation Adapter Feature:**

- | *ASCII Functions Reference*, GA27-3872
- | *Terminal User's Reference for Expanded Functions*, GA23-0332

| **To Use the Multiple Logical Terminals Function:**

- | *Terminal User's Reference for Expanded Functions*, GA23-0332

| **To Obtain Data Stream Programming and Reference Information:**

- | *Functional Description*, GA23-0218
- | *Data Stream Programmer's Reference*, GA23-0059
- | *ASCII Functions Reference*, GA27-3872
- | *3174 Reference Summary*, GX27-3872
- | *3174 Character Set Reference*, GA27-3831
- | *3270 X.25 Operation*, GA23-0204

| **To Perform Maintenance (Service Personnel):**

- | *Models 1L, 1R, 2R, 3R, 11L, 11R, 12L, 12R, 13R, and 14R Maintenance Information*, SY27-2572
- | *Models 21H, 21L, 21R, 22L, 22R, 23R, and 24R Maintenance Information*, SY27-0323
- | *Models 51R, 52R, 53R, 61R, 62R, 63R, and 64R Maintenance Information*, SY27-2573
- | *Models 81R, 82R, 90R, 91R, and 92R Maintenance Information*, SY27-2584
- | *CE Reference Summary*, SX27-3873
- | *Status Codes*, GA27-3832

| **To Install, Customize, and Service the 8250 Workstation Networking Module**

- | *8250 Workstation Networking Module Installation and Customization Guide*, GA27-4022
- | *3174 Planning Guide - Configuration Support C*, GA27-3918

| *Utilities Guide - Configuration Support C*, GA27-3920

| *8250 Workstation Networking Module Problem Determination and Service Guide*, SY27-0342

| **Other Related Publications**

| The following publications are available for the 3174. They are developed by the International Technical Support Center. The intended audience for these books are IBM System Engineers and Customer Network Planners.

| *Installation Guidelines for IBM Token-Ring Network Products*, GG24-3291

| *3174 Establishment Controller Installation Guide*, GG24-3061

| *3174 Establishment Controller APPN Implementation Guide*, GG24-3702

| *APPN Architecture and Product Implementations Tutorial*, GG24-3669

| *NetView Distribution Manager Release 2 and 3174 Central Site Change Management Implementation Guide*, GG24-3424

| *3174 CECP Migration Issues*, GG24-3380

| *3174 Workstation Peer Communication Support Program User's Guide*, available with the 3174-WPCSP, P/N 96X5677

| The following books may also be useful when working with a 3174 or its attached network.

| *ES Connection Fault Isolation*, SY22-9533

| *Cabling System Planning and Installation Guide*, GA27-3361

| *ESCON Cable Connector Cleaning Procedures*, SY27-2604

| *Token-Ring Network Problem Determination Guide*, SX27-3710

| *NetView Operations*, SC31-6019

| *3299 Terminal Multiplexer Product Information and Setup*, G520-4216

| *3299 Model 32 Planning for Optical Fiber Cable*, GA27-3902

| *Local Area Network Technical Reference*, SC30-3383

| *Token-Ring Network Architecture Reference*, SC30-3374

| *Local Area Network Administrator's Guide*, GA27-3748

| *Token-Ring Network Installation Guide*, GA27-3678

| *Token-Ring Network Bridge Program*,

| Version 1.1 available with P/N 83X8880

| Versions 2.0 and 2.1 available with P/N 16F0493

| Version 2.2 available with P/N 53F7724.

| *TCP/IP Tutorial & Technical Overview*, GG24-3376

| *SNA – APPN Architecture Reference*, SC30-3422

| *SNA Formats*, GA27-3136

What Is New in This Book

| This edition includes support of Configuration Support A Release 5, Configuration Support S Release 5, Configuration Support B Release 4, and Configuration Support C Release 5.

| This edition adds additional status code information for:

- | • Advanced Peer-to-Peer Networking* (APPN*) enhancements
- | • Frame Relay Communications
- | • Ethernet support
- | • Customization code support
- | • 8250 Workstation Networking Module (WNM) support
- | • Miscellaneous enhancements

Chapter 1. 3174 Status Codes

Status codes help you identify and locate a failing subsystem component. Status codes may appear in the Status display on the 3174 operator panel, in the 3174 event log, on attached terminals, or in all three. To display and use the event log, see Test 1 in the online test section of the *IBM 3174 Customer Problem Determination Guide* or 3174 maintenance manuals. Some status codes in the range 2%% through 890 are sent to the host in an alert.

Status Code Description

The base status code is 1 to 4 characters. It is the first number that is displayed in the Status display, in the event log, or on the terminal. The base status code is the number in the first column of the Status Code Chart.

The base status code may have additional numbers following it; you can display these additional numbers at the operator panel by pressing Advance.

Some status codes are normal progress status codes or completion messages. If a progress status code remains in the display more than 30 seconds, the code indicates an error.

The base status code and the associated additional numbers identify the type of problem and its source.

Status codes 2%% through 890 have information stating whether or not *alerts* have been sent to the host. Alerts are high-priority notifications that warrant immediate attention and are directed to the NetView* program operator. Alerts fall into five categories:

Permanent errors disable a device or cause the loss of a critical resource.

Temporary errors are recoverable with some loss of productivity and cause the loss of a non-critical resource.

Performance errors exceed a predetermined threshold but do not disable a device.

Delayed errors report an alert condition that prevented the alert sender from sending that alert to the focal point. Sending a delayed alert indicates that the alert condition it reports no longer affects availability.

Operator Intervention Required indicates an error, such as an installation problem, that requires an operator to correct it.

For more information about specific alerts, refer to *3174 Functional Description*.

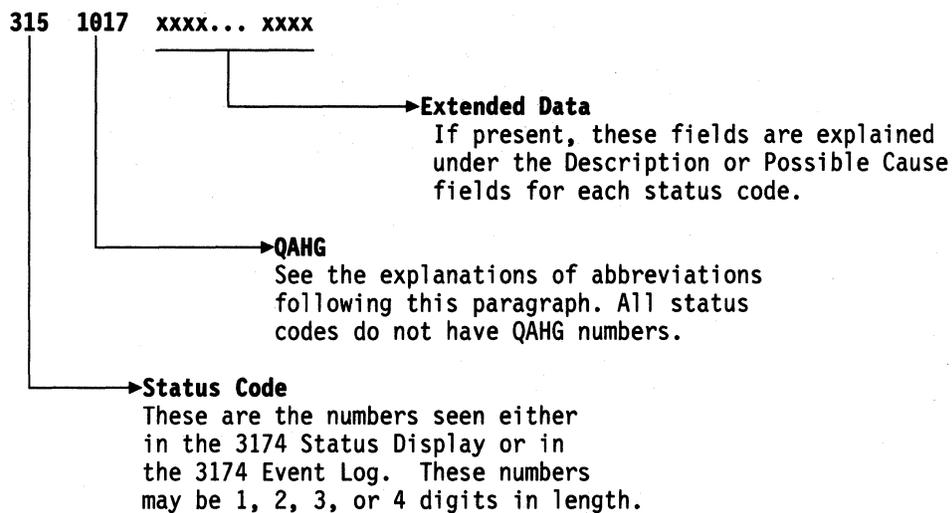
How to Use the Status Code Chart

Customers

To use the Status Code Chart:

1. The base status code, qualifier (QA), hardware group (HG), and extended data (or additional fields) are shown on the first line of each status code entry in Status Code Charts that follow in this chapter.

For example:



In the Status Code Charts, *x* represents any number from 0 to 9.

2. Read the **Description** and **Possible Cause**. Do the first recommended action listed under **User Action**. If that does not solve the problem, do the next action. Continue in this way until you solve the problem or are told to request assistance or service.
3. When requesting service, be sure to give the base status code, QAHG number, and any additional numbers to the service personnel.

The Status Code Chart uses some abbreviations that you need to know.

- QA** Qualifier—A 2-digit number that immediately follows many of the base status codes. The base status code and the qualifier are both needed to identify a subsystem problem.
- HG** Hardware Group—A 2-digit number that follows the qualifier (QA) and represents a functional area of the controller. For example, a hardware group number 01 indicates *diskette drive 1*. A list of the hardware groups is shown in Figure 2-2 on page 2-18.
- B1B2...** Byte 1, Byte 2, and so on, of Extended Data field.
- LOCA** Location of the replaceable part (01 to 63).
- TYPE** Type number of the card. For example, 9154 is a type number of the File/Terminal Adapter. See Table 2-3 on page 2-15.
- Re-IML** To make the controller operational by pressing the IML (initial microcode¹ load) push button, or to obtain the 40 prompt by performing an ALT 1 IML.

Service Personnel

All of the statements about status codes stated previously apply. It is recommended that you verify that the customer has performed these actions and find out the results. For example, sometimes the customer is directed to perform an ALT 2 IML. Find out whether the ALT 2 completed successfully with 2082 displayed. This will save you time because you will not be repeating activities the customer has already performed. For status codes that have the **Service Actions**, do the first recommended action listed. If that does not solve the problem, do the next action. Continue in this way until you solve the problem or complete all the service actions. If you have completed all of the actions and the controller is still failing, contact the next level of your support.

| 8250 Workstation Networking Module Users

- | In this manual, the field replaceable unit (FRU) is identified for replacement purposes. If you are using
- | this manual with the 8250 Workstation Networking Module (WNM), the entire module must be replaced.

¹ Microcode may be classified as IBM Licensed Internal Code. See the "3174 Licensed Internal Code" notice at the beginning of this document for information.

How to Display Status Codes

You can display a status code under these conditions:

- When the status display is blank.
- When a status code is already displayed.
- When a status code is blinking or sequencing. (While sequencing, up to 10 codes are displayed, one at a time, followed by a blank. After the blank, the sequence begins again.)

The following sections show you how to display status codes under each condition.

Note: The procedures described in these sections should not be used if the status display contains non-numeric characters. Always request service for the controller when non-numeric characters are displayed.

1. Observe the initial condition of the Status display, and match it to one of the following conditions (**A**, **B**, or **C**).
2. Do the associated action for that condition.
3. Record the status codes as you move through the procedure; you will need the full status code (base status code and additional numbers) when you look up the status code in the Status Code Chart.
4. Find the status code by numeric order in the Status Code Chart. See page 1-5.

Condition A (The Status Display is blank):

1. Press **Enter**.
2. If a single status code is displayed, follow the procedure for Condition B.
3. If status codes are blinking or sequencing, follow the procedure for Condition C.

Condition B (A single status code is displayed):

1. Press **Advance**.
2. Additional numbers are displayed or the same status code remains displayed, indicating there are no additional numbers.
3. If additional numbers are displayed, continue pressing **Advance** until the status display is blank. This indicates the end of the status code.
4. Press **Advance** again. If another blank is displayed, there is only one status code. If numbers appear, this is the beginning of the next status code. Repeat this procedure from Step 1.

Note: After two blank displays appear, you can redisplay the status codes by pressing **Advance**.

Condition C (The Status Display is blinking):

1. Press **Advance**.
2. The status display stops on one code.
3. Press **Advance** to display any additional numbers. Repeat this step until the status display is blank. The blank indicates the end of this status code.
4. Press **Enter** to display the other status codes. The status display begins sequencing again. Press **Advance** when you want to stop on a particular status code, and repeat Step 3 to display the complete status code, and then repeat this step to display any other status code.

3174 Status Code Chart

XXXX

Description: Status code is not in the chart, or the status code contains characters other than numbers.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only: Refer to MAP 0110 in the maintenance manual for your model.

1 01HG B1B2 B3B4 B5B6 B7B8

Description: An operational IML has been started.

B1 = xy

x = Storage option.

x=0 = Storage Initialization was requested.

x=1 = Storage Initialization was not requested.

y = The IML drive number.

y=0 = The controller was IMLed, allowing it to default to whatever drive was ready with the Control diskette.

y=1,2,3, or 4 = The drive number selected during an ALT IML.

B2 = The type of IML where:

41 = Normal IML.

42 = Backup level IML.

43 = Trial level IML.

If present, B3 through B8 is:

B3 = Microcode Configuration level.

B4 = Microcode Release level.

B5 = Microcode Suffix level.

B6-B8 = Microcode Maintenance level.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

2

Description: 3174 hardware failure during an IML.

Possible Cause: Processor

User Action:

1. Re-IML.

2. Request service.

For Service Personnel Only:

For Models 51R through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5

Description: One of the cooling fans is failing.

Possible Cause: N/A

User Action: Request service and report that a fan is failing.

For Service Personnel Only: Replace the fan that is failing. Refer to Chapter 3 in the maintenance manual for your model.

Description: 3174 hardware failure during an IML.

Possible Cause:

- Storage card defective or missing
- 1-MB storage card in first position
- Total storage exceeds 6 MB
- FRU ID problem
- Planar board defective

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

1. Check location J22 for a 1-MB storage card (Type 9486):
 - If there is a 1-MB storage card in J22 and no storage card in J23 or a 1-MB storage card in both J22 and J23, contact your IBM representative to obtain the 2-MB storage card.
 - If there is a 1-MB storage card in J22 and a 2-MB storage card (Type 9482) in J23, interchange the two cards and retry the operation.
2. Exchange the storage card in location J22.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

10 or 11

Description: 3174 IML progress message. If the Check Cond indicator is on, a failure has occurred.

Possible Cause:

- Storage
- Planar board

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

1. Exchange the storage card in location J22.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

12 or 13

Description: 3174 IML progress message. If the Check Cond indicator is on, a failure has occurred.

Possible Cause:

- Storage
- Planar board

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

1. Exchange the storage card in location J23.
2. Exchange the storage card in location J22.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

14 or 15

Description: 3174 IML progress message. If the Check Cond indicator is on, a failure has occurred.

Possible Cause:

- Storage
- Planar board

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

1. Exchange the storage card in location J23.
2. Exchange the storage card in location J22.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

31

Description: 3174 Alternate IML progress message unless this code remains displayed.

Possible Cause:

- ALT 1 or ALT 2 key held down
- Processor
- Operator panel adapter card (Models 1L through 14R only)
- Operator panel
- Storage card plugged in wrong slot location for Models 1XR and 1XL

User Action:

1. Verify that the ALT 1 or ALT 2 key is not stuck down on the operator panel.
2. Request service.
3. Verify the storage card location.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange the operator panel adapter card in location 05.
3. Exchange the operator panel.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange the operator panel.

Refer to Chapter 3 in the maintenance manual for your model.

36

Description: 3174 hardware failure during an IML.

Possible Cause: Planar Board

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Description: An ALT 1 IML prompt message. This is a request for additional input.

From this prompt you can enter requests to:

- Customize
- Run offline tests
- Perform alternate IMLs.

Possible Cause: N/A

User Action: Perform the action indicated by the procedure being used.

- For customizing procedures, refer to "How to Display the Master Menu" in the *3174 Utilities Guide*.
- For running offline tests, refer to "Diagnostic Aids: Offline Tests" in the *3174 Customer Problem Determination Guide*.
- For Alternate IMLs, see Chapter 2 in this book

For Service Personnel Only: No action is required.

Description: 3174 IML progress message. If this status code is displayed longer than 30 seconds, a failure has occurred.

Possible Cause: Processor

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Description: 3174 hardware failure during an IML.

Possible Cause:

- Processor
- Storage
- Logic board (Models 1L through 14R)

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Use the following steps or refer to MAP 0500 in the maintenance manual.

1. Exchange FRU type 905x in location 19.
2. Exchange FRU type 905x in location 20.
3. Exchange FRU type 905x in location 17.
4. Exchange FRU type 950x in location 18.
5. Exchange the logic board.

For Models 21H, 21L, 21R, 22L, 23R, 61R, 62R, 63R and 64R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

For Models 51R through 53R:

1. If present, exchange FRU Type 905X in location 05.
2. Exchange the planar board.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the storage card in location J22.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

57 to 61

Description: 3174 IML progress message. If this status code remains displayed longer than 30 seconds, a storage test has failed.

Possible Cause:

- Storage
- Processor

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Use the following steps or refer to MAP 0500 in the maintenance manual.
2. Exchange FRU type 905x in location 19.
3. Exchange FRU type 950x in location 18.

For Models 21H, 21L, 21R, 22L, 23R, 61R, 62R, 63R and 64R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

For Models 51R through 53R:

1. If present, exchange FRU Type 905X in location 05.
2. Exchange the planar board.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the storage card in location J22.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

77

Description: 3174 hardware failure.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Description: Machine check while using the operator panel keypad.

Possible Cause: Processor

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Description: An incorrect operator panel key was pressed in response to the ALT 1 IML 40 prompt.

Possible Cause:

- Wrong key was pressed
- Operator panel adapter
- Defective operator panel

User Action:

1. Re-IML, and retry the procedure.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the operator panel adapter card in location 05.
2. Exchange the operator panel in location 06.

For Models 21H through 92R:

1. Exchange the operator panel.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Description: IML progress message. This is a failure if the Check Cond indicator is on or if the status code is displayed longer than 30 seconds.

Possible Cause:

- Processor
- File adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

102

Description: IML in progress message. Either the ALT 1 power-on IML procedure was performed incorrectly, or an unrecoverable machine check occurred.

Possible Cause: Processor

User Action:

1. Perform an ALT 1 IML again; see page 2-1.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

103

Description: A 3174 hardware failure has occurred.

Possible Cause:

- File adapter
- Processor
- PIO adapter cards
- Logic board (Models 1L through 14R)

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Use the following steps or refer to MAP 0410 in the maintenance manual.

1. Exchange FRU type 950x in location 18.
2. Exchange the PIO adapter cards in locations 21, 22, 23, and 24 one at a time.
3. Exchange the logic board.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

104

Description: 3174 hardware failure has occurred.

Possible Cause:

- Processor
- PIO adapter cards
- Logic board (Models 1L through 14R)

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Use the following steps or refer to MAP 0410 in the maintenance manual.

1. Exchange FRU type 950x in location 18.
2. Exchange the PIO adapter cards in locations 21, 22, 23, and 24 one at a time.
3. Exchange the logic board.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

105

Description: A 3174 hardware failure has occurred.

Possible Cause: File adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the file adapter in location 21.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

108 or 109

Description: The 3174 is waiting for a hard disk drive to become ready.

This code is an error if the Check Cond indicator is on.

Note: 108 and 109 alternate up to 30 seconds until the hard disk becomes ready.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 64R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

111 to 114

Description: Selection of a hard disk is in progress.

This code is an error if the Check Cond indicator is on.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 64R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

117 01HG

Description: A failure has occurred during an ALT 1 IML.

Possible Cause:

- Disk media
- Diskette drive
- Diskette drive not ready
- File Adapter
- Fixed disk drive
- Processor

User Action: For diskette drives (HG=01 or 02):

1. Install a backup diskette and re-IML.
2. Request service.

For hard disk drives (HG=03 or 04):

1. Re-IML.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

120 01HG

Description: Control or Utility microcode was not found during an IML.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause: N/A

User Action: For diskette drives (HG = 01 or 02):

1. Insert the correct diskette then retry the operation.
 - For an operational IML, insert a customized Control diskette.
 - For customizing or tests, insert a Utility diskette.
2. Request service.

For hard disk drives (HG = 03 or 04):

1. Copy the Control and Utility diskettes to the hard disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

121 01HG

Description: A diskette drive "not ready" condition was found during an IML.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause:

- Diskette not present
- Diskette drive
- File adapter
- Logic board (Models 1L through 14R)

User Action:

1. Be sure the correct diskette is in the diskette drive indicated by the hardware group number and the drive door is closed.
2. Re-IML.
3. Request service.

For Service Personnel Only:

1. Perform the diskette drive ready test (FN 01) on the diskette drive indicated by the hardware group number. Refer to "How to Run Diskette Drive Optional Tests" in the maintenance manual for your model.
2. For Models 1L through 14R, exchange the logic board.

122 01HG

Description: A hard disk drive is not formatted.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause:

- Fixed disk drive is not formatted
- Defective hard disk drive

User Action:

1. Run the "Fixed Disk Full Format" on page 2-9.
2. Re-IML.
3. Request service.

For Service Personnel Only: Exchange the hard disk indicated by the HG number.

123 01HG

Description: A file adapter failure occurred during an IML.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause:

- File adapter
- Diskette drive
- Fixed disk

User Action:

For diskette drives (HG = 01 or 02):

1. Re-IML.
2. Request service.

For hard disk failures (HG = 03 or 04):

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the file adapter in location 21.
2. Exchange the drive indicated by the HG number.

For Models 21H through 92R:

1. Exchange the planar board.
 2. Exchange the drive indicated by the HG number.
-

124 01HG

Description: During an IML, a disk media error occurred.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause:

- Diskette
- Diskette drive
- File adapter
- Fixed disk drive

User Action:

For diskette drives (HG = 01 or 02):

1. Exchange the diskette in the drive indicated by the HG number.
2. Re-IML.
3. Request service.

For hard disk drives (HG = 03 or 04):

1. Re-IML.
2. Run the fixed disk media tests. See "Fixed Disk Media Tests" on page 2-5.
3. Re-IML.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the file adapter.
2. Exchange the drive indicated by the HG number.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange the drive indicated by the HG number.

125 01HG

Description: During an IML, a diskette drive or hard disk drive error occurred.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause:

- Diskette drive
- Fixed disk drive

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Exchange the diskette drive or hard disk drive indicated by the HG number.

126 01HG

Description: During an ALT 1 IML, a hard disk not present error occurred.

Note: This status code may appear in the additional fields of status code 130.

Possible Cause: Fixed disk drive

User Action:

1. Verify that you are selecting the correct drive number for your IML device. See "Alt 1 IML Procedure" on page 2-1.
2. Re-IML.
3. Request service.

For Service Personnel Only: If the hard disk drive being used as the IML device is present, exchange the drive. Refer to Chapter 3 of the maintenance manual for your model.

130 HF01 HF02 SF01 SF02

Description: During a normal IML or an ALT 1 normal IML, a Control diskette or a CTL subdirectory on a hard disk was not found. This could be an operator error or a hardware failure.

HF01 = Status code for hard disk 1.

HF02 = Status code for hard disk 2.

SF01 = Status code for diskette drive 1.

SF02 = Status code for diskette drive 2.

Possible Cause:

- File adapter
- Diskette
- Diskette drive
- Fixed disk drive
- Electromagnetic interference (EMI) (applies to table-top models only)

User Action:

1. Perform the actions indicated by the additional fields HF01, HF02, SF01, and SF02. For example, if the status code in SF01 and SF02 is 120, then a Control diskette is not installed in either diskette drive.

Note: If you are using a hard disk as your IML device, verify that a CTL subdirectory exists on the disk. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.

2. Request service.

For Service Personnel Only: Perform an ALT 2 IML; see page 2-3.

Description:

- An ALT 1 IML was attempted with a diskette other than a Control, Utility, or Dump diskette.
- An ALT 1 IML was attempted from a hard disk without a bootstrap loader.

Possible Cause: N/A**User Action:**

For diskette drives (HG = 01 or 02):

1. Insert the correct diskette, and retry the ALT 1 IML; see page 2-1.
2. Request service.

For hard disk drives (HG = 03 or 04):

Go to "Bootstrap Write Procedure" on page 2-4.

For Service Personnel Only: No action is required.

2%% (2EE) 01HG**Description:** The controller is configured for a keyboard language that does not support the keyboard on the attached 3270 terminal.**Note:** 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Permanent.

Possible Cause: N/A**User Action:**

1. If this failure is occurring on 3270 terminals, then disconnect the terminals.
2. If this error is occurring on all 3270-type terminals, the Control disk has to be reconfigured. Refer to question 121 in the *3174 Planning Guide*, and refer to the *3174 Establishment Controller Character Set Reference* to determine which keyboard language supports the attached terminals and keyboards.

For Service Personnel Only: No action is required.

2%% (2EE) 02HG**Description:** An unsupported printer is attached to a Terminal Adapter port that is configured for ASCII emulation. The attached printer is supported by IBM/3270 hosts. The printer can be attached only to a port that is configured for IBM/3270 hosts.**Note:** 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Permanent.

Possible Cause: N/A**User Action:** Either reconfigure the port for IBM/3270 host sessions or attach the printer to a Terminal Adapter port that is not configured for ASCII emulation.To reconfigure the port, refer to the *3174 Planning Guide*.**For Service Personnel Only:** No action is required.

2%% (2EE) 21HG**Description:** A device attached to the controller does not have the required buffer space. The buffer must be a minimum of 1920 bytes.

Unrecoverable error.

Note: 2EE appears in the event log. 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Permanent.

Possible Cause: N/A**User Action:** Disconnect the device with the inadequate buffer space.**For Service Personnel Only:** No action is required.

2%% (2EE) 31HG B1B2**Description:**

For a display:

The controller has not been configured for the attached keyboard, or the attached keyboard is not compatible with the language that is configured.

Unrecoverable error.

For a printer:

Printer reporting that it has an Extended Attribute Buffer when it does not have one.

B1B2 = Keyboard ID.

B1 is byte 08.

B2 is byte 09.

Note: 2EE appears in the event log. 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

If a display:

1. Record the contents of extended data bytes B1 and B2. See "Port Control Area Bit Definitions" in Chapter 2, to determine what the Keyboard ID is.
2. Use online test 2, option 2, to see how the controller is configured. Refer to "Test 2: Configuration Menu" in the *3174 Customer Problem Determination Guide*. Record the answers to the following question numbers:
 - 121 – Specifies keyboard language support
 - 132 – Specifies alternate keyboard support
 - 136 – Specifies modifiable keyboard standard layout
 - 137 – Specifies modifiable keyboard modified layouts
 - 138 – Specifies modifiable keypad standard layout
 - 166 – Specifies use of attribute select keypad.

Refer to the *3174 Planning Guide* and the *3174 Character Set Reference* to determine if you can reconfigure the Control disk to support the keyboard on the failing terminal.

If a printer:

Request service for the printer.

For Service Personnel Only: No action is required.

2%% (2EE) 32HG

Description: Multiple Logical Terminal (MLT) configuration problem. The controller does not have enough storage to support more than one logical unit on this Terminal Adapter port. The change screen function on the attached terminal cannot be used to access another host session.

Note: 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: One of the following actions can be performed to correct the problem:

1. Change the answers to configuration question 117 (Port Assignment Panel). See Note 1.
2. Change the answer to question 110 to a higher number to allocate additional MLT storage. See Note 2.
3. The screen size and characteristics of the terminals attached to the controller can affect the number of logical terminals that can be supported. Refer to question 110: "MLT Configuration Level" in Chapter 6 of the *3174 Planning Guide*. See Note 3.

Notes:

1. The number of logical terminals for more than one port may have to be reduced. Refer to "Planning for Port Assignment" in the *3174 Planning Guide*.
2. Additional storage may be required in the controller to support changing question 110. Refer to "Planning for Controller Storage" in the *3174 Planning Guide*. Contact your IBM representative to obtain the additional storage.
3. On 3180-type terminals the model ID can be changed to a lower number that uses less storage. This may leave storage available to support the logical terminals selected during controller configuration.

For Service Personnel Only: No action is required.

2%% (2EE) 33HG

Description: Country Extended Code Page (CECP) attribute mismatch.

Note: 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Temporary.

Possible Cause: The terminal keyboard is not in native mode.

User Action: Press **Reset** on the terminal. Refer to the terminal documentation to set the terminal keyboard to native mode if you want to use CECP characters.

Note: Depending on the terminal, putting the keyboard in native mode is performed during setup, or by setting switches under the keyboard.

For Service Personnel Only: No action is required.

2%% (2EE) 34HG

Description: An attached 3270 terminal has a Magnetic Stripe Reader feature, but the controller has not been configured to support this feature.

Unrecoverable error.

Note: 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: To use the magnetic stripe reader, the Control disk has to be reconfigured. Refer to question 141 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

2%% (2EE) 35HG

Description: The attached printer is missing a feature that is required to support another feature.

For example, the 3174 is customized for Country Extended Code Page (CECP) and the printer reports that it supports CECP, but does not support APL, does not have an EAB, or does not require translation tables. The printer will default to table 5A only. (Refer to question 123 in the *3174 Planning Guide*.)

Note: 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Temporary.

Possible Cause: Unrecoverable error.

User Action: Request service for the printer.

For Service Personnel Only: The prerequisite feature for the printer is required to support the requested function or the printer hardware is failing.

2%% (2EE) 36HG

Description: Multiple Logical Terminals (MLT) configuration problem. The controller does not have enough storage to support this session. The change screen key can still be used to access other usable host sessions.

Note: 2EE appears in the event log and 2%% appears in the operator information area of the terminal when this error occurs.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: One of the following actions can be performed to correct the problem:

1. Reduce the number of logical terminals on the Logical Terminal Assignment (LTA) panel for a specific host. See Note 1.
2. Change your response to question 117 (Port Assignment Panel). See Note 2.
3. Change your response to question 110 to a higher number to allocate additional MLT storage. See Note 3.

4. The screen size and characteristics of the terminals attached to the controller can affect the number of logical terminals that can be supported. Refer to question 110: "MLT Configuration Level" in Chapter 6 of the *3174 Planning Guide*. See Note 4.

Notes:

1. The number of sessions assigned on the specific host adapter may have to be reduced. Refer to "Logical Terminal Assignment" and "Planning for Port Assignment" in the *3174 Planning Guide*.
2. The number of logical terminals for more than one port may have to be reduced. Refer to "Planning for Port Assignment" in the *3174 Planning Guide*.
3. Additional storage may be required in the controller to support changing question 110. Refer to "Planning for Controller Storage" in the *3174 Planning Guide*. Then, contact your IBM representative to obtain the additional storage.
4. On 3180-type terminals, the model ID can be changed to a lower number which uses less storage. This may leave storage available to support the logical terminals selected during controller configuration.

For Service Personnel Only: No action is required.

2%% (2EE) 37HG

Description: An attached 3270 terminal does not have the hardware necessary to support a function that the operator has attempted to use, such as color or program symbols. The Extended Character Set Adapter feature is required to support these functions.

This error also occurs if the terminal is attached through a 7232 Dual Control Unit Terminal Multiplexer and 3174 configuration question 178 has been answered with a 0. Refer to the *3174 Planning Guide*.

Unrecoverable error.

Note: 2EE appears in the event log and 2%% appears in the operator information area of the terminal when an error occurs.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. If the Extended Character Set Adapter (ECSA) feature is not present in the terminal, the functions supported by ECSA cannot be used.
2. If the ECSA feature is present, refer to the terminal documentation for further problem isolation.
3. If the failing terminal is connected through a 7232, check the answer to configuration question 178. The response to question 178 has to be 1. Refer to the *3174 Planning Guide*.

Use online test 2, option 2, to display the configuration question. Refer to "Test 2: Configuration Menu" in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

201 01HG

Description: 3270 Terminal signal cable timeout or parity errors.

Alert Sent = None.

Possible Cause:

- Terminal
- Terminal signal cable or its connections

User Action:

1. Check the signal cable connections at the terminal and at the controller.
2. At the failing terminal, switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

201 51HG B1B2 B3B4 B5B6

Description: Temporary 3270 Terminal timeout or parity errors. The terminal is still operational. Controller-recoverable.

Before Release B4:

There is no extended data.

Release B4 and above:

B1–B8 are error counters where:

B1 = Poll Timeout
B2 = Read Timeout
B3 = Poll Parity
B4 = Read Parity
B5 = Coax Threshold
B6 = Maximum Threshold

Counters B1 through B4 represent the number of errors in hexadecimal that occurred in the 30-minute period before the error was logged. These error counters stop when they reach a maximum of 255 (FF). The number of errors may be much higher than the counter.

Alert Sent = Performance.

Possible Cause:

- Terminal
- Terminal signal cable or its connections
- Crosstalk from another terminal on the next lower numbered port on the same multiplexer (TMA or 3299)

User Action: No action is required unless terminal performance is degraded due to an excessive number of 201 errors. If performance is degraded:

For Coaxial Cable:

Refer to the terminal documentation for further problem isolation.

For Telephone Twisted-Pair Cable:

Check for crosstalk with the following procedures:

1. Examine the error log to determine the port number the error is logged against.
2. Disconnect or turn off the device on the next lower port at the terminal end.
3. Re-examine the logs to ensure that errors are still being detected.
4. Disconnect the signal cable on the next lower port of the 3174 TMA or 3299 and re-examine the logs.

If there are errors:

Refer to the terminal documentation for further problem isolation.

If there are no errors:

Crosstalk exists. Ensure that only one controller per telephone twisted-pair bundle is being used.

For more information on the extended data, refer to Online Test 3, Option 2, in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

202 01HG

Description: A 3270 terminal is accessing the controller at an abnormally high rate. Turn off the terminal until it has been repaired. It is affecting the operation of the entire subsystem.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: Use the terminal documentation to isolate the failure.

For Service Personnel Only: No action is required.

202 02HG

Description: A 3270 terminal has caused an overflow of the special request list. The terminal is degrading the performance of the 3174.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. At the failing terminal, switch the Normal/Test switch from **Normal** to **Test** and back again or turn the power Off and then back On.
2. Use the terminal documentation to isolate the failure.

For Service Personnel Only: No action is required.

203 31HG 51HG

Description: 3270 Terminal feature error.

Controller-recoverable.

Alert Sent = Temporary when QA = 31.

Alert Sent = None when QA = 51.

Possible Cause: Terminal

User Action: No action is required unless terminal performance is degraded because of excessive 203 errors recorded in the event log.

If performance is degraded, refer to the terminal documentation for further problem isolation.

Also check the event log for 209 0X status codes for this same terminal. 209 status codes can identify which terminal feature is failing.

For Service Personnel Only: No action is required.

203 52HG

Description: Temporary 3270 Terminal feature error while a Terminal Adapter command queue is in progress. The terminal is still operational.

Controller-recoverable.

Alert Sent = None.

Possible Cause: Terminal

User Action: No action is required unless terminal performance is degraded because of an excessive number of 203 errors. If performance is degraded, refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

204 01HG

Description: 3270 Terminal buffer parity error.

Alert Sent = Permanent.

Possible Cause: Terminal

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

204 31HG

Description: 3270 Terminal buffer parity error.

Operator-recoverable.

Alert Sent = None.

Possible Cause: Terminal

User Action:

1. At the failing terminal, press **Reset**, and retry the operation, or turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

204 52HG

Description: Temporary 3270 Terminal buffer parity error. The terminal is still operational.

Controller-recoverable.

Alert Sent = None.

Possible Cause: Terminal

User Action: No action is required unless terminal performance is degraded because of an excessive number of 204 errors. If performance is degraded, refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

204 53HG

Description: Temporary 3270 Printer buffer parity error. The printer is still operational.

Controller-recoverable.

Alert Sent = None.

Possible Cause: Printer

User Action: No action is required unless printer performance is degraded because of an excessive number of 204 errors. If performance is degraded, refer to the printer documentation for further problem isolation.

For Service Personnel Only: No action is required.

206 32HG to 3CHG

Description: Incorrect 3270 terminal feature initialization. The terminal is operational, but all features are disabled. However, for qualifier 3C, only the Host Addressable Printer feature is disabled.

QA = 32 through 3C where:

- 32 = Selector Pen Feature.
- 34 = Magnetic Stripe Reader Feature.
- 36 = Extended Function Feature
- 37 = Extended Character Set Adapter.
- 3B = Color Convergence Feature.
- 3C = Host Addressable Printer Feature.

Operator-recoverable.

Alert Sent = Temporary.

Possible Cause: Terminal

User Action: At the failing terminal:

1. Press **Reset**, and retry the operation.
2. Switch the Normal/Test switch from **Normal** to **Test** and back again or turn the power Off and then back On.
3. Refer to the terminal documentation for further problem isolation.
4. Check the feature indicated by the status code qualifier 32 to 3C.

For Service Personnel Only: No action is required.

207 01HG

Description: Missing device completion status (3270 terminal).

Alert Sent = Permanent.

Possible Cause:

- Terminal
- Terminal signal cable

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

207 02HG

Description: Expedited Status (ES) returned too many times from a distributed function terminal.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

207 03HG

Description: ASCII printer timeout. The asynchronous emulation adapter did not receive "Command Complete" from the ASCII printer within the specified time.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. Reestablish communication with the printer.
 - If the printer is connected via a switched line, re-dial to reconnect the printer.
 - If the printer is connected via direct connection or leased line, turn Off the printer and then back On.
2. Refer to the printer documentation for further problem isolation.
3. Request service.

For Service Personnel Only: Refer to MAP 1000 in the maintenance manual for your model.

207 04HG

Description: Completion status missing from a terminal with an attached printer.

Alert Sent = Permanent.

Possible Cause:

- Terminal
- Terminal signal cable

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the control unit.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

208 31HG

Description: Unexpected device operation completion status (3270 terminal).

Operator-recoverable.

Alert Sent = Temporary.

Possible Cause: Terminal

User Action: At the failing terminal:

1. Press **Reset**, and retry the operation.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

209 01HG to 07HG

Description: Terminal Adapter to 3270 terminal communication failure.

QA = 01 through 07 where:

- 01 = Terminal Adapter command queue failure.
- 02 = Selector pen command queue failure.
- 04 = Magnetic stripe reader command queue failure.
- 06 = Extended Function Feature command queue failure on a device such as a 3180.
- 07 = Extended character set adapter command queue failure.

Note: The Terminal Adapter command queue buffers commands between the attached terminals and the controller. Terminal errors or coaxial problems can cause failures with the command queue. The QA field helps to identify which area of an attached terminal is failing when 209 errors occur.

Possible Cause:

- Terminal signal cable
- Terminal
- Terminal Adapter in the controller
- TMA card in the controller
- 3299

Alert Sent = Permanent.

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the controller.
3. Request service.

For Service Personnel Only: Refer to MAP 0200 in the maintenance manual for your model.

Note: If the terminal appears to be the cause of the failure, check the feature indicated by the qualifier (02 through 07) in the status code.

209 12HG

Description: Command queue failure for a terminal with an attached printer.

Note: The Terminal Adapter command queue buffers commands between the attached terminals and the controller. Terminal errors or coaxial problems can cause failures with the command queue.

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- Terminal
- Terminal Adapter in the controller
- TMA card in the controller
- 3299

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the control unit.
3. Refer to the terminal documentation for further problem isolation.
4. Request service.

For Service Personnel Only: Refer to MAP 0200 in the maintenance manual for your model.

209 51HH to 57HG

Description: Temporary Terminal Adapter to 3270 terminal communication failure. The terminal is still operational.

QA = 51 through 57 where:

- 51 = Terminal Adapter command queue failure.
- 52 = Selector pen command queue failure.
- 54 = Magnetic stripe reader command queue failure.
- 56 = Extended Function Feature Command queue failure on a device such as a 3180.
- 57 = Extended character set adapter command queue failure.

Note: The Terminal Adapter command queue buffers commands between the attached terminals and the controller. Terminal errors or coaxial problems can cause failures with the command queue. The QA field helps to identify which area of an attached terminal is failing when 209 errors occur.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Terminal signal cable
- Terminal
- Terminal Adapter in the controller
- TMA card in the controller
- 3299

User Action: No action is required unless terminal performance is degraded because of an excessive number of 209 errors.

1. Check the signal cable connections at the terminal and at the controller.
2. Refer to the terminal documentation for further problem isolation.
3. Request service.

For Service Personnel Only: Refer to MAP 0200 in the maintenance manual for your model.

Note: If the terminal appears to be the cause of the failure, check the feature indicated by the qualifier: 52 through 57 in the status code.

209 62HG

Description: Temporary command queue failure for a terminal with an attached printer.

Note: The Terminal Adapter command queue buffers commands between the attached terminals and the controller. Terminal errors or coaxial problems can cause failures with the command queue.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Terminal signal cable
- Terminal
- Terminal Adapter in the controller
- TMA card in the controller
- 3299

User Action: This is a temporary failure; the controller is still operational. No action is required unless terminal performance is degraded because of an excessive number of errors. See status code 209 01, if there are an excessive number of errors.

For Service Personnel Only: No action is required.

210 01HG B1B1

Description: Incorrect 3270 converged keyboard identification.

B1B2 = Keyboard ID.

B1 is byte 08.

B2 is byte 09.

See bytes 08 and 09 of the "Port Control Area Bit Definitions" on page 2-34.

Alert Sent = Permanent.

Possible Cause:

There is an incompatibility involving:

- The keyboard type.
- The keyboard identification (ID) that was selected during terminal setup (on some terminals the keyboard ID is set by switches located on the bottom of the keyboard).
- The answers to configuration questions 136 or 137.
- The keyboard defined by the "Modify Keyboards" procedure in the *3174 Utilities Guide*.

User Action:

1. Obtain the keyboard ID of the failing terminal from the contents of extended data bytes B1 and B2.
2. Use online test 2, option 2, to see how the controller is configured. Refer to "Test 2: Configuration Menu" in the *3174 Customer Problem Determination Guide*. Record the answers to the following question numbers: 136 or 137.
3. Use the *3174 Planning Guide* to determine which keyboard IDs are configured on the Control disk (questions 136 or 137).

4. Refer to the terminal problem determination or setup guide to see if either the keyboard ID or the configuration of the Control disk can be changed to make them match.
5. Refer to "Modifying Keyboards" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

210 02HG B1B2

Description: Incorrect 3270 IBM Office Keyboard identification.

B1B2 = Keyboard ID.

B1 is byte 08.

B2 is byte 09.

See bytes 08 and 09 in "Port Control Area Bit Definitions" on page 2-34.

Alert Sent = Permanent.

Possible Cause:

There is an incompatibility involving:

- The keyboard type
- The keyboard ID that was selected during terminal setup (on some terminals the keyboard ID is set by switches located on the bottom of the keyboard).
- The answers to configuration questions 136 or 137.
- The keyboard defined by the modify keyboards procedure in the *3174 Utilities Guide*.

User Action:

1. Obtain the keyboard ID of the failing terminal from the contents of extended data bytes B1 and B2.
2. Use test 2, option 2 to see how the controller is configured. Refer to "Test 2: Configuration Menu" in the *3174 Customer Problem Determination Guide*. Record the answers to the following question numbers: 136 or 137.
3. Use the *3174 Planning Guide* to determine which keyboard IDs are configured on the Control disk (questions 136 or 137).
4. Refer to the terminal problem determination or setup guide to see if either the keyboard ID or the configuration of the Control disk can be changed to make them match.
5. Refer to "Modifying Keyboards" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

211 01HG to 02HG

Description: Illegal status received from a terminal.

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- Terminal

User Action:

1. At the terminal, switch the Normal/Test switch from Normal to test and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

211 03HG

Description: Illegal status received from a printer attached to a display.

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- Printer

User Action:

1. Check the signal cable connections at the terminal and at the controller.
2. At the printer, turn the power Off and then back On.
3. If the failure continues, refer to the printer documentation for further problem isolation.

For Service Personnel Only: No action is required.

211 31HG

Description: Illegal device status received from a device.

Alert Sent = Temporary.

Possible Cause:

- Terminal signal cable
- Terminal

Operator-recoverable.

User Action:

1. At the terminal, press **Reset**, and retry the operation.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

211 53HG

Description: Temporary illegal device status received from a distributed function terminal (DFT) or printer. The terminal is still operational.

Alert Sent = None.

Possible Cause:

- Terminal signal cable
- Terminal

User Action: No action is required unless terminal performance is degraded because of an excessive number of 211 errors.

1. Check the signal cable connections at the terminal and at the controller.
2. At the terminal, switch the Normal/Test switch from Normal to test and back again, or turn the power Off and then back On.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

212 31HG

Description: An illegal keyboard scan code was received by the 3174.

Operator-recoverable.

Alert Sent = Temporary.

Possible Cause:

- Terminal keyboard
- AEA microcode

User Action: At the failing terminal:

1. Press **Reset**, and retry the operation.
2. Turn the power Off and then back On.
3. Check the signal cable connections at the terminal and at the controller.
4. Refer to the terminal documentation for further problem isolation.
5. Call for service.

For Service Personnel Only: The keyboard scan codes are software generated in the AEA adapter. Contact your next level of support.

212 32HG B1B2

Description: 3174 microcode failure: Asynchronous Emulation Adapter. An illegal keyboard scan code was received from an asynchronous emulation adapter.

B1 = Scan Code Received.

B2 = Station ID of failing AEA port.

Operator-recoverable.

Alert Sent = Temporary.

Possible Cause: Microcode

User Action:

1. Press **Reset**, and retry the operation.
2. Request service.

For Service Personnel Only: The keyboard scan codes are software generated in the AEA adapter. Contact your next level of support.

222 3xHG

Description: Selector pen status error on a 3270 terminal. Operator-recoverable.

Alert Sent = Temporary.

Possible Cause:

- Selector pen
- Selector pen feature card in the terminal
- Terminal signal cable

User Action: At the failing terminal:

1. If a keyboard is attached, press **Reset**, and retry the operation. If a keyboard is not attached, retry the operation.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

223 01HG

Description: Extended Character Set Adapter (ECSA) buffer parity error (3270 terminal).

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- ECSA card in the terminal

User Action:

1. Check the signal cable connections at the terminal and at the controller.
2. At the terminal, press **Reset**, and retry the operation.
3. At the terminal, switch the Normal/Test switch from Normal to test and back again, or turn the power Off and then back On.
4. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

223 31HG

Description: Extended Character Set Adapter (ECSA) buffer parity error (3270 terminal). Operator-recoverable.

Alert Sent = None.

Possible Cause:

- Terminal signal cable
- ECSA card in the terminal

User Action:

1. Check the signal cable connections at the terminal and at the controller.
2. At the terminal, press **Reset**, and retry the operation.
3. At the terminal, switch the Normal/Test switch from Normal to test and back again, or turn the power Off and then back On.
4. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

223 52HG

Description: Temporary extended Character Set Adapter (ECSA) buffer parity error (3270 terminal). The terminal is still operational. Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Terminal signal cable
- ECSA card in the terminal

User Action: No action is required unless terminal performance is degraded because of an excessive number of 223 errors. If performance is degraded, refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

224 3xHG

Description: Magnetic Stripe Reader status error (3270 Terminal). Operator-recoverable.

Alert Sent = Temporary.

Possible Cause:

- Terminal signal cable
- Terminal

User Action: At the failing terminal:

1. Press **Reset**, and retry the operation.
2. Turn the power Off and then back On.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

225 0xHG

Description: Extended Character Set Adapter (ECSA) status failure (3270 terminal).

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- ECSA card in the terminal

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation. Check the ECSA feature in the terminal.

For Service Personnel Only: No action is required.

228 01HG

Description: Color convergence backup store failure (3270 terminal). If the keyboard can be reset, the battery in the terminal has failed.

If the keyboard cannot be reset, the color convergence hardware in the terminal has failed.

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- Terminal

User Action: At the failing terminal:

1. Press **Reset**, and retry the operation.
2. Check the signal cable connections at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

228 51HG

Description: Temporary color convergence backup store failure (3270 terminal). The terminal is still operational. Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Terminal signal cable
- Terminal

User Action: No action is required unless terminal performance is degraded because of an excessive number of 228 errors. If performance is degraded, refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

229 01HG

Description: Color convergence storage failure.

Alert Sent = Permanent.

Possible Cause:

- Terminal
- Terminal signal cable

User Action: At the failing terminal:

1. Switch the Normal/Test switch from **Normal** to **Test** and back again, or turn the power Off and then back On.
2. Check the signal cable connections at the terminal and the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

229 51HG

Description: Temporary color convergence storage failure. The terminal is still operational.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Terminal
- Terminal signal cable

User Action: No action is required unless terminal performance is degraded because of an excessive number of 229 errors.

If excessive 229 errors are in the event log, perform the following actions:

1. Check the signal cable connections at the terminal and the controller.
2. Refer to the terminal documentation for further problem isolation.

Also check the event log for 209 0X status codes for this same terminal. 209 status codes can identify which terminal feature is failing.

For Service Personnel Only: No action is required.

231 01HG or 02HG

Description: An equipment check has occurred on a printer attached to a Terminal Adapter port.

Alert Sent = Permanent.

Possible Cause:

- Printer
- Controller microcode

User Action: At the failing printer:

1. Check the printer for an error code:
 - If one is present, use the printer documentation.
 - If a printer error code is not present, turn the power Off and then back On.
2. Request service.

For Service Personnel Only: Contact your next level of support.

231 03HG

Description: Equipment check on a printer attached to a display.

Alert Sent = Permanent.

Possible Cause: Printer

User Action:

1. Turn the power Off at the terminal and its attached printer, and then back On.
2. If the problem continues, refer to the printer documentation for further problem isolation.

For Service Personnel Only: No action is required.

232 01HG

Description: Printer detected load program symbols order error (3270 printer).

Alert Sent = Permanent.

Possible Cause:

- Printer microcode
- Controller microcode

User Action: Check the printer for an error code:

- If one is present, use the printer documentation.
- If a printer error code is not present, request service.

For Service Personnel Only: Contact your next level of support.

234 01HG

Description: Extended Character Set Adapter (ECSA) ROS not present in the attached 3270 terminal.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: The required ROS must be installed to enable the use of extended attributes. Contact your IBM representative.

For Service Personnel Only: No action is required.

235 01HG

Description: Country Extended Code Page (CECP) hardware mismatch.

Note: In order to use CECP the terminal must have an Extended Attribute Buffer (EAB).

Alert Sent = Permanent.

Possible Cause: Terminal

User Action:

1. At the terminal, switch the Normal/Test switch from Normal to Test and back again.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

236 31HG

Description: Country Extended Code Page (CECP) hardware mismatch. The terminal is not defaulting to the expected base character set.

Alert Sent = Temporary.

Possible Cause: Terminal

User Action:

1. Press **Reset**. This allows the terminal to use the base character set to which it has defaulted. It cannot use the CECP character set.
2. Refer to the terminal documentation.

For Service Personnel Only: No action is required.

239 01HG

Description: Incorrect device type information. Terminal hardware failure.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Press **Reset** to restore the keyboard.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

240 0xHG

Description: Distributed function terminal interface error.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

241 01HG

Description: Distributed function terminal interface error.

Alert Sent = Permanent.

Possible Cause:

- Terminal microcode
- Controller microcode

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.
3. Request service.

For Service Personnel Only: Contact your next level of support.

242 01HG

Description: Distributed function terminal (DFT) error.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

243 01HG

Description: Distributed function terminal (DFT) completion status timeout.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

244 31

Description: An unexpected completion status was returned from a distributed function terminal (DFT). The DFT sent a completion status of Function Complete (FC) when Function Complete with Input Required (FCIR) was expected. This occurred while the controller was processing a Write Local Channel Command (WLCC) with a Select Read or Read Modify.

Alert Sent = None.

Possible Cause: N/A

User Action: Request service for the terminal.

For Service Personnel Only: No action is required.

244 51HG B1B2

Description: Intelligent device percent (%) of interference indicator.

B1B2 = percentage of interference. For example, 0098 = 98%.

Note: This status code is logged in intensive mode only.

Controller-recoverable.

Alert Sent = None.

Possible Cause: N/A

User Action: The action to be taken depends on the type of operations occurring with the failing terminal.

- If the operation is host-data-dependent in the outbound direction, then the message size and the number of messages in each transmission should be reduced.
- If the operation is host-data-dependent in the inbound direction, then a different DFT should be used for the application.
- If the operation involves single or multiple functions, then the message sizes and the number of messages in each transmission should be reduced, or a different DFT should be used for the application.

For Service Personnel Only: No action is required.

245 02HG

Description: Status error from a device with the Extended Function Feature such as a 3180.

Alert Sent = Permanent.

Possible Cause:

- Terminal signal cable
- Terminal

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Check the signal cable connection at the terminal and at the controller.
3. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

245 02HG

Description: Status error from a printer.

The printer power is turned off by the controller.

Alert Sent = Permanent.

Possible Cause: Printer

User Action: At the failing printer:

1. Turn the printer Off and then back On.
2. Retry the operation.
3. Refer to the printer documentation.

For Service Personnel Only: No action is required.

245 52HG

Description: An incorrect status was received from an attached printer. This is a temporary failure; the controller is still operational.

Alert Sent = None.

Possible Cause: Printer

User Action: No action is required unless printer performance is degraded because of an excessive number of 245 errors. If performance is degraded, refer to the printer documentation for further problem isolation.

For Service Personnel Only: No action is required.

245 53HG

Description: Temporary printer hardware problem. The controller is still operational.

The printer is still operational.

Alert Sent = None.

Possible Cause: Printer

User Action: No action is required unless printer performance is degraded because of an excessive number of 245 errors. If performance is degraded, refer to the printer documentation for further problem isolation.

For Service Personnel Only: No action is required.

245 54HG

Description: Temporary printer hardware problem. This is a temporary failure; the controller is still operational.

The printer is still operational. The printer indicated that it supported load structured field (LSF) orders but did not indicate that it supported load DSE/DSC query, which is required with an LSF order.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless printer performance is degraded because of an excessive number of 245 errors. If performance is degraded, refer to the printer documentation for further problem isolation.

For Service Personnel Only: No action is required.

246 01HG

Description: Complete status missing for the Extended Function Feature for a terminal such as a 3180.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

247 01HG

Description: Protocol error for the Extended Function Feature for a terminal such as a 3180.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: At the failing terminal:

1. Turn the power Off and then back On.
2. Check the signal cable connection at the terminal.
3. Exchange the terminal or refer to the terminal documentation.

For Service Personnel Only: No action is required.

247 02HG

Description: Terminal protocol error for patch support.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. At the failing terminal, turn the power Off and then back On.
2. Use the terminal documentation to isolate the failure.

For Service Personnel Only: No action is required.

247 03HG

Description: An incorrect response was received from an attached terminal during Online Test 5.

Alert Sent = Permanent.

Possible Cause: Terminal

User Action:

1. Turn the terminal power switch Off, and then back On, and retry the operation.
2. Refer to the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

248 01HG

Description: Terminal interface failure occurred because a user issued a second request on Test 9,9 to disable the interface before the device responded to the first request.

Alert Sent = Permanent.

Possible Cause: Terminal microcode

User Action: At the failing terminal:

1. Turn the power Off and then back On again.
2. Refer to the terminal documentation for further problem isolation.
3. Request service on the terminal.

For Service Personnel Only: Contact your next level of support.

249 01HG

Description: Terminal interface failure occurred because the device requested an incorrect interface state change.

Alert Sent = Permanent.

Possible Cause: Terminal microcode

User Action: At the failing terminal:

1. Turn the power Off and then back On again.
2. Refer to the terminal documentation for further problem isolation.
3. Request service on the terminal.

For Service Personnel Only: Contact your next level of support.

250 01HG to 06HG

Description: Terminal to controller communication failure occurred because the controller detected an interface protocol error.

Alert Sent = Permanent.

Possible Cause: Terminal microcode

User Action: At the failing terminal:

1. Turn the power Off and then back On again.
2. Refer to the terminal documentation for further problem isolation.
3. Request service on the terminal.

For Service Personnel Only: Contact your next level of support.

251 00HG to 07HG

Description: Terminal to controller communication failure occurred because the device detected an interface protocol error.

Alert Sent = Permanent.

Possible Cause:

- Terminal microcode.
- Controller microcode

User Action: At the failing terminal:

1. Turn the power Off and then back On again.
2. Refer to the terminal documentation for further problem isolation.
3. Request service.

For Service Personnel Only: Contact your next level of support.

255 01HG

Description: A personal computer in CUT mode has changed the values of its field attributes and a 3174 does not allow a CUT to change those values.

Alert Sent = None.

Possible Cause: PC microcode

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

270 01HG B1

Description: An attempt was made to establish communications with a 3270 host for an ASCII printer through an asynchronous emulation adapter (AEA) port that was unavailable for use. The switched disconnect timer has to expire before this AEA port becomes available.

B1 = the amount of time in minutes required for the switched disconnect timer to expire. (This value is entered during 3174 customizing.)

Alert Sent = None.

Possible Cause: N/A

User Action: Wait for the amount of time indicated by extended data byte B1; then, try to establish the connection.

If you want to change the length of time of the switched disconnect timer, refer to question 741 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

280 31

Description: The extended vital product data may be incorrect for the attached terminal.

Alert Sent = None.

Possible Cause: N/A

User Action: Place the terminal in setup mode as follows:

For Distributed Function Terminals (DFT):

1. Press and hold the **ALT** key.
2. Press and release the **SETUP** key.
3. Release the **ALT** key.
4. Select **Go to Offline Setup**.
5. Select **Set Extended VPD** from the offline setup menu.
6. Correct the data fields that have an asterisk (*) in front of them.
7. Press the **Exit** PF key.

For Control Unit Terminals (CUT):

1. Press and hold the **ALT** key.
2. Press and release the **TEST** key.
3. Release the **ALT** key.
4. Press **PF12**.
5. Type a **5** and press **Enter**.

6. Type a **6** and press **Enter**.
7. Correct the data fields that have an asterisk (*) in front of them.
8. Press the **Save** PF key.

For Service Personnel Only: No action is required.

290 00HG

Description: Hard drive (disk #3) contains valid dump data. The automatic hard drive dump function is disabled.

Possible Cause: An automatic or manual hard drive controller dump has been taken and drive #3 contains dump data.

User Action: Use RAS Test 14 or OPS Panel interface to copy dump from the hard drive to diskette media or erase dump data. After you have copied or erased the dump data on the hard drive, the automatic dump to hard drive function will be enabled if configured.

For Service Personnel Only: No action is required.

293 02HG

Description: A distributed function terminal (DFT) is connected to a port that is not configured for a 3270 host address.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: If communication with a host system is required, then either connect the terminal to a port that is configured with an IBM host address (customizing question 117), or reconfigure the Control disk microcode so the port being used is configured with an IBM host address. Refer to question 116 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

293 31HG

Description: A 3270 display or printer is connected to a port that is not configured for a IBM/3270 host.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

- If this status code is displayed on a terminal, press **Reset** on the terminal keyboard.
- If communication with a host system is required, either connect the terminal to a port that is configured with an IBM host address, or reconfigure the Control disk microcode so the port being used is configured with an IBM host address. Refer to question 116 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

293 32HG

Description: An AEA Host Addressable Printer is connected to a port that is not configured for a IBM/3270 host.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

- If this status code is displayed on a terminal, press **Reset** on the terminal keyboard.
- If communication with a host system is required, then either connect the terminal to a port that is configured with an IBM host address, or reconfigure the Control disk microcode so the port being used is configured with an IBM host address. Refer to question 116 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

293 33HG

Description: The host link was not available at session initialization time.

Alert Sent = None.

Possible Cause: N/A

User Action: Use the change screen key sequence to go to the next available session.

Note: The affected session is skipped in subsequent change screen sequences until the host link becomes available.

For Service Personnel Only: No action is required.

300 01HG

Description: Removal of potential terminal hang condition indicator.

Note: Status code 379-01 is removed from the operator panel and the terminals by this status code.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

300 02HG

Description: Removal of potential terminal hang condition indicator.

Note: Status codes 379-02 through 379-07 are removed from the operator panel by this status code.

Possible Cause: N/A

Alert Sent = Permanent.

User Action: No action is required.

For Service Personnel Only: No action is required.

301 01HG to 03HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Alert Sent = Permanent.

Possible Cause: Terminal adapter

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

302 31HG to 38HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Operator recoverable.

Note: Status codes 379-02 through 379-07 are removed from the operator panel by this status code.

Alert Sent = Temporary.

Possible Cause: Terminal adapter

User Action:

Warning: An IML will disrupt operating terminals.

1. Press **Reset** and retry the operation.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

302 51HG to 54HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Controller-recoverable.

Alert Sent = Temporary.

Possible Cause: Terminal adapter

User Action: No action is required unless machine performance is degraded because of an excessive number of 302 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the Terminal Adapter hardware group test. Use HG number 26 or 27, TP 91. Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

302 55HG B1B2 B3B4

Description: Temporary 3174 Hardware or microcode failure. The controller is still operational.

B1B2 = TYPE

B3B4 = LOCA

Alert Sent = Temporary.

Possible Cause:

- Terminal Adapter
- Microcode

User Action: No action is required unless machine performance is degraded because of an excessive number of 302 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the Terminal Adapter hardware group test. Use HG number 26 or 27, TP 91. Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

303 51HG B1B2 B3B4

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Controller-recoverable.

Alert Sent = Temporary.

Possible Cause: Terminal Adapter

User Action: No action is required unless machine performance is degraded because of an excessive number of 303 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the Terminal Adapter hardware group test. Use HG number 26 or 27, TP 91. Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

305 or 306 01HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Note: When this failure occurs, 305 or 306 appears on the operator panel but no extended data appears on the panel or in the event log. The extended data is sent to the host in an alert.

Alert Sent = Delayed.

Possible Cause:

- Processor
- Microcode (status code 306 only)

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

307 51HG

Description: Lost machine check log record.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

308 01

Description: One of the cooling fans is failing. The controller will continue to operate until it loses power.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. To prevent damage to the controller, the fan must be replaced at the earliest convenient time that power can be turned off.
2. Request service.

Warning: If the controller loses power while the fan is failing, any attempt to restore power will result in Status Code 5. Since Status Code 5 stops the IML, the fan must be replaced before operation can resume.

For Service Personnel Only: Replace the fan that is failing. Refer to Chapter 3 in the maintenance manual.

311 01HG or 03HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Note: Extended data fields B1 through B4 are not present for status code 311 03HG.

Alert Sent = Delayed.

Possible Cause:

- Storage
- Processor
- For Models 1L through 24R, an adapter on the MMIO bus (Status code 311 03HG only)

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 24R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.
4. One at a time, exchange the adapters in locations 11 through 15.

For Models 51R through 53R:

1. If present, exchange the storage card.
2. Exchange the planar board.

For Models 61R through 64R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the storage card in location J22.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

311 51HG or 52HG B1B2 B3B4

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Controller-recoverable.

Alert Sent = None when QA = 51.

Alert Sent = Temporary when QA = 52.

Possible Cause:

- Storage
- Processor

User Action: No action is required unless machine performance is degraded because of an excessive number of 311 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the processor/storage hardware group test. Use HG number 87, TP 91. Refer to "Hardware Group Test AIs and Processor/Storage Tests" in the maintenance manual for your model.

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 24R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

For Models 51R through 53R:

1. If present, exchange the storage card in location 05.
2. Exchange the planar board.

For Models 61R through 64R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the storage card in location J22.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

313 01HG or 02HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Note: When the failure occurs, 313 appears at the operator panel but the extended data does not.

Alert Sent = Delayed.

Possible Cause:

- Microcode
- Processor

User Action:

1. Press **Reset** at the affected terminal.
2. Request service; repair action is mandatory before the next IML.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

313 51HG to 54HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Microcode
- Processor
- Operator panel
- Operator panel adapter (applies to 53HG and 54HG only)

User Action: No action is required unless machine performance is degraded because of an excessive number of 313 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the processor/storage hardware group test. Use HG number 87, TP 91. Refer to "How to Run Hardware Group Test Alls and Processor/Storage Tests" in the maintenance manual for your model.

1. Exchange the FRU indicated by TYPE and LOCA.
2. Contact your next level of support.

Refer to Chapter 3 in the maintenance manual for your model.

315 01HG to 05HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5, if present = Interrupt level.

SNA sense = 1001.

Non-SNA sense = 1000.

Alert Sent = Delayed.

Possible Cause:

- ES Connection Adapter (HG17) or Channel Adapter (HG16)
- Microcode, status code 315 02HG only

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

315 06HG to 08HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Alert Sent = Delayed.

Possible Cause:

- ES Connection Adapter (HG17) or Channel adapter (HG16)
- Processor
- MMIO Bus, status codes 315 06HG and 07HG only
- Channel driver receiver card

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

315 09HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5, if present = interrupt level.

Alert Sent = Delayed.

Possible Cause:

- Microcode
- ES Connection Adapter

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

315 10HG B1B2

Description: 3174 hardware failure.

B1B2 = Bytes 2 and 3 of the Link Error Log Register.

Alert Sent = Delayed.

Possible Cause:

- ES Connection Adapter (HG17)
- Incorrect adapter sequence

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

315 55HG to 58HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Interrupt Level.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Channel adapter (HG16) or ES Connection Adapter (HG17)
- Processor
- MMIO Bus, status codes 315 56HG and 58HG only

User Action: No action is required unless machine performance is degraded because of an excessive number of 315 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only:

1. Loop the adapter Basic test. Use HG number 16 or 17, TP 91. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual.
2. Exchange the FRU indicated by TYPE and LOCA.

Refer to Chapter 3 in the maintenance manual for your model.

325 01HG or 02HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Delayed when QA = 01.

Alert Sent = None when QA = 02.

Possible Cause:

- Concurrent Communication Adapter
- ISDN Adapter
- Microcode

User Action:

1. Use the Change Screen key sequence to go to the next available session.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

325 03HG to 05HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Concurrent Communication Adapter
- ISDN Adapter
- Microcode
- Logic board (Models 1L through 24R)

User Action:

1. Use the Change Screen key sequence to go to the next available session.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the logic board (Models 1L through 24R).

Refer to Chapter 3 in the maintenance manual for your model.

325 06HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

- Concurrent Communication Adapter
- ISDN Adapter
- Microcode

User Action:

1. Use the Change Screen key sequence to go to the next available session.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

325 53HG or 56HG B1B2 B3B4

Description: Temporary 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

- Concurrent Communication Adapter
- ISDN Adapter
- Microcode

User Action: No action is required unless the controller performance is degraded because of an excessive number of 325 5xHG errors. If performance is degraded because of excessive errors, see status code 325 03HG and perform the actions as indicated.

331 01HG to 04HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Alert Sent = Delayed when QA = 01 (SNA and X.25), 02, 03, or 04.

Alert Sent = None when QA = 01 (BSC).

Possible Cause:

- Communication adapter
- PIO Bus, status codes 331 02HG and 03HG only

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21R through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

331 52HG or 53HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Interrupt Level.

Controller-recoverable.

Alert Sent = None.

Possible Cause: Communication adapter

User Action: No action is required unless machine performance is degraded because of an excessive number of 331 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the communication adapter hardware group test. Use HG number 11, TP 91. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual for your model.

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21R through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

335 01HG to 04HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Alert Sent = Permanent when QA = 01 or 02.

Alert Sent = Delayed when QA = 03 or 04.

Possible Cause:

- Encrypt/Decrypt adapter
- PIO Bus, status codes 331 02HG and 03HG only

User Action:

Warning: An IML will disrupt operating terminals.

1. Non-encrypted sessions can still be used.
2. Press **Reset** at the affected terminal and follow local Logon/Logoff procedures to establish a non-encrypted session.
3. Re-IML.
4. Perform an **ALT 2 IML**; see page 2-3.
5. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

335 51HG to 53HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Encrypt/Decrypt adapter
- PIO Bus, status codes 335 53HG and 54HG only

User Action: No action is required unless machine performance is degraded because of an excessive number of 335 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only:

1. Loop the Encrypt/Decrypt adapter hardware group test, use HG number 46, TP 91. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual for your model.
2. Exchange the FRU indicated by TYPE and LOCA.

Refer to Chapter 3 in the maintenance manual for your model.

336 01HG or 51HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent when QA = 01.

Alert Sent = None when QA = 51.

Possible Cause: Battery on the Encrypt/Decrypt adapter.

User Action: The battery is a customer-replaceable item.

Replace the battery; refer to the *3174 User's Guide* for your model. If you need to reenter the master key value, refer to the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

340 01HG B1 to B13

Description: The LAN Adapter has been reopened. If there was a previous LAN error on the operator panel, it has now been cleared.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics, where:

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN* 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = The LAN carries traffic for this 3174-Peer bridge.

bit 5 = The LAN carries traffic for TCP/IP.

bits 6-8 = Reserved.

B6-B11 = Local MAC address.

B12B13 = Ring ID.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

341 01HG B1 to B10

Description: 3174 LAN Adapter initialization failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = The Token-Ring ID number.

B7-B10 = Reserved.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, option 5 to see the extended data.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause:

- LAN Adapter
- Wrong operator panel adapter for specified model (floor models only)

User Action:

1. Contact the host operator to reactivate the link.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

341 02HG B1 to B10

Description: 3174 LAN Adapter closed because of an unrecoverable failure.

B1B2 = TYPE.
B3B4 = LOCA.
B5B6 = The Token-Ring ID number.
B7-B10 = Reserved.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, option 5, to see the extended data.

Alert Sent = Permanent for Gateways.
Alert Sent = None for all other controllers.

Possible Cause: LAN Adapter

User Action:

1. Contact the host operator to reactivate the link.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

341 03HG or 04HG B1B2 B3B4 B5

Description: 3174 LAN Adapter failure.

B1B2 = TYPE.
B3B4 = LOCA.
B5 = Interrupt Level.

Alert Sent = Permanent.

Possible Cause:

- Microcode
- LAN Adapter
- Processor, status code 341 04HG only

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

341 05HG or 06HG B1B2 B3B4 B5

Description: 3174 hardware failure.

B1B2 = TYPE.
B3B4 = LOCA.
B5 = Interrupt Level.

Alert Sent = Permanent.

Possible Cause:

- LAN Adapter
- Processor

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.

3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 64R and 90R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

341 21HG B1B2 B3B4 B5B6

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = Reserved.

Note: The extended data does not appear at the operator panel, but is included in the event log. Use online test 1, option 5, to see the extended data.

Alert Sent = Delayed.

Possible Cause:

- LAN Adapter
- Wrong operator panel adapter for specified model (floor models only)

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

341 22HG B1B2 B3B4 B5B6 B7B8

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = Ring ID.

B7B8 = Reserved.

Note: The extended data does not appear at the operator panel, but is included in the event log. Use online test 1, option 5, to see the extended data.

Alert Sent = Delayed.

Possible Cause:

- LAN Adapter
- Multistation access unit

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

341 23HG to 26HG B1B2 B3B4 B5

Description: 3174 failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Failing interrupt Level.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, option 5, to see the extended data.

If the failing LAN Adapter carries the alert focal point link then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- LAN Adapter
- Microcode error

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test. Refer to the appropriate adapter optional tests in the *3174 Customer Problem Determination Guide*. Record the results.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

341 27HG B1 to B15

Description: Ethernet patch adapter error; adapter not opened.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Always 0000.

B14B15 = Adapter patch failure code.

where:

B14 = Major reason code.

B15 = Minor reason code.

Alert Sent = None

Possible Cause:

- Invalid patch ID
- Bad adapter return code

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

341 31HG B1 to B15

Description: LAN Adapter initialization failure.

B1B2 = Type.

B3B4 = LOCA.

B5 = LAN characteristics, where:

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

- bit 4 = The LAN carries traffic for this 3174-Peer bridge.
- bit 5 = The LAN carries traffic for TCP/IP.
- bits 6–8 = Reserved.

B6–B11 = Local MAC address.
 B12B13 = Ring ID.
 B14B15 = Reserved.

If the LAN Adapter or LAN with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: Hardware

User Action: Perform the following actions:

1. Re-open the LAN Adapter using one of the following methods:
 - Re-IML.
 - If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the gateway 3174 itself will not cause a LAN Adapter reset.
 - Online Test: You can perform Online Test 9, Option 13.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

341 32HG B1 to B15

Description: Token-Ring Adapter check.

B1B2 = Type.

B3B4 = LOCA.

B5 = LAN characteristics, where:

- bit 1 = The LAN carries 2.0 traffic for this 3174.
- bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
- bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
- bit 4 = The LAN carries traffic for this 3174-Peer bridge.
- bit 5 = The LAN carries traffic for TCP/IP.
- bits 6–8 = Reserved.

B6–B11 = Local MAC address.
 B12B13 = Ring ID.
 B14B15 = Reserved.

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: Hardware failure

User Action: Perform the following actions:

1. Re-open the Token-Ring Adapter using one of the following methods.
 - Re-IML.
 - If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the gateway 3174 itself will not cause a Token-Ring Adapter reset.
 - Online Test: You can perform Online Test 9, Option 13.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Run the appropriate adapter wrap test.
4. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

341 33HG B1 to B15

Description: Ethernet Adapter check.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Always 0000.

B14B15 = Reserved.

If the Ethernet Adapter with the error carries the alert focal point link, then:

Alert Sent = Delayed

Otherwise:

Alert Sent = Permanent

Possible Cause: Ethernet Adapter microcode or hardware failure.

User Action: Perform the following actions:

1. Re-open the Ethernet Adapter by performing one of the following actions:
 - a. Re-IML.
 - b. If the 3174 is configured as a gateway, request that the host operator activate any logical link or physical unit attached through the gateway. Activating the physical unit of the 3174 gateway itself does not cause the Ethernet Adapter to be reset.
 - c. Perform online Test 9, Option 13.

If the problem reoccurs, go to step 2.

2. Perform an **ALT 2 IML**. See "Alt 2 IML Procedures for Testing the 3174" on page 2-3. If no problems are detected by this procedure, go to step 3.
3. Run the Ethernet Adapter wrap test. Refer to the *3174 Customer Problem Determination Guide*. If no problems are detected by this procedure, go to step 4.
4. Request service.

For Service Personnel Only: This SSC may indicate a problem in the adapter microcode. Go to MAP 0630 in the maintenance manual for your model. If the MAP process does not detect a problem in the hardware, contact your next level of support, for microcode problem determination.

341 34HG B1 to B15

Description: The Ethernet adapter's microcode patch level does not match its hardware. The 3174 may still be operational.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Reserved.

B14 = Major reason code.

B15 = Minor reason code.

Alert Sent = None

Possible Cause: Invalid patch installed

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

341 53HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Interrupt Level.

Controller-recoverable.

Alert Sent = None.

Possible Cause: LAN Adapter

User Action: No action is required unless machine performance is degraded because of excessive number of 341 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the LAN Adapter Hardware Group Test; use HG number 31 for a token-ring adapter, or HG number 41 for an Ethernet adapter, or use the HG number from the status code, TP 91. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual.

Exchange the FRU indicated by TYPE and LOCA.

Refer to Chapter 3 in the maintenance manual for your model.

341 54HG to 56HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Interrupt Level.

Controller-recoverable.

Alert Sent = None.

Possible Cause: LAN Adapter

User Action: No action is required unless machine performance is degraded because of excessive number of 341 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the LAN Adapter Hardware Group Test; use HG number 31 for a Token-Ring adapter, or HG number 41 for an Ethernet adapter, or use the HG number from the status code, TP 91. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual.

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the Processor card.

For Models 21H through 64R and 90R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

345 01HG to 04HG, and 45HG

Description: The WNM has detected an interface failure with the 8250 Hub backplane management facility.

This status code is recorded and communication with the 8250 Hub management module (when present) is no longer operational.

Possible Cause:

- A defective WNM
- A microcode failure

User Action:

- Look at the WNM status display or event log for a status code.
- Perform the corrective actions for the status code.
- Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
- Re-IML.
- Request service if the problem persists.

For Service Personnel Only: Exchange the WNM.

350 01HG to 02HG B1B2 B3B4

Description: 3174 Asynchronous Emulation Adapter (AEA) failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- AEA
- Microcode
- Processor

User Action:

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the Processor card (status code 350 02HG only).

For Models 21H through 64R:

Exchange the FRU indicated by TYPE and LOCA.

Exchange the planar board (status code 350 02HG only).

Refer to Chapter 3 in the maintenance manual for your model.

350 03HG or 04HG B1B2 B3B4 B5B6 B7

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5-B7 (If present) = Environment Control Block (ECB) ID Number.

Alert Sent = Permanent.

Possible Cause:

- Microcode
- Processor
- Asynchronous Emulation Adapter

User Action:

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

350 05HG B1B2 B3B4

Description: 3174 hardware failure. The controller is operational, but the Asynchronous Emulation Adapter (AEA) is not initialized.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause: AEA

User Action:

1. To initialize the AEA, re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 64R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

350 52HG to 54HG B1B2 B3B4

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

- Asynchronous Emulation Adapter
- Processor

User Action: No action is required unless machine performance is degraded because of an excessive number of 350 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the Asynchronous Emulation Adapter Hardware Group Test; use HG number 21, 22 or 23 with TP 91. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual for your model.

For Models 1L through 14R:

1. Exchange the processor card.

2. Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 64R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

351 01HG to 03HG B1B2 B3B4

Description: 3174 Asynchronous Emulation Adapter port failure occurred. Only one port on this adapter is failing. The rest of the controller is operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause: Asynchronous Emulation Adapter

User Action:

1. Perform a wrap test on the failing port. Refer to "Test 12 Asynchronous Emulation Adapter Tests" in the *3174 Customer Problem Determination Guide*. Record the results.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

352 01HG to 03HG B1B2 B3B4

Description: 3174 microcode failure: Asynchronous Emulation Adapter (AEA).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Microcode
- Asynchronous Emulation Adapter

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only:

1. If the ALT 2 IML did not fail, exchange the FRU indicated by TYPE and LOCA.
2. Contact your next level of support.

352 04HG to 08HG B1B2 B3B4

Description: 3174 microcode failure: Asynchronous Emulation Adapter (AEA).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Microcode
- Asynchronous Emulation Adapter

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: If the ALT 2 IML did not fail, contact your next level of support.

Status Codes

352 09HG B1B2 B3B4

Description: 3174 microcode failure: Asynchronous Emulation Adapter (AEA).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Microcode
- Asynchronous Emulation Adapter

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only:

1. If the ALT 2 IML did not fail, exchange the FRU indicated by TYPE and LOCA.
 2. Contact your next level of support.
-

352 11HG B1B2 B3B4

Description: 3174 microcode failure: Asynchronous Emulation Adapter (AEA).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Microcode
- Asynchronous Emulation Adapter

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: If the ALT 2 IML did not fail, contact your next level of support.

369 01HG

Description: WNM hardware failure

Possible Cause: N/A

User Action: Request Service

For Service Personnel Only: Exchange the WNM.

369 02HG

Description: RAM disk battery needs replacement. The contents of the RAM disk will be lost if power is off for 10 minutes or more.

Possible Cause: RAM disk (HG = 07)

User Action: Request Service. Refer to the battery safety notice in the *8250 Workstation Networking Module Problem Determination and Service Guide*.

For Service Personnel Only: Exchange the WNM.

369 03HG

Description: RAM disk battery has low voltage.

Possible Cause: RAM disk (HG = 07)

User Action: Request Service. Refer to the battery safety notice in the *8250 Workstation Networking Module Problem Determination and Service Guide*.

For Service Personnel Only: Exchange the WNM.

369 51HG

Description: A recovered WNM hardware failure.

This code is recorded for informational purposes only.

Possible Cause: N/A

User Action: N/A

For Service Personnel Only: N/A

378 01HG B1B2 B3B4 B5

Description: ASCII emulation protocol conversion failure. Data received from an ASCII host could not be converted by the Asynchronous Emulation Adapter.

Possible Cause: Microcode error

B1–B4 = Address of the outbound translate table being used.

B5 = The last character received from the ASCII host.

Alert Sent = None.

User Action: Request service.

For Service Personnel Only: 3174 microcode failure, use your support structure for aid.

379 01HG B1B2 B3B4 B5B6 B7B8

Description: Potential microcode hang condition.

Note: If error recovery for this failure is successful, status code 300-01 is recorded in the event log.

Release C3 and above:

B1B2 = Suspended resource

B3B4 = Suspended resource owner

B5B6 = Process waiting for resource

B7B8 = Suspended resource owner condition

Before Release B3:

Alert Sent = Permanent.

Release B3 and above:

Alert Sent = Temporary.

Possible Cause:

- Microcode
- Faulty cabling or a defective device

User Action: No action is required unless the machine performance is degraded due to an excessive number of 379 errors. If the performance is degraded due to excessive errors, request service.

For Service Personnel Only: Contact your next level of support.

379 02HG

Description: Potential microcode hang condition.

Note: If error recovery for this failure is successful, status code 300-02 is recorded in the event log.

Before Release B3:

Alert Sent = Permanent.

Release B3 and above:

Alert Sent = Temporary.

Possible Cause: Microcode

User Action: If this status code is displayed more than 15 minutes, perform the following actions:

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Contact your next level of support.

Status Codes

379 03HG to 07HG B1B2 B3B4 B5B6 B7B8 B9B10

Description: Potential microcode hang condition.

Note: If error recovery for this failure is successful, status code 300-02 is recorded in the event log.

B1B2 = Process executing on level 3

B3B4 = Process executing on level 4

B5B6 = Process executing on level 5

B7B8 = Process executing on level 6

B9B10 = Process executing on level 7

Before Release B3:

Alert Sent = Permanent.

Release B3 and above:

Alert Sent = Temporary.

Possible Cause: Microcode

User Action: If this status code is displayed more than 15 minutes, perform the following actions:

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Contact your next level of support.

380 01HG B1B2 B3B4 B5B6

Description: The LAN Adapter initialized successfully but did not insert into the ring.

B1B2 = The Token-Ring ID number.

B3 = Command Code.

B4 = Return Code. See page 2-37.

B5B6 = Reserved.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, option 5, to see the extended data.

Alert Sent = None.

Possible Cause: LAN Adapter microcode

User Action:

1. Contact the host operator to activate the link.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide* for further problem isolation.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Go to Map 610.

For Models 21H through 64R and 90R:

Go to Map 600.

Refer to Chapter 2 in the maintenance manual for your model.

380 02HG B1B2 B3B4 B5B6

Description: A failure occurred when an Open Service Access Point was issued.

B1B2 = The Token-Ring ID number.

B3 = Command Code.

B4 = Return Code. See page 2-37.

B5B6 = Reserved.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, option 5, to see the extended data.

Alert Sent = None.

Possible Cause: LAN Adapter microcode

User Action:

1. Contact the host operator to activate the link.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide* for further problem isolation.
4. Request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to Map 610.

For Models 51R through 64R and 90R:

Go to Map 600.

Refer to Chapter 2 in the maintenance manual for your model.

380 03HG B1 to B13

Description: 3174 microcode failure: An error occurred during processing of a Receive data command to acknowledge receipt of data from a station on the LAN.

- B1B2 = The Token-Ring ID number.
- B3 = Command Code.
- B4 = Return Code. See page 2-37.
- B5-B10 = Source address.
- B11 = Service access point address.
- B12 = Link primary state.
- B13 = Link secondary state.

See "Link States" on page 2-40 for the description of bytes B12 and B13.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, option 5, to see the extended data.

Alert Sent = None.

Possible Cause: Microcode

User Action:

1. Contact the host operator to reactivate the link.
2. Re-IML.
3. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide*, for further problem isolation.

For Service Personnel Only:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Contact your next level of support.

380 04HG B1 to B13

Description: An error occurred while the LAN Adapter was processing a transmit command.

- B1B2 = The Token-Ring ID number.
- B3 = Command Code.
- B4 = Return Code. See page 2-37.
- B5-B10 = Source address.
- B11 = Service access point address.
- B12 = Link primary state.
- B13 = Link secondary state.

See "Link States" on page 2-40 for the description of bytes B12 and B13.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data.

Alert Sent = None.

Possible Cause: Microcode

User Action:

1. Contact the host operator to reactivate the link.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

Status Codes

For Service Personnel Only: Loop the LAN Adapter Hardware Group Test; use HG number 31 for a Token-Ring adapter, or HG number 41 for an Ethernet adapter, or use the HG number from the status code. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual.

380 20HG B1 to B11

Description: 3174 microcode failure: LAN Adapter.

B1B2 = The Token-Ring ID number.
B3 = Command Code.
B4 = Return Code. See page 2-37.
B5 = Last command/response received.
B6 = Last command/response sent.
B7 = Link primary state.
B8 = Link secondary state.
B9 = N(S) Transmitter send sequence number.
B10 = N(R) Transmitter receive sequence number.
B11 = Last N(R) received.

See "Link States" on page 2-40 for the description of bytes B7 and B8.

Note: The extended data does not appear at the operator panel, but is included in the event log. Use online test 1 to see the extended data.

Alert Sent = Delayed.

Possible Cause: Microcode

User Action:

1. Contact the host operator to reactivate the link.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For Service Personnel Only: Loop the LAN Adapter Hardware Group Test; use HG number 31 for a Token-Ring adapter, or HG number 41 for an Ethernet adapter, or use the HG number from the status code. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual.

380 21HG B1 to B14

Description: The LAN Adapter had a microcode failure causing communications to be disabled.

B1B2 = TYPE.
B3B4 = LOCA.
B5B6 = Station ID.
B7-B12 = Local MAC Address.
B13 = Command code.
B14 = Return code. See page 2-37.

If the LAN Adapter or LAN with the error carries the alert focal point link or if this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: N/A

User Action: Perform the following actions:

- Re-IML.
- Perform an **ALT 2 IML**; see page 2-3.
- Request service.

For Service Personnel Only: Loop the LAN Adapter Hardware Group Test; use HG number 31 for a Token-Ring adapter, or HG number 41 for an Ethernet adapter, or use the HG number from the status code. Refer to "How to Run Hardware Group Basic Tests" in Chapter 2 of the maintenance manual.

380 60HG B1B2 B3B4

Description: Temporary 3174 microcode failure. The controller is still operational. LAN communication is not disabled.

B1B2 = The Token-Ring ID number.

B3 = Command Code.

B4 = Return Code. See page 2-37.

Alert Sent = Temporary.

Possible Cause: Microcode

User Action: No action is required unless machine performance is degraded because of an excessive number of 380 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

380 61HG B1 to B14

Description: LAN Adapter microcode failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = Station ID.

B7-B12 = Local MAC Address.

B13 = Command code.

B14 = Return code. See page 2-37.

Alert Sent = None.

Possible Cause: Communications are not disabled

User Action: No action is required unless this condition reoccurs. If it does, perform an **ALT 2 IML**; see page 2-3 and request service.

For Service Personnel Only: If ALT 2 IML does not fail, contact your next level of support.

380 90HG B1B2 B3B4 B5B6

Description: Temporary 3174 LAN Adapter microcode failure. The controller is still operational.

B1B2 = The Token-Ring ID number.

B3 = Command Code.

B4 = Return Code. See page 2-37.

B5B6 = Reserved.

Alert Sent = None.

Possible Cause: Microcode

User Action: No action is required unless machine performance is degraded because of an excessive number of 380 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

380 91HG to 96HG B1 to B13

Description: Temporary 3174 LAN Adapter microcode failure. The controller is still operational.

B1B2 = The Token-Ring ID number.

B3 = Command Code.

B4 = Return Code. See page 2-37.

B5-B10 = Source address.

B11 = Service access point address.

B12B13 = Reserved.

Alert Sent = None.

Possible Cause: Microcode

User Action: No action is required unless machine performance is degraded because of an excessive number of 380 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

Status Codes

381 01HG to 08HG B1B2 B3

Description: 3174 microcode failure.

Note: For status code 381 06, another possible cause is the communication adapter, if the failure occurred during IML.

B1B2 = Environment Control Block (ECB) ID Number.

B3 = Interrupt Level.

Alert Sent = Delayed.

Possible Cause:

- Microcode
- Asynchronous Emulation Adapter (AEA)

User Action:

Warning: An IML will disrupt operating terminals.

1. Record the entire status code and re-IML.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

For Service Personnel Only: Contact your next level of support.

381 20HG

Description: 3174 microcode failure: Communication adapter (X.21 and X.25).

Alert Sent = Delayed.

Possible Cause: Microcode

User Action:

Warning: An IML will disrupt operating terminals.

1. Record the entire status code and re-IML.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

For Service Personnel Only: Contact your next level of support.

381 21HG

Description: 3174 channel adapter timeout.

Alert Sent = Delayed.

Possible Cause:

- Host channel hardware
- Channel adapter card
- Processor card
- Microcode

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

For Service Personnel Only: Go to MAP 0910 in the maintenance manual for your model.

381 22HG B1B2

Description: 3174 microcode failure: The LAN Adapter failed to insert onto the ring after receiving the open command.

B1 = Command Code.

B2 = Return code. See page 2-37.

Alert Sent = Delayed.

Possible Cause: Microcode

User Action:

Warning: An IML will disrupt operating terminals.

1. Record the entire status code and re-IML.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

For Service Personnel Only: Contact your next level of support.

381 23HG B1 to B14

Description: LAN Adapter open process failure.

- B1B2 = TYPE.
- B3B4 = LOCA.
- B5B6 = Station ID.
- B7-B12 = Local MAC Address.
- B13 = Command code.
- B14 = Return code. See page 2-37.

If the LAN Adapter or LAN with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- LAN microcode failure
- LAN Adapter failure

User Action:

Warning: An IML will disrupt operating terminals.

1. Try to reopen the LAN Adapter using Online Test 9, option 13. Refer to *3174 Customer Problem Determination Guide*.
2. Perform the following actions:
 - Re-IML.
 - Perform an **ALT 2 IML**; see page 2-3.
 - Request service.

For Service Personnel Only: Contact your next level of support.

381 45HG

Description: The 8250 Hub Management Module has detected a WNM failure.

This status code is not recorded by the WNM, but is recorded by the 8250 Hub Management Module (when present) when it detects that the WNM is no longer operational.

Possible Cause: A WNM failure

User Action:

- Look at the WNM status display or event log for a status code.
- Perform the corrective actions for the status code.
- Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
- Request Service.

For Service Personnel Only: Exchange the WNM.

381 51HG to 55HG

Description: Temporary 3174 microcode failure: The controller is still operational.

Controller-recoverable.

Alert Sent = None.

Possible Cause: Microcode

User Action: No action is required unless machine performance is degraded because of an excessive number of 381 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the processor/storage hardware group test. Use HG number 87, TP 91. Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

Status Codes

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Refer to Chapter 3 in the maintenance manual for your model.

381 56HG B1B2

Description: 3174 microcode failure.

B1B2 = Reserved.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless machine performance is degraded due to an excessive number of 381-56 errors. If performance is degraded, perform the following actions:

- Record the extended data.
- Request service.
- Report the extended data to the service personnel.

For Service Personnel Only: Contact your next level of support and report the extended data.

382

Description: 174 hardware failure: Timer.

Alert Sent = None.

Possible Cause: Processor

User Action:

Warning: An IML will disrupt operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Refer to Chapter 3 in the maintenance manual for your model.

382 51HG to 54HG B1B2 B3B4 B5

Description: Temporary 3174 hardware problem: Timer. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

If present, extended data byte B5 is an interrupt level.

Controller-recoverable.

Alert Sent = None.

Possible Cause: Processor

User Action: No action is required unless machine performance is degraded because of an excessive number of 382 errors. If performance is degraded because of excessive errors, request service.

For Service Personnel Only: Loop the processor/storage hardware group test. Use HG number 87, TP 91. Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

383 01HG or 02HG B1B2 B3B4 B5B6 B7

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

B5-B7 = One of the following codes:

X385 00 = Disk drive not ready.

X388 00 = Disk media error.

X388 80 = File allocation table error.

X388 81 = Directory error.

Alert Sent = Permanent.

Possible Cause:

- File adapter
- Fixed Disk

User Action: Check the contents of extended data bytes B5B6.

- If B5B6 = X385, see status code 385.
- If B5B6 = X388, see status code 388.

For Service Personnel Only: No action is required.

384 03HG B1B2 B3B4 B5B6 B7B8

Description: An error occurred while the controller was searching for DSL microcode on a diskette or fixed disk.

B1B2 = A status code for diskette 1.

B3B4 = A status code for diskette 2 or RAM disk.

B5B6 = A status code for fixed disk 1.

B7B8 = A status code for fixed disk 2.

These fields can contain one of the following status codes:

0000 = Drive not present or checked for DSL code.

X385 = Drive not ready.

X386 = Fixed disk is busy.

X387 = Wrong diskette.

X388 = Disk failure.

X390 = Data set not found.

X391 = Diskette is write-protected.

X392 = Full disk, or directory full, or end of file.

X393 = A diskette change operation has occurred.

Note: X = Any character 0-9.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

For diskette drives (HG = 01 or 02):

1. Insert a Downstream Load (DSL) diskette; if a DSL diskette is present, remove it, reinsert it, and close the diskette drive door.
2. Replace the DSL diskette with a new one. Use a duplicate DSL diskette.
3. Request service.

Status Codes

For fixed disk drives (HG = 03 or 04):

If you want the Downstream Load microcode on your fixed disk, you must copy the DSL diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For RAM disk (HG = 07):

If you want the DSL microcode on your RAM disk, you must copy the DSL files to the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.

For Service Personnel Only: Use the status code in the extended data bytes. For example:

If B1B2 is equal to 0385, go to status code 385 and perform the repair actions for that code.

384 05HG B1B2 B3B4 B5B6 B7B8

Description: Downstream Load (DSL) microcode is not present in the controller.

B1B2 = A status code for diskette 1.

B3B4 = A status code for diskette 2 or RAM disk.

B5B6 = A status code for fixed disk 1.

B7B8 = A status code for fixed disk 2.

These fields can contain one of the following status codes:

0000 = Drive not present or checked for DSL code.

X385 = Drive not ready.

X386 = Fixed disk is busy.

X387 = Wrong diskette.

X388 = Disk failure.

X390 = Data set not found.

X391 = Diskette is write-protected.

X392 = Full disk, or directory full, or end of file.

X393 = A diskette change operation has occurred.

Note: X = Any character 0–9.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

For diskette drives (HG = 01 or 02):

1. Insert a DSL diskette; if a DSL diskette is present, remove it, reinsert it, and close the diskette drive door.
2. Replace the DSL diskette with a new one. Use a duplicate DSL diskette.
3. Request service.

For fixed disk drives (HG = 03 or 04):

If you want the DSL microcode on your fixed disk, you must copy the DSL diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For RAM disk (HG = 07):

If you want the DSL microcode on your RAM disk, you must copy the DSL files to the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.

For Service Personnel Only: Use the status code in the extended data bytes. For example:

If B1B2 is equal to 0385, go to status code 385 and perform the repair actions for that code.

384 06HG B1B2 B3B4 B5B6 B7B8

Description: /D has been entered to request a dump of a distributed function terminal and a 3174 Dump diskette is not present in the controller.

B1B2 = A status code for diskette 1.

B3B4 = A status code for diskette 2.

B5B6 = A status code for fixed disk 1.

B7B8 = A status code for fixed disk 2.

These fields can contain one of the following codes:

0000 = Drive not present or checked for DSL code.

X385 = Drive not ready.

X386 = Fixed disk is busy.

X387 = Wrong diskette.

- X388 = Disk failure.
- X390 = Data set not found.
- X391 = Diskette is write-protected.
- X392 = Full disk, or directory full, or end of file.
- X393 = A diskette change operation has occurred.

Note: X = Any character 0-9.

Alert Sent = None.

Possible Cause: N/A

User Action:

Warning: An IML will disrupt operating terminals.

1. Verify that a Dump diskette is correctly inserted into one of the diskette drives. Reinitiate the /D test.
2. Try another Dump diskette.
3. Re-IML.
4. Perform an **ALT 2 IML**; see page 2-3.
5. Request service.

For Service Personnel Only: Use the status code in the extended data bytes. For example:

If B1B2 is equal to 0385, go to status code 385 and perform the repair actions for that code.

385 00HG to 04HG B1B2 B3B4

Description: A diskette drive, fixed disk drive, or RAM disk is not ready.

The QA identifies the microcode on the diskette, fixed disk, or RAM disk:

| QA | Disk Type |
|----|------------------------------|
| 00 | Any disk type |
| 01 | Control disk |
| 02 | Control disk |
| 03 | Control disk or DSL disk |
| 04 | Control disk or Utility disk |

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required when QA = 00, 01 or 02.

Alert Sent = None when QA = 03 or 04.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive defective
- File adapter defective
- Electromagnetic interference (EMI) (table-top models only).

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive defective
- File adapter defective.

For RAM disk (HG = 07):

- RAM disk not present.
- WNM defective.

User Action:

Warning: An IML will disrupt operating terminals.

For diskette drives (HG = 01 or 02):

1. Install the correct diskette in the diskette drive indicated by the hardware group number.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3. Record the results.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

Status Codes

For RAM disk (HG = 07):

1. Verify that the RAM disk is installed securely; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
2. Re-IML.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM: Exchange the WNM.

385 05HG B1B2 B3B4

Description: A diskette, fixed disk drive, or RAM disk not-ready condition was detected during a downstream load (DSL) attempt.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive defective
- File adapter defective.

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive defective
- File adapter defective.

For RAM disk (HG = 07): WNM defective.

User Action:

Warning: An IML will disrupt operating terminals.

For diskette drives (HG = 01 or 02):

1. Insert the correct DSL diskette into the diskette drive indicated by the hardware group number.
2. Retry the operation. The DSL should resume automatically.
3. Perform an **ALT 2 IML**; see page 2-3. Record the results.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Verify that the DSL subdirectory exists on the fixed disk. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Retry the operation. The DSL should resume automatically.
3. Perform an **ALT 2 IML**; see page 2-3. Record the results.
4. Request service.

For RAM disk (HG = 07):

1. Verify that the RAM disk is installed securely; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.

2. Retry the operation. The DSL should resume automatically.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM: Exchange the WNM.

385 06HG B1B2 B3B4

Description: A disk drive not-ready condition was detected during a Distributed Function Terminal (DFT) dump.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

- Diskette drive door open
- Diskette drive defective
- File adapter defective

User Action:

Warning: An IML will disrupt operating terminals.

1. Verify that the 3174 Dump diskette is in the diskette drive indicated by the hardware group number.
2. Restart the DFT dump procedure.
3. Perform an **ALT 2 IML**; see page 2-3. Record the results.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

385 07HG B1B2 B3B4

Description:

A diskette or fixed disk drive not-ready condition was detected during offline tests.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive defective
- File adapter defective

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive defective
- File adapter defective

User Action:

For diskette drives (HG = 01 or 02):

1. Verify that the correct diskette is in the diskette drive indicated by the hardware group number.
2. Press **Enter** (4001 is displayed).
3. Retry the test selection.
4. Perform an **ALT 2 IML**; see page 2-3. Record the results.
5. Request service.

For fixed disk drives (HG = 03 or 04):

1. Press **Enter** (4001 is displayed).
2. Retry the test selection.
3. Perform an **ALT 2 IML**; see page 2-3. Record the results.
4. Request service.

For Service Personnel Only:For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

385 08HG B1B2 B3B4

Description: A disk drive not-ready condition was detected during the 3174 Dump procedure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive defective
- File adapter defective

User Action:

1. The Dump procedure must be performed again when the original controller failure reoccurs.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

385 09HG B1B2 B3B4

Description: A disk drive not-ready condition was detected during the 3174 Dump procedure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive defective
- File adapter defective

User Action:

1. Restart the Dump by removing the Dump or Control diskette and reinserting it.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

385 10HG B1B2 B3B4

Description: A diskette, fixed disk drive, or RAM disk not-ready condition was detected during a central site change management (CSCM) operation. Resource not available.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive
- File adapter
- WNM defective

For fixed disk drives (HG = 03 or 04):

- Fixed disk or connecting cable
- File adapter

For RAM disk (HG = 07): WNM defective.

User Action:

For the NetView DM operator:

Contact the network site 3174 operator. The drive not-ready condition must be resolved and the NetView DM function must be re-issued before an IML of the network site 3174 is performed.

Contact the WNM network site operator. The drive not-ready condition must be resolved and the NetView DM function must be re-issued before an IML of the WNM is performed.

For the network site 3174 operator:

For diskette drives (HG=01 or 02):

1. Verify that the correct type of diskette is inserted and the diskette drive door is closed.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Perform an **ALT 2 IML** at the network site 3174; see page 2-3. Record the results.
4. Request service.

For fixed disk drives (HG=03 or 04):

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For the WNM network site operator:

For RAM disk (HG = 07):

1. Verify that the RAM disk is installed securely; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
2. Retry the operation. The downstream load should resume automatically. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive cables.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

385 11HG B1B2 B3B4

Description: A diskette or fixed disk drive not-ready condition was detected during a patch operation.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette drive door open
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action:

For diskette drives (HG=01 or 02):

1. Verify that the Control diskette is inserted and the diskette drive door is closed.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For fixed disk drives (HG=03 or 04):

Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 24R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

For Models 51R through 92R:

1. For fixed disk drives only, reseal the disk drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

385 12HG B1B2 B3B4

Description: The disk drive is not ready.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause: Defective fixed disk drive

User Action: Request service.

For Service Personnel Only:

1. Remove and reinsert the fixed disk drive.
2. If problems persist, see 385-01 recovery actions.

385 13HG B1B2 B3B4

Description: The disk drive is not ready. Cannot perform updates to the 3174 bridge configuration file on the disk.

B1B2 = TYPE.

B3B4 = LOCA.

Status Codes

Alert Sent = Operator Intervention Required.

Possible Cause:

- Drive door open
- Defective diskette or fixed disk

User Action:

For diskette drives (HG = 01 or 02): Perform the following actions:

- Remove the diskette from the drive indicated by the hardware group number.
- Verify that this diskette is correct.
- Insert the correct diskette and close the drive door.
- Repeat the last operation.
- If an error occurs before the IML is complete, re-IML.

For fixed disk drives (HG = 03 or 04): Request service.

For Service Personnel Only: Remove and reinsert the fixed disk, indicated by the hardware group number. If the problem persists, see status code 385-01 possible causes.

386 02HG or 05HG or 06HG

Description: A function was attempted when the diskette or fixed disk was busy or was performing another operation, such as a central site change management (CSCM) update.

The QA represents the function that was attempted when the disk was busy:

QA = 02 = Online Tests.
05 = Downstream Load.
06 = Dump.

Note: If the operation causing the busy condition is CSCM, then the status code will alternate with 5800 in the status panel.

Alert Sent = None.

Possible Cause: N/A

User Action: Do not perform any controller activities that would interrupt the communication between the host and your 3174 while these status codes are displayed.

Do not open any diskette drive doors.

Do not perform an IML, ALT 1 IML, or ALT 2 IML.

Do not turn the power Off on the 3174.

When the operation is complete, the status code is erased and the online test, Downstream Load, or Dump can be retried.

For Service Personnel Only: No action is required.

387 02HG

Description: The extended vital product data (VPD) test cannot be executed.

Possible Cause: The wrong Control diskette is in the controller.

Alert Sent = None.

User Action: Insert the diskette that you used to IML the 3174. At the terminal, turn the power Off and then On again and retry the test.

Note: If you do not have the original Control disk, you must IML a control disk that is customized for extended vital product data (VPD) to eliminate the error.

For Service Personnel Only: No action is required.

387 05HG

Description: Downstream Load (DSL) microcode is not present in the controller or the WNM.

Alert Sent = None.

Possible Cause: N/A

User Action:

For diskette drives (HG=01 or 02):

Insert a DSL diskette into the diskette drive, normally diskette drive 2.

For fixed disk drives (HG=03 or 04):

Use online test 5, Option 1; refer to "Test 5: Vital Product Data" in the *3174 Customer Problem Determination Guide*. See if the DSL microcode for your attached terminals is present.

- If the microcode is not present, you will have to copy your DSL diskette onto the fixed disk and select the subdirectory. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
- If the microcode is present, request service.

Note: The distributed function terminal has to be switched off and then on again to start the DSL function.

For RAM disk (HG = 07):

Use Online Test 5, Option 1 (Display Vital Product Data — Controller Configuration). See if the DSL microcode for your attached terminals is present.

- If the microcode is not present, you will have to copy your DSL diskette onto the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
- If the microcode is present, request service.

For Service Personnel Only:

- Perform an **ALT 2 IML** for the controller.
- For the WNM, refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Exchange the WNM if the test fails.

387 08HG B1B2 B3B4

Description: 3174 Diskette media failure while a 3174 offline dump was in progress.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause: A 2.4-MB dump diskette was inserted into a 1.2-MB drive.

User Action: No action is required. The dump must be reinitiated at the next operational microcode failure.

For Service Personnel Only: No action is required.

387 09HG B1B2 B3B4

Description: 3174 Diskette media failure while a 3174 offline dump was in progress.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause: A 2.4-MB dump diskette was inserted into a 1.2-MB drive.

User Action: Insert a 1.2-MB dump diskette and close the drive door. The dump will restart.

For Service Personnel Only: No action is required.

387 11HG

Description: Error found in the File Table of Contents of the patch file.

Alert Sent = None.

Possible Cause: Microcode

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

387 13HG

Description: The diskette that contains the current bridge operational table is not in the drive.

Alert Sent = None.

Possible Cause:

User Action: Insert the Control diskette containing the current bridge operational table in the diskette drive.

For Service Personnel Only: No action is required.

Status Codes

388 00HG to 06HG B1B2 B3B4

Description: A disk media failure has occurred.

QA = 00-56 where:

- x0 = Control, Utility, and DSL
- x1 = Control
- x2 = Control
- x3 = Control or DSL
- x4 = Utility
- x5 = DSL
- x6 = Dump

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required when QA = 00, 01, 02, 05, or 06.

Alert Sent= None when QA = 03 or 04.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter
- Electromagnetic interference (EMI) (table-top models only)
- WNM defective

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

For RAM disk (HG = 07): WNM defective.

User Action:**For the NetView DM operator:**

Reissue the transmission plan.

Warning: An IML will disrupt operating terminals.

For the network site 3174 operator:

For diskette drives (HG = 01 or 02):

1. Exchange the diskette in the diskette drive indicated by the hardware group number. Use a duplicate diskette.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Record the entire status code.
2. Run the "Fixed Disk Media Tests" on page 2-5.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For RAM disk (HG = 07):

1. Verify that the RAM disk is installed securely; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
2. Retry the operation. The DSL should resume automatically.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
4. Request service.

For Service Personnel Only:For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM: Exchange the WNM.

388 07HG B1B2 B3B4

Description: A disk media failure has occurred while running offline tests.

Note: If your 3174 recently received a microcode change through the CSCM function, your host site may need to transmit the data again. Contact your network planner.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action:

Warning: An IML will disrupt operating terminals.

For diskette drives (HG = 01 or 02):

1. Press **Enter**; 4001 appears.
2. Retry the test.

Status Codes

3. Exchange the diskette in the diskette drive indicated by the hardware group number. Use a duplicate diskette.
4. Re-IML.
5. Request service.

For fixed disk drives (HG = 03 or 04):

1. Press **Enter**; 4001 appears.
2. Retry the test.
3. Record the entire status code.
4. Run the "Fixed Disk Media Tests" on page 2-5.
5. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 08HG B1B2 B3B4

Description: A diskette media failure occurred while a 3174 offline dump was in progress.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

- Diskette media
- Diskette drive
- File adapter

User Action: The Dump procedure must be performed again when the original controller failure reoccurs.

Obtain a new Dump diskette before attempting another dump.

For Service Personnel Only:

For Models 1L through 14R:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 09HG B1B2 B3B4

Description: A disk media failure occurred while a 3174 offline dump was in progress.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action:

- If the Control diskette was installed when this failure occurred, exchange the Control diskette and the dump process continues.
- If the Dump diskette was installed when this failure occurred, exchange the Dump diskette and the dump process continues.
- If more than one Dump diskette is used, all Dump diskettes must be retained for analysis.

Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 10HG B1B2 B3B4

Description: A disk media error was detected during central site change management.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter
- WNM defective

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

For RAM disk (HG = 07): WNM defective.

User Action:

For the NetView DM operator:

1. In the transmission plan, set the Destruction parameter to Allowed.
2. Reissue the transmission plan.
3. If the failure continues, contact the network site 3174 operator or the WNM network site operator.

For the network site 3174 operator:

For diskette drives (HG = 01 or 02):

1. Exchange the diskette in the diskette drive indicated by the hardware group number. Use a duplicate diskette.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Re-IML.
4. Perform an **ALT 2 IML**; see page 2-3.
5. Request service.

For fixed disk drives (HG = 03 or 04):

1. Record the entire status code.
2. Run the "Fixed Disk Media Tests" on page 2-5.
3. Contact your central site. The host should re-send the data for the CSCM operation.
4. Re-IML.
5. Request service.

Status Codes

For RAM disk (HG = 07):

1. Verify that the RAM disk is installed securely; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
2. Retry the operation. The DSL should resume automatically.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the File adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM: Exchange the WNM.

388 11HG to 13HG B1B2 B3B4

Description: A disk media failure has occurred.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action:

For the NetView DM operator:

Re-issue the transmission plan.

For the network site 3174 operator:

For diskette drives (HG = 01 or 02):

1. Exchange the diskette in the diskette drive indicated by the hardware group number. Use a duplicate diskette.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For fixed disk drives (HG = 03 or 04):

- Record the entire status code.
- Run the "Fixed Disk Media Tests" on page 2-5.
- Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 12HG B1B2 B3B4

Description: A disk media failure has occurred during a Topology Data Base/Directory Services request.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

- Fixed disk drive
- File adapter

User Action:

Warning: An IML will disrupt operating terminals.

For the network site 3174 operator:

1. Record the entire status code.
2. Run the "Fixed Disk Media Tests" on page 2-5.
If data restoration is required, copy your Control diskettes onto the fixed disk.
3. Re-IML.
4. Perform an **ALT 2 IML**; see page 2-3.
5. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 13HG B1B2 B3B4

Description: A disk media failure has occurred while using the 3174-Peer Bridge file.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action:

Warning: An IML will disrupt operating terminals.

For the network site 3174 operator:

For diskette drives (HG = 01 or 02):

1. Exchange the diskette in the diskette drive indicated by the hardware group number. Use a duplicate diskette.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For fixed disk drives (HG = 03 or 04):

- Record the entire status code.
- Run the "Fixed Disk Media Tests" on page 2-5.

Status Codes

If data restoration is required, copy your Control diskettes onto the fixed disk.

- Re-IML.
- Perform an **ALT 2 IML**; see page 2-3.
- Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 50HG to 55HG B1B2 B3B4

Description: A temporary disk media failure occurred. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action: No action is required unless the controller performance is degraded because of an excessive number of 388 5xHG errors. If performance is degraded because of excessive errors, see status code 388 00HG and perform the actions as indicated.

For Service Personnel Only: No action is required.

388 56HG B1B2 B3B4

Description: A temporary diskette media failure occurred while a 3174 online dump was in progress.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

- Diskette media
- Diskette drive
- Fixed disk
- File adapter

User Action: No action is required unless the problem continues.

For diskette drives (HG = 01 or 02):

- If the Control diskette was installed when this failure occurred, exchange the Control diskette and the dump process continues.
- If the Dump diskette was installed when this failure occurred, exchange the Dump diskette and the dump process continues.
- If two Dump diskettes are used, both Dump diskettes must be retained for analysis.

For fixed disk drives (HG = 03 or 04):

1. Record the entire status code.
2. Run the "Fixed Disk Media Tests" on page 2-5.
If data restoration is required, copy your customized Control diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
3. Re-IML.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

388 60HG to 63HG B1B2 B3B4

Description: A temporary disk media error was detected during central site change management. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action: No action is required unless the controller performance is degraded because of an excessive number of 388 6xHG errors. If performance is degraded because of excessive errors, see status code 388 00HG and perform the actions as indicated.

For Service Personnel Only: No action is required.

388 61HG B1B2 B3B4

Description: A temporary disk media error was detected during a patch operation. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Diskette media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action: No action is required unless the controller performance is degraded because of an excessive number of 388 61HG errors. If performance is degraded, see status code 388 00HG and perform the actions as indicated.

For Service Personnel Only: No action is required.

Status Codes

388 80HG or 81HG B1B2 B3B4

Description: A temporary disk media failure occurred. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause:

For diskette drives (HG = 01 or 02):

- Disk media
- Diskette drive
- File adapter

For fixed disk drives (HG = 03 or 04):

- Fixed disk drive
- File adapter

User Action: No action is required unless the controller performance is degraded because of an excessive number of 388 8xHG errors. If performance is degraded, see status code 388 00HG and perform the actions as indicated.

For Service Personnel Only: No action is required.

389 01HG B1B2 B3B4 B5

Description: 3174 hardware failure: File adapter. This failure can occur either when the controller is operational or during IML or a 3174 offline dump. If the Dump procedure was being performed, it must be performed again when the original controller problem reoccurs.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Interrupt Level.

Alert Given = Permanent if operational.

Alert Given = None if NOT operational.

Possible Cause:

- File adapter
- Processor
- Storage

User Action: Perform one of the following actions:

- If the controller is operational, you may continue to operate; however:
 1. Do not IML.
 2. Do not remove power from distributed function terminals that require downstream loads.
 3. When the controller can be taken offline, perform an **ALT 2 IML**; see page 2-3.
 4. Request service.
- If you are trying to do an IML:
 1. Perform an **ALT 2 IML**; see 2-3.
 2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.
3. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

389 02HG B1B2 B3B4

Description: 3174 hardware failure.

Note: If a diskette drive or fixed disk is causing the problem, the TYPE and LOCA fields may not indicate the correct drive.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- File adapter
- Diskette drive
- Fixed disk
- Processor

User Action: Perform one of the following actions:

- If the controller is operational, you may continue to operate; however:
 1. Do not IML.
 2. Do not remove power from distributed function terminals that require downstream loads.
 3. When the controller can be taken offline, perform an **ALT 2 IML**; see page 2-3.
 4. Re-IML.
 5. Request service.
- If you are trying to do an IML:
 1. Perform an **ALT 2 IML**; see 2-3.
 2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the drive indicated by the HG number.
3. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange the drive indicated by the HG number.

Refer to Chapter 3 in the maintenance manual for your model.

389 03HG B1B2 B3B4

Description: 3174 hardware failure.

Note: If a diskette drive or fixed disk is causing the problem, the TYPE and LOCA fields may not indicate the correct drive.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Diskette drive
- File adapter
- Fixed disk
- Processor

User Action: Perform one of the following actions:

- If the controller is operational, you may continue to operate; however:
 1. Do not IML.
 2. Do not remove power from distributed function terminals that require downstream loads.
 3. When the controller can be taken offline, perform an **ALT 2 IML**; see page 2-3.
 4. Request service.
- If you are trying to do an IML:
 1. Perform an **ALT 2 IML**; see 2-3.
 2. Request service.

Status Codes

For Service Personnel Only:

For Models 1L through 64R:

Go to MAP 0430 in the maintenance manual.

For Models 81R through 92R:

1. Exchange the planar board.
2. Exchange the diskette drive.

Refer to Chapter 3 in the maintenance manual for your model.

389 04HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- File adapter
- Processor
- Storage
- Insufficient storage when IMLing with Configuration Support B or C

User Action: Perform one of the following actions:

- If the controller is operational, you may continue; however:
 1. Do not IML.
 2. Do not remove power from distributed function terminals that require downstream loads.
 3. When the controller can be taken offline, perform an **ALT 2 IML**; see page 2-3.
 4. Request service.
- If you are trying to do an IML:
 1. Perform an **ALT 2 IML**; see 2-3.
 2. Request service.
 3. Review the storage requirements in the *3174 Planning Guide*. Contact your IBM representative to obtain additional storage.

For Service Personnel Only:

For Models 1L through 64R:

Go to MAP 0430 in the maintenance manual.

For Models 81R or 82R:

1. Exchange the planar board.
2. Exchange the diskette drive.

For Models 90R through 92R:

1. Exchange the planar board.
2. Exchange the diskette drive.
3. Exchange the storage card in location J22.

Refer to Chapter 3 in the maintenance manual for your model.

389 05HG B1B2 B3B4

Description: 3174 hardware failure: File adapter error during a I/O operation.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- File adapter
- Fixed disk

User Action: Perform one of the following actions:

- If the controller is operational, you may continue to operate; however:
 1. Do not IML.
 2. Do not remove power from distributed function terminals that require downstream loads.
 3. When the controller can be taken offline, perform an **ALT 2 IML**; see page 2-3.
 4. Request service.
- If you are trying to do an IML:
 1. Perform an **ALT 2 IML**; see 2-3.
 2. Request service.

For Service Personnel Only:

For Models 1L through 64R:

Go to MAP 0430 in the maintenance manual.

For Models 81R through 92R:

1. Exchange the planar board.
2. Exchange the diskette drive.

Refer to Chapter 3 in the maintenance manual for your model.

389 51HG to 54HG B1B2 B3B4 B5

Description: Temporary 3174 hardware failure. The controller is still operational.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = Interrupt Level.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- File adapter
- Processor

User Action: No action is required unless the machine performance is degraded due to an excessive number of 389 errors.

If performance is degraded because of an excessive number of errors, request service.

For Service Personnel Only:

For Models 1L through 64R:

Go to MAP 0430 in the maintenance manual.

For Models 81R through 92R:

1. Exchange the planar board.
2. Exchange the diskette drive.

Refer to Chapter 3 in the maintenance manual for your model.

390 00HG

Description: 3174 disk failure: file not found.

Possible Cause:

- Incorrect diskette installed
- Fixed disk or RAM disk
- Microcode

Alert Sent = Permanent.

User Action:

For diskette drives (HG = 01 or 02):

1. Remove the diskette from the drive indicated by the HG number.
2. Insert the correct diskette and close the diskette drive door.
3. Re-IML.
4. Request service.

Status Codes

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy the diskettes required for your 3174 configuration onto the fixed disk indicated by the HG number.
2. Re-IML.
3. Request service.

For RAM disk (HG = 07):

1. Reload the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Request service.

For Service Personnel Only: Contact your next level of support.

390 01HG to 03HG

Description: 3174 disk failure: file not found.

Alert Sent = Permanent when QA = 01 or 02.

Alert Sent = None when QA = 03.

Possible Cause:

- Incorrect diskette installed
- Fixed disk
- Microcode

User Action:

For diskette drives (HG = 01 or 02):

1. Remove the diskette from the drive indicated by the HG number.
2. Insert a Control diskette and close the diskette drive door.
3. Re-IML.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy a customized Control diskette onto the fixed disk indicated by the HG number.
2. Re-IML.
3. Request service.

For Service Personnel Only: Contact your next level of support.

390 03HG

Description: Disk failure: file not found.

Alert Sent = Permanent when QA = 01 or 02

Alert Sent = None when QA = 03

Possible Cause:

- Incorrect diskette installed
- Microcode failure
- RAM disk defective

User Action:

For diskette drive (HG = 01):

1. Remove the diskette from the drive.
2. Insert a Control diskette and close the diskette drive door.
3. Re-IML.
4. Request service.

For RAM disk (HG = 07):

1. Reload the RAM disk and re-IML. Refer "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Request service.

For Service Personnel Only: Contact your next level of support.

390 04HG

Description: 3174 disk failure: file not found.

Alert Sent = None.

Possible Cause:

- Incorrect diskette installed
- Fixed disk or RAM disk
- Microcode

User Action:

For diskette drives (HG = 01 or 02):

1. Remove the diskette from the drive indicated by the HG number.
2. Insert a Utility diskette and close the diskette drive door.
3. Re-IML.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy a Utility diskette onto the fixed disk indicated by the HG number.
2. Re-IML.
3. Request service.

For RAM disk (HG = 07):

1. Reload the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Request service.

For Service Personnel Only: Contact your next level of support.

390 05HG

Description: 3174 disk failure: file not found.

Note: To restart the Downstream Load operation, turn the power Off and then back On at the distributed function terminal (DFT), after you have performed the recovery actions for this status code.

Alert Sent = Permanent.

Possible Cause:

- Incorrect diskette installed
- Fixed disk or RAM disk defective
- Microcode

User Action:

For diskette drives (HG = 01 or 02):

1. Remove the diskette from the drive indicated by the HG number.
2. Insert a Downstream Load diskette and close the diskette drive door.
3. Re-IML.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy a Downstream Load diskette onto the fixed disk indicated by the HG number.
2. Re-IML.
3. Request service.

For RAM disk (HG = 07):

1. Reload the DSL files onto the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Re-IML.
3. Request service.

For Service Personnel Only: Contact your next level of support.

Status Codes

390 06HG

Description: 3174 disk failure: file not found.

Alert Sent = Permanent.

Possible Cause:

- Diskette media
- Incorrect diskette installed
- Microcode

User Action:

1. Perform the following actions:
 - Remove the diskette from the drive indicated by the HG number.
 - Insert a new Dump diskette and close the diskette drive door.
 - Re-issue the Dump request.
2. Request service.

For Service Personnel Only: Contact your next level of support.

390 07HG

Description: 3174 disk failure: file not found.

Alert Sent = None.

Possible Cause:

- Diskette media
- Incorrect diskette installed
- Fixed disk
- Microcode

User Action:

1. Press **Enter**; 4001 appears.
2. Retry the test.

For diskette drives (HG = 01 or 02):

1. Exchange the Utility diskette in the drive indicated by the HG number.
2. Retry the test.
3. Request service.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy a Utility and/or a customized Control diskette onto the fixed disk indicated by the HG number.
2. Retry the test.
3. Request service.

For Service Personnel Only: Contact your next level of support.

390 08HG

Description: 3174 disk media failure: file not found while a 3174 offline dump was in progress.

Alert Sent = None.

Possible Cause:

- Diskette media
- Incorrect diskette installed
- Microcode

User Action: The Dump procedure must be performed again when the original controller failure reoccurs.

1. Ensure that a 3174 Dump diskette is in the diskette drive indicated by the hardware group number.
2. If the diskette in the drive is the correct one, obtain a new Dump diskette before performing the Dump procedure again.

Note: If two Dump disks are used, both must be retained for analysis.

For Service Personnel Only: No action is required.

390 09HG

Description: 3174 disk media failure: file not found while a 3174 offline dump was in progress.

Alert Sent = None.

Possible Cause:

- Diskette media
- Incorrect diskette installed
- Microcode

User Action:

For diskette drives (HG = 01 or 02):

- If the Control diskette was installed when this failure occurred, exchange the Control diskette and the dump continues.
- If the Dump diskette was installed when this failure occurred, exchange the Dump diskette and the dump continues.
- If more than one Dump diskette is used, all Dump diskettes must be retained for analysis.

For fixed disk drives (HG = 03 or 04):

Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy the Control diskette onto the fixed disk.

Perform the dump again when the original controller failure occurs.

For Service Personnel Only: No action is required.

390 10HG

Description: 3174 failure: file not found error detected during a central site change management operation.

Alert Sent = Permanent.

Possible Cause: File name not found in the disk directory.

- Incorrect diskette installed
- The required subdirectory does not exist on the fixed disk or RAM disk.

User Action:

For the NetView DM operator:

1. Verify that the NetView Distribution Manager (NDM) sense code detected an error.
2. In the transmission plan, set the Destruction parameter to Allowed.
3. Reissue the transmission plan.
4. If the failure continues, contact the network site operator.

For the 3174 operator:

For diskette drives (HG = 01 or 02):

1. Ensure that the correct diskette was installed for the attempted CSCM operation.
2. Exchange the diskette.
3. Contact your central site. The host should re-send the data for the CSCM operation.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy the required diskettes onto the fixed disk.
2. Contact your central site. The host should re-send the data for the CSCM operation.

For RAM disk (HG = 07):

1. Reload the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Contact your central site. The host should re-send the data for the CSCM operation.

For Service Personnel Only: No action is required.

Status Codes

390 11HG

Description: File not found; error detected during a patch operation. A required CUT patch is not installed at the network site controller.

Alert Sent = Permanent.

Possible Cause:

- Incorrect diskette installed
- Wrong diskette copied onto the fixed disk
- CUT patch has not been distributed by NetView DM

User Action:

For diskette drives (HG = 01 or 02):

1. Ensure that the correct diskette was installed for the attempted patch operation.
2. Exchange the diskette.
3. Re-IML.

For fixed disk drives (HG = 03 or 04):

- CSCM users submit a transmission plan to send and install the required patch.
- Non-CSCM users copy a customized Control diskette onto the fixed disk and re-IML. Refer "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

390 13HG

Description: 3174 disk failure: file not found. An error was found while trying to read the 3174 bridge configuration file from the disk.

Alert Sent = Permanent.

Possible Cause: The file was not found on the disk's directory or subdirectory.

User Action:

For diskette drives (HG = 01 or 02):

1. Remove the diskette from the drive indicated by the HG number.
2. Insert a Control diskette and close the diskette drive door.
3. Re-IML.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to copy a customized Control diskette onto the fixed disk indicated by the HG number.
2. Re-IML.
3. Request service.

For Service Personnel Only: Contact your next level of support.

391 00HG to 09HG B1B2 B3B4

Description: 3174 diskette media or RAM disk write-protected.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent when QA = 00, 01, 02, 05, or 06.

Alert Sent = None when QA = 03, 04, 07, 08, or 09.

Possible Cause:

- Diskette media
- Diskette drive
- File adapter
- RAM disk defective

User Action:

Warning: An IML will disrupt operating terminals.

1. Exchange the diskette or remove the write protection sticker from the diskette and retry the operation.
2. If the error occurred during an IML, re-IML.
3. Request service.

For RAM disk (HG = 07):

1. If the error occurred during an IML, re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM:

1. For diskette drive (HG = 01): Exchange the WNM.
2. For RAM disk (HG = 07): Contact your next level of support.

391 10HG B1B2 B3B4

Description: 3174 write-protect error detected during a central site change management operation.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Diskette media
- Diskette drive
- File adapter
- RAM disk defective
- WNM defective

User Action:

For the NetView DM operator:

1. Contact the network site operator. The error condition must be corrected at the network site 3174.
2. After the error condition is corrected, reissue the transmission plan.

For the 3174 operator:

1. Exchange the diskette or remove the write protection sticker from the diskette you are using.
2. Contact your central site. The host should re-send the data for the CSCM operation.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM:

1. For diskette drive (HG = 01): Exchange the WNM.
2. For RAM disk (HG = 07): Contact your next level of support.

Status Codes

391 11HG B1B2 B3B4

Description: 3174 write protect error detected during a patch operation.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause:

- Diskette media
- Diskette drive
- File adapter

User Action: Exchange the diskette or remove the write protection sticker from the diskette.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

391 13HG B1B2 B3B4

Description: 3174 write protect error detected during an attempt to write the 3174 bridge configuration file to the disk.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause: The diskette is write protected.

User Action:

1. Remove write protection from the diskette or exchange the diskette in the diskette drive indicated by the hardware group number and repeat the last update to the file or the update will be lost.
2. If the error occurred before the IML was complete, re-IML.

For Service Personnel Only: No action is required.

392 00HG to 06HG B1B2

Description: 3174 disk media failure.

B1B2 = 0X00 = one of the following conditions:

0100 = disk full.

0200 = disk directory full.

0300 = disk End of file (EOF) error.

Alert Sent = Permanent when QA = 00, 01, 02, 05, or 06.

Alert Sent = None when QA = 03 or 04.

Possible Cause: Microcode

User Action:

For diskette drives (HG = 01 or 02):

1. Exchange the diskette in the diskette drive indicated by the hardware group. Use the same kind of diskette.
2. Re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For fixed disk drives (HG = 03 or 04):

1. If the error occurred during an IML, re-IML.
2. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*. Delete any unnecessary subdirectories and re-IML.

3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For RAM disk (HG = 07):

1. If the error occurred during an IML, re-IML.
2. Reload the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
3. Perform a **Test All 82**; refer to *8250 Workstation Networking Module Problem Determination and Service Guide*. Record the results.
4. Request service.

For Service Personnel Only: Contact your next level of support.

392 07HG B1B2

Description: 3174 disk media failure.

B1B2 = 0X00 = one of the following conditions:

- 0100 = Disk full.
- 0200 = Disk directory full.
- 0300 = Disk End of file (EOF) error.

Alert Sent = None.

Possible Cause: Microcode

User Action:

For diskette drives (HG = 01 or 02):

1. Press **Enter**; 4001 appears.
2. Retry the test.
3. Exchange the diskette in the diskette drive indicated by the hardware group. Use the same kind of diskette.
4. Re-IML.
5. Perform an **ALT 2 IML**; see page 2-3.
6. Request service.

For fixed disk drives (HG = 03 or 04):

1. If the error occurred during an IML, re-IML.
2. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*. Delete any unnecessary subdirectories and re-IML.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For Service Personnel Only: Contact your next level of support.

392 08HG B1B2

Description: 3174 diskette media failure, while a 3174 offline dump was in progress.

B1B2 = 0X00 = one of the following conditions:

- 0100 = diskette full.
- 0200 = diskette directory full.
- 0300 = diskette End of file (EOF) error.

Alert Sent = None.

Possible Cause: Microcode

User Action: Perform the dump again when the original controller failure occurs, using a new Dump diskette.

For Service Personnel Only: No action is required.

392 10HG B1B2

Description: 3174 disk full, directory full, or end of file (EOF) error was detected while the controller was receiving data from the host during a central site change management operation.

B1B2 = 0X00 = one of the following conditions:

- 0100 = disk full.
- 0200 = disk directory full.
- 0300 = disk End of file (EOF) error.

Alert Sent = Permanent.

Status Codes

Possible Cause: Microcode or an excessive amount of host data.

User Action:

For the NetView DM operator:

1. Remove, delete, or accept any unnecessary data objects.
2. Reissue the original transmission plan with the destruction parameter set to Allowed.
3. If the failure continues, contact the network site operator.

For the 3174 operator:

For diskette drives (HG 01 or 02):

1. Install a new diskette of the same type.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For fixed disk drives (HG 03 or 04):

1. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*. Delete any unnecessary subdirectories and re-IML.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Request service.

For RAM disk (HG = 07):

1. Reload the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
4. Request service.

For Service Personnel Only: Contact your next level of support.

392 11HG B1B2

Description: 3174 disk full, directory full, or end of file (EOF) error detected during a patch operation.

B1B2 = 0X00 = one of the following conditions:

- 0100 = disk full.
- 0200 = disk directory full.
- 0300 = disk End of file (EOF) error.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

For diskette drives (HG 01 or 02):

1. Install a new diskette of the same type, and retry the operation.
2. Request service.

For fixed disk drives (HG 03 or 04):

1. Delete any unnecessary subdirectories, and retry the operation. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Request service.

For Service Personnel Only: Contact your next level of support.

392 12HG B1B2

Description: The 3174 disk is full or an end of file (EOF) error was detected while the 3174 was attempting to write to the fixed disk.

B1B2 = one of the following conditions:

- 0100 = disk full
- 0200 = disk directory full
- 0300 = disk end of file (EOF) error.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. Delete any unnecessary subdirectories from the fixed disk and retry the operation. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Request service.

For Service Personnel Only: Contact your next level of support.

392 13HG B1B2

Description: 3174 disk full, directory full, or end of file (EOF) error was detected while attempting to write the 3174 bridge operation file to the disk.

B1B2 = one of the following conditions:

- 0100 = disk full.
- 0200 = directory full.
- 0300 = disk end of file (EOF) error.

Alert Sent = Permanent.

Possible Cause: Microcode

User Action:

For diskette drives (HG = 01 or 02):

Request service. Space should be reserved on the diskette.

For fixed disk drives (HG = 03 or 04):

1. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*. Delete any unnecessary subdirectories from the fixed disk.
2. If the problem persists, request service.

For Service Personnel Only: Contact your next level of support.

393 00HG

Description:

- The diskette was changed in the diskette drive indicated by the hardware group number, or the diskette drive was busy.
- If using a fixed disk, the drive was busy.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: No action is required. This is only an informational message.

For Service Personnel Only: No action is required.

393 01HG to 06HG

Description:

- A diskette was removed and reinserted while a controller operation was running that did not require a disk change, or the diskette drive was busy.
- If using a fixed disk, the drive was busy.

Alert Sent = Permanent when QA = 01, 02, 05, or 06.

Alert Sent = None when QA = 03 and 04.

Possible Cause:

- Diskette was removed and reinserted
- Diskette drive
- Fixed disk
- File adapter

User Action:

1. Ensure that the correct diskette is inserted.
2. Retry the operation.
3. Re-IML.
4. Perform an **ALT 2 IML**; see page 2-3.
5. Request service.

Status Codes

For Service Personnel Only:

For Models 1L through 64R:

Go to MAP 0430 in the maintenance manual for your model.

For Models 81R through 92R:

1. Exchange the diskette drive, indicated by the HG number.
2. Exchange the planar board.

393 07HG

Description:

- A diskette was removed and reinserted while a controller operation was running that did not require a disk change, or the diskette drive was busy.
- If using a fixed disk, the drive was busy.

Alert Sent = None.

Possible Cause:

- Diskette was removed and reinserted
- Diskette drive
- Fixed disk
- File adapter

User Action:

1. Ensure that the correct diskette is inserted.
2. Press **Enter**; 4001 appears.
3. Retry the test.
4. Re-IML.
5. Perform an **ALT 2 IML**; see page 2-3.
6. Request service.

For Service Personnel Only:

For Models 1L through 64R:

Go to MAP 0430 in the maintenance manual for your model.

For Models 81R through 92R:

1. Exchange the diskette drive, indicated by the HG number.
2. Exchange the planar board.

393 08HG

Description:

- A diskette was removed and reinserted while a controller operation was running that did not require a disk change, or the diskette drive was busy.
- If using a fixed disk, the drive was busy.

Alert Sent = None.

Possible Cause:

- Diskette was removed and reinserted
- Diskette drive
- Fixed disk
- File adapter

User Action: The dump procedure must be performed again when the original controller failure reoccurs.

Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only: No action is required.

393 10HG

Description: A diskette was removed and reinserted while a central site change management (CSCM) operation was in progress.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: This may or may not be a failure. Contact your central site. The host may need to re-send the data to complete the CSCM operation.

For Service Personnel Only: No action is required.

393 11HG

Description: A diskette was removed and reinserted during a patch operation.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: This may or may not be a failure. Retry the operation. If the failure continues, request service.

For Service Personnel Only: No action is required.

393 12HG

Description: A disk change error occurred while writing to the fixed disk.

Alert Sent = Permanent.

Possible Cause: The fixed disk drive was previously busy.

User Action: No action is required. This is only an informational message.

For Service Personnel Only: No action is required.

393 13HG

Description: A disk change error occurred while writing the 3174 bridge configuration to the disk.

Alert Sent = Permanent.

Possible Cause: The drive was previously busy or the diskette was changed.

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

394 04HG

Description: An attempt was made to rename a dataset, and the new dataset name already exists.

Possible Cause: N/A

Alert Sent = Temporary.

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

394 10HG

Description: A disk media error was detected during a central site change management operation.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

For the NetView DM operator:

1. Remove, delete, or accept any unnecessary data objects.
2. Reissue the original transmission plan with the destruction parameter set to allowed.
3. If the failure continues, contact the network site 3174 operator.

Status Codes

For the network site 3174 operator:

For diskette drives (HG = 01 or 02):

1. Replace the diskette.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Request service.

For fixed disk drives (HG = 03 or 04):

1. Run the "Fixed Disk Media Tests" on page 2-5.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Request service.

For RAM disk (HG = 07):

1. Reload the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
2. Contact your central site. The host should re-send the data for the CSCM operation.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
4. Request service.

For Service Personnel Only: Contact your next level of support.

395 00HG to 11HG B1B2 B3B4

Description: Diskette/diskette drive incompatibility error. A 2.4-MB diskette has been inserted into a 1.2-MB drive.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required when QA = 00, 01, 02, 03, 05, 06, 10, or 11.

Alert Sent = None when QA = 04 or 07.

Possible Cause: N/A

User Action:

1. Insert the 2.4-MB diskette into a 2.4-MB drive.
2. Retry the operation.

For Service Personnel Only: No action is required.

395 13HG B1B2 B3B4

Description: A 2.4-MB diskette has been inserted into a 1.2-MB drive.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Operator Intervention Required.

Possible Cause: N/A

User Action:

1. Insert the 2.4-MB diskette into a 2.4-MB drive and repeat the last update or the last update will be lost.
2. If the error occurred during an IML, re-IML.

For Service Personnel Only: No action is required.

398 0100 9344 B3B4

Description: There is an Ethernet Adapter and microcode mismatch. The controller is operational for other applications that do *not* require this adapter.

B3B4 = LOCA.

Alert Sent = Delayed

Otherwise:

Alert Sent = Permanent.

Possible Cause: The microcode does not support the Ethernet Adapter.

User Action: Re-IML with the correct microcode.

For Service Personnel Only: No action is required.

398 01HG B1B2 B3B4

Description: 3174 hardware failure detected during the IML, but the IML will continue. The controller is operational for other applications that do *not* require the defective adapter.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause: Defective adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

398 51HG B1B2 B3B4

Description: Temporary 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless the controller performance is degraded because of an excessive number of errors. See status code 398 01HG, if there are an excessive number of errors.

For Service Personnel Only: No action is required.

399 01HG

Description: The Control diskette is configured for an Asynchronous Emulation Adapter (AEA), but the adapter does not appear to be in the controller. The controller is operational; only this adapter is not working.

Alert Sent = Temporary.

Possible Cause:

- Control diskette is configured incorrectly
- AEA is defective

User Action: Verify that the number of AEAs installed is the same as the number of AEAs for which you have configured.

1. Use Online Test 2, option 2 to verify your customization. Refer to *3174 Customer Problem Determination Guide*.
2. Locate the AEA hardware.

For Models 1L through 14R:

Check card locations 12, 13, and 14 for card type 9331 or 9333.

For Models 21H through 24R:

Check card locations 11–15 for card type 9311.

For Models 51R through 64R:

Check the back panel for the eight AEA ports.

- If the AEA hardware is not present in the controller, the Control disk must be reconfigured; refer to the *3174 Planning Guide*.
- If the AEA hardware is present, request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3. Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

399 03HG B1B2 B3B4

Description: The microcode for one or more of the following features was not found on the DSL, Control Extension diskette, or RAM disk:

- Asynchronous Emulation Adapter (AEA)
- APPN
- Peer Communication
- Frame Relay

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause:

- Control Extension diskette.
- Downstream Load diskette.
- Fixed disk or RAM disk media failure, or DSL subdirectory not present.
- Control Extension microcode without the configured features is present on the fixed disk drive or the RAM disk. The 3174 always accesses the fixed disk drive first when searching for Control Extension microcode.

User Action: For information about running 3174 online tests, refer to the *3174 Customer Problem Determination Guide*.

1. Use Online Test 1, Option 5, to see if there are any recent status codes in the range of 384 to 393. If any status code 384 to 393 is in the event log, perform the repair action for that status code.
2. Re-IML.
3. Use Online Test 5, Option 1 to display the "Controller Vital Data." Under DSL information, look for the appropriate DSL microcode.

3020 = AEA.

3174 = Control Extension.

AAAA = APPN.

CCCC = Peer Communication.

FFFF = Frame Relay Communications.

- If the microcode is not present, then obtain the feature microcode. Contact your IBM representative.
- If the microcode is present:

For diskette drives (HG = 01 or 02):

Exchange the DSL diskette.

For fixed disk drives (HG = 03 or 04):

Copy the microcode onto the fixed disk; refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For RAM disk (HG = 07):

Use Online Test 5, Option 1 (Display Vital Product Data — Controller Configuration). Check whether the DSL microcode for your attached terminal is present.

- If the microcode is not present, you will have to copy your DSL diskette onto the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
- If the microcode is present, request service.

For Service Personnel Only:

For diskette drives (HG = 01): No action is required.

For RAM disk (HG = 07): Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Exchange the WNM if the test fails.

399 04HG

Description: The levels of the Control disk and the DSL microcode are incompatible for one of the following functions:

- Asynchronous Emulation Adapter (AEA)
- APPN
- Peer Communication
- Control Extension
- Frame Relay

The release levels, configuration, and suffix of the Control disk must be equal to the DSL microcode.

The HG represents the disk drive number that contains the incompatible DSL microcode.

HG = 01 or 02 = Diskette Drives 1 or 2.

HG = 03 or 04 = Fixed Disk Drives 3 or 4.

Alert Sent = Temporary.

Possible Cause:

- The diskette used may be incorrect.
- DSL microcode present on fixed disk drive or RAM disk. The 3174 always accesses the fixed disk drive first when searching for DSL microcode.

User Action: For information about running online tests, refer to the *3174 Customer Problem Determination Guide*.

1. Use Online Test 5, Option 1, to display the "Controller Vital Data."
2. Record the information next to the entry line "Microcode Release."
3. Under the entry line "DSL Information," look for "3020", "3174", "AAAA", or "CCCC" and record the next field that indicates the release and suffix levels.
4. Either obtain a Control disk that is compatible with the DSL microcode, or obtain DSL microcode that is compatible with the Control disk. If a fixed disk drive is used, copy the microcode onto the fixed disk; refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
5. Re-IML.

For RAM disk (HG =07):

Use Online Test 5, Option 1 (Display Vital Product Data — Controller Configuration). See if the DSL microcode for your attached terminals is present.

- If the microcode is not present, you will have to copy your DSL diskette onto the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
- If the microcode is present, request service.

For Service Personnel Only:

For diskette drive: No action is required.

For RAM disk: Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Exchange the WNM if the test fails.

399 05HG

Description: A Terminal Adapter is not present during an IML.

Alert Sent = Temporary.

Possible Cause: The Terminal Adapter is:

- Missing (Models 1L through 14R only)
- Defective
- Plugged in incorrectly
- Plugged in after a defective adapter

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 915X.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

399 06HG

Description: A feature was not initialized during an IML because the required microcode load from the DSL diskette, Control Extension diskette, the fixed disk, or RAM disk did not occur.

Alert Sent = Temporary.

Possible Cause:

- Wrong DSL diskette
- DSL or Control Extension diskette with the correct microcode is not installed, or the DSL microcode is not present on the fixed disk, or RAM disk
- RAM disk defective

Status Codes

User Action: For information about running online tests, refer to *3174 Customer Problem Determination Guide* manual.

1. Use Online Test 5, Option 1, to see if the feature microcode is installed.

Under the DSL information, 3020, 3174, AAAA, CCCC, or FFFF should appear.

- If Test 5 shows 3020, 3174, AAAA, CCCC, or FFFF is installed, request service and report the status code and the QAHG field.
- If Test 5 does not show 3020, 3174, AAAA, CCCC, or FFFF installed:
 - For diskette drives (HG 01 or 02):
Insert the appropriate diskette into one of the diskette drives and Re-IML.
 - For fixed disk drives (HG 03 or 04):
Copy the appropriate diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
 - For RAM disk (HG = 07):
Use Online Test 5, Option 1 (Display Vital Product Data — Controller Configuration). See if the DSL microcode for your attached terminals is present.
 - If the microcode is not present, you will have to copy your DSL diskette onto the RAM disk. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
 - If the microcode is present, request service.

2. Request service.

For Service Personnel Only:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*. Exchange the WNM if the test fails.

399 07HG B1

Description: The Control disk is customized for a particular amount or level of Multiple Logical Terminal (MLT) storage. The controller does not have enough physical storage to support this MLT storage selection. MLT support is downgraded. The controller is operational, but some terminal users may not be able to access all the host sessions that were configured. Additional storage is required to support your current configuration.

B1 = MLT level to which the controller has been deconfigured.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Either reconfigure the Control disk to change the MLT storage selection or obtain the additional storage.

- To reconfigure the Control disk, refer to the *3174 Utilities Guide*. Question 110 specifies the MLT support levels.
- To determine the amount of storage required to support your current MLT selection, refer to "Controller Storage Planning" and question 110 in the *3174 Planning Guide*.

Contact your IBM representative to obtain the additional storage.

For Service Personnel Only: No action is required.

399 08HG B1B2 B3B4

Description: 3174 hardware failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause:

- Asynchronous emulation adapter internal I/O cable missing, loose or not connected
- Asynchronous emulation adapter

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Check and re-plug the AEA internal I/O cable.
2. Exchange the FRU indicated by TYPE and LOCA.

For Models 51R through 64R:

1. Check and re-plug the AEA internal I/O cable.
2. Exchange the AEA card in location 04.

Refer to Chapter 3 in the maintenance manual for your model.

399 09HG B1B2 B3B4

Description: The connection between the Terminal Adapter and an installed Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter is not working.

Only the terminals attached to the failing TMA or indirectly to the failing FTA are inoperative. The remainder of the controller is usable.

Note: The TYPE and LOCA fields identify the Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause:

- The coaxial cable that connects the Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter to the Terminal Adapter is defective or not connected.
- Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter
- Terminal Adapter
- Unterminated cables or defective device on associated TMA card.

User Action: Perform the following actions:

1. Record the status code, qualifier, hardware group, and extended data.
2. Verify that the coaxial cable connecting the TMA or FTA to the Terminal Adapter is correctly installed.
3. Re-IML.
 - If 399-09 appears again, request service.
 - If 399-09 does not appear again, the problem has been corrected.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

399 10HG B1B2

Description: A configuration error occurred during an IML.

B1B2 = 7XXX = Customizing status code that explains why this error occurred.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: See the 7XXX status code in this chart to determine what is causing the problem.

For Service Personnel Only: No action is required.

399 11HG B1B2 B3B4

Description: A storage error occurred during an IML. The controller may be operational but the storage size is reduced.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only: Perform the Processor/Storage Test (HG87). Refer to Chapter 2 in the maintenance manual for your model.

399 12HG B1B2

Description: Configuration error, insufficient storage.

The controller does not have enough storage to support the number of downstream physical units (DSPU) specified during customizing. The controller is operational but some of the attached DSPUs will not work.

If present, B1B2 = The maximum number of DSPUs that can be supported (in decimal).

The addresses of the supported DSPUs are those defined on the LAN Address Assignment panel, starting with the address (question 940) that follows the gateway address, and continuing for the total number represented by B1B2.

Alert Sent = Temporary.

Possible Cause: N/A

Status Codes

User Action: Either reconfigure the Control disk or obtain the necessary storage.

- To reconfigure, refer to question 940 and the "Storage Planning Procedure" in the *3174 Planning Guide* to determine how many DSPUs your 3174 will support.
- To determine how much storage you need to support your current configuration, refer to "Planning for Controller Storage" in the *3174 Planning Guide*.

Contact your IBM representative to obtain the additional storage.

For Service Personnel Only: No action is required.

399 13HG

Description: Fixed disk unavailable for central site change management, because of insufficient storage installed.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Verify that at least 1.5 MB of storage is installed.

Use online Test 2, Option 1. Refer to "Test 2 Configuration Menu" in the *3174 Customer Problem Determination Guide*.

Contact your IBM representative to obtain the additional storage.

For Service Personnel Only: No action is required.

399 14HG

Description: Asynchronous emulation adapter support is unavailable because of insufficient storage installed.

The AEA functions will not work.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: To determine how much storage you will need to support your current configuration, refer to "Planning for Controller Storage" in the *3174 Planning Guide*.

Contact your IBM representative to obtain the additional storage.

399 15HG

Description: Hardware/customization mismatch. The control diskette is customized for LAN adapter type (FRU ID) that is not installed.

Alert Sent = Temporary.

Possible Cause: LAN adapter missing, defective, or not seated correctly, or wrong type of LAN adapter customized.

User Action: Verify that the LAN adapter is present and mounted correctly. Reconfigure the control disk or obtain the LAN adapter feature hardware. If customized for a Token-Ring LAN, the FRU is 935x. If customized for Ethernet, the FRU is 9344.

For Models 1L, 1R, 2R, 11L, 11R, 12L and 12R:

Check for FRU in locations 11 through 17.

- If the FRU is present, the controller is failing; request service.
- If the FRU is not present, the controller is configured incorrectly. You must change your answers to the LAN questions. Refer to the *3174 Planning Guide*.

For Models 21H, 21L, 21R, and 22L:

Check for FRU in locations 11 through 15.

- If the FRU is present, the controller is failing; request service.
- If the FRU is not present, the controller is configured incorrectly. You must change your answers to the LAN questions. Refer to the *3174 Planning Guide*.

For Models 51R, 52R, 61R, and 62R:

Check the back panel for the 9-pin cable connector.

- If the cable connector is present, the controller is failing; request service.
- If the cable connector is not present, reconfigure the Control disk. You must change your answers to the Token-Ring gateway questions. Refer to the *3174 Planning Guide*.

For Models 3R, 13R, 14R, 23R, 24R, 53R, 63R, 64R, and 90R:

Request service.

For Service Personnel Only: Exchange the LAN Adapter.

399 16HG

Description: Hardware/customizing mismatch. The Token-Ring speed has been downgraded. The controller is operational.

Alert Sent = Temporary.

Possible Cause:

- Control microcode is customized incorrectly.
- LAN Adapter does not support 16 Mbps as the ring speed.

User Action: Either reconfigure the Control disk or obtain the Token-Ring adapter that supports 16 Mbps ring speed.

- To reconfigure, change customizing question 384 or 911 to 4 Mbps. Refer to the *3174 Planning Guide*.
- To obtain the 16 Mbps LAN Adapter, contact your IBM representative.

For Service Personnel Only: No action is required.

399 17HG

Description: Hardware/customizing mismatch. The Token-Ring release option has been downgraded to normal token release. The controller is operational.

Alert Sent = Temporary.

Possible Cause:

- Control microcode is customized incorrectly.
- LAN Adapter does not support early token release.

User Action: Either reconfigure the Control disk or obtain the 16/4-Mbps LAN Adapter that supports early token release.

- To reconfigure, change customizing question 384 or 911 to normal token release. Refer to the *3174 Planning Guide*.
- To obtain the LAN Adapter, contact your IBM representative.

For Service Personnel Only: No action is required.

399 18HG

Description: Hardware/customizing mismatch. The Token-Ring I-frame size has been downgraded. The controller is operational.

Alert Sent = Temporary.

Possible Cause:

- Control microcode is customized incorrectly.
- LAN Adapter does not support I-frame sizes greater than 2042 bytes.

User Action: Either reconfigure the Control disk or obtain the 16/4-MB LAN Adapter that supports I-frame sizes greater than 2042 bytes.

- To reconfigure, change customizing questions 941 (gateway Configuration Support S and B), 380 (non-gateway Configuration Support A), and 382 (non-gateway Configuration Support B). Refer to the *3174 Planning Guide*.
- To obtain the LAN Adapter, contact your IBM representative.

For Service Personnel Only: No action is required.

399 19HG

Description: Hardware/customizing mismatch. The number of Token-Ring downstream physical units (DSPUs) has been downgraded. The controller is operational.

Alert Sent = Temporary.

Possible Cause:

- Control microcode is customized incorrectly
- LAN Adapter does not support over 140 DSPUs.

User Action: Either reconfigure for a maximum of 140 DSPUs or obtain the 16/4-MB LAN Adapter.

- To reconfigure, change customizing questions 104 and 105. Refer to the *3174 Planning Guide*.
- To obtain the 16/4 LAN Adapter, contact your IBM representative.

For Service Personnel Only: No action is required.

399 20HG

Description: The RPQ customization data sent by the central site does not match the RPQ microcode that was received.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

For the 3174 operator:

Contact your central site. The NetView DM Function must be reissued for the 3174.

For the NetView DM operator:

1. Verify that the RPQ data objects were specified correctly in the transmission plan with the appropriate corequisite data objects.
2. Reissue the transmission plan.

For Service Personnel Only: No action is required.

399 21HG

Description: The Control disk is configured for a Concurrent Communication Adapter (CCA) or an ISDN Adapter, but the adapter does not appear to be in the controller. The controller is still operational; only this adapter is failing.

The HG number in the status code represents the configured adapter that is failing or not present.

- HG=51 identifies the first (in the lower slot number) or only Concurrent Communication Adapter as missing or defective. The adapter can be Type 9263 or 9267.
- HG=52 indicates that the controller is configured for two Concurrent Communication Adapters and the second adapter is either missing or defective. The CCA in the lower slot number is HG51 and the second is HG52. Either HG can be type 9263 or 9267.

Alert Sent = Temporary.

Possible Cause:

- Control disk is configured incorrectly.
- The Concurrent Communication Adapter or the ISDN Adapter is missing or defective.

User Action: Check the controller to see if the adapter(s) required for your customization are present. See "Status Code 399-21 Failure" on page 2-14.

For Service Personnel Only: If only one adapter is present, replace it. If more than one adapter is present, exchange each adapter one at a time, and perform the following actions for each adapter you exchange:

- Re-IML.
 - If the status code reappears, test the next adapter.
-

399 22HG

Description: The Control disk is configured for a Type 1 adapter but the adapter does not appear to be in the controller. If configured for more than one host, the controller is still operational; only this adapter is failing.

The Type 1 adapter can be either a Communication Adapter (HG11) or a Concurrent Communication Adapter (HG51 or HG52).

- HG11 – Identifies card Type 9253.
- HG51 – Identifies the first (in the lowest slot number) or only Concurrent Communication Adapter (CCA) as missing or defective. The adapter should be Type 9263.
- HG52 – The controller is configured for two Concurrent Communication Adapters and identifies the second one as missing or defective. The CCA in the lower slot number is HG51 and can be either Type 9263 or 9267. The second one should be Type 9263.

Alert Sent = Temporary.

Possible Cause:

- Control disk is configured incorrectly.
- Type 1 adapter is missing or defective.
- Type 2 adapter is installed instead of a Type 1.

User Action:

1. Use online test 2, option 1 to display the Hardware Configuration Table. Refer to the *3174 Customer Problem Determination Guide* for online test information.
2. Verify that the HG number in the status code is listed in the table.
 - If the HG is listed, go to step 3.
 - If the HG is not listed, check the controller to see if the adapter is installed.
 - If the adapter is installed, request service.
 - If the adapter is not installed, either reconfigure the controller or contact your IBM representative to obtain the adapter.
3. In the table, verify that the correct Type is specified with the HG number.
 - If correct, request service.
 - If not correct, either reconfigure the controller or contact your IBM representative to obtain the correct adapter.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the FRU indicated by the HG number.

For Models 21H through 64R:

1. Exchange the FRU indicated by the HG number.
2. Exchange the planar board.

For Models 81R through 92R:

Exchange the planar board.

399 23HG

Description: The Control disk is configured for a Type 1 adapter, but the cable for that adapter appears to be missing. If configured for more than one host link, the controller is still operational.

The Type 1 adapter can be either a Communication Adapter (HG11) or a Concurrent Communication Adapter (HG51 or HG52).

- HG11 – Identifies card Type 9253.
- HG51 – Identifies the first (in the lower slot number) or only Concurrent Communication Adapter(CCA). The adapter should be Type 9263.
- HG52 – Identifies the second of two Concurrent Communication Adapters. The CCA in the lower slot number is HG51 and can be either Type 9263 or 9267. The second one should be Type 9263.

Alert Sent = Temporary.

Possible Cause:

- Type 1 adapter cable is missing or defective.
- Type 2 adapter cable is installed instead of a Type 1.

User Action:

1. Check to ensure that the cable is connected.
 - For Models 1L through 14R: The cable should be directly attached to the Type 1 adapter in the controller.
 - For Models 21H through 64R: The cable should be attached to the back panel connector.
 - If the cable is present, go to step 2.
 - If the cable is not present, contact your IBM representative to obtain the cable.
2. See "Communication Adapter Cable Part Numbers" on page 2-35 to make sure that the cable has a valid part number.
 - If the cable is correct, request service.
 - If the cable is not correct, contact your IBM representative to obtain the correct cable.

For Service Personnel Only:

1. Exchange the cable.
2. Exchange the FRU indicated by the HG number.

399 24HG

Description: The Control disk is configured for a Type 2 adapter but the adapter does not appear to be in the controller. If configured for more than one host, the controller is still operational; only this adapter is failing.

The Type 2 adapter can be either a Communication Adapter (HG11) or a Concurrent Communication Adapter (HG51 or HG52).

- HG11 – Identifies card Type 927x.
- HG51 – Identifies the first (in the lower slot number) or only Concurrent Communication Adapter (CCA) as missing or defective. The adapter should be Type 9267.
- HG52 – The controller is configured for two Concurrent Communication Adapters and identifies the second one as missing or defective. The CCA in the lower slot number is HG51 and can be either Type 9263 or 9267. The second one should be Type 9267.

Alert Sent = Temporary.

Possible Cause:

- Control disk is configured incorrectly.
- Type 2 adapter is missing or defective.
- Type 1 adapter is installed instead of a Type 2.

User Action:

1. Use online test 2, option 1 to display the Hardware Configuration Table. Refer to the *3174 Customer Problem Determination Guide* for online test information.
2. Verify that the HG number in the status code is listed in the table.
 - If the HG is listed, go to step 3.
 - If the HG is not listed, check the controller to see if the adapter is installed.
 - If the adapter is installed, request service.
 - If the adapter is not installed, either reconfigure the controller or contact your IBM representative to obtain the adapter.
3. In the table, verify that the correct type is specified with the HG number.
 - If correct, request service.
 - If not correct, either reconfigure the controller or contact your IBM representative to obtain the correct adapter.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the FRU indicated by the HG number.

For Models 21H through 64R:

1. Exchange the FRU indicated by the HG number.
2. Exchange the planar board.

For Models 81R through 92R:

Exchange the planar board.

399 25HG

Description: The Control disk is configured for a Type 2 adapter, but the cable for that adapter appears to be missing. If configured for more than one host, the controller is still operational.

The Type 2 adapter can be either a Communication Adapter (HG11) or a Concurrent Communication Adapter (HG51 or HG52).

- HG11 – Identifies card Type 927x.
- HG51 – Identifies the first (in the lower slot number) or only Concurrent Communication Adapter (CCA). The adapter should be Type 9267.
- HG52 – Identifies the second of two Concurrent Communication Adapters. The CCA in the lower slot number is HG51 and can be either Type 9263 or 9267. The second one should be Type 9267.

Alert Sent = Temporary.

Possible Cause:

- Type 2 adapter cable is missing or defective.
- Type 1 adapter cable is installed instead of a Type 2.

User Action:

1. Verify that a cable is attached.
 - For Models 1L through 24R: The cable should be directly attached to the Type 2 adapter in the controller.
 - For Models 51R through 92R: The cable should be attached to the back panel connector.
- If the cable is present, go to step 2.
- If the cable is not present, contact your IBM representative to obtain the cable.
2. See "Communication Adapter Cable Part Numbers" on page 2-35 to make sure that the cable has a valid part number.
 - If the cable is correct, request service.
 - If the cable is not correct, contact your IBM representative to obtain the correct cable.

For Service Personnel Only:

1. Exchange the cable.
2. Exchange the FRU indicated by the HG number.

399 26HG

Description: Configuration error; insufficient storage.

The 3174 does not have enough storage to support the Gateway feature. The controller is operational; only this feature is deconfigured.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Either reconfigure the Control disk or obtain the necessary storage.

- To reconfigure, Refer to "Planning to Configure" in the *3174 Planning Guide*. Question 150 in the *3174 Planning Guide* specifies whether the controller is a Gateway.
- To determine how much storage you need to support your current configuration, Refer to the "Planning for Controller Storage" in the *3174 Planning Guide*. Contact your IBM representative to obtain the additional storage.

For Service Personnel Only: No action is required.

399 27HG B1

Description: Configuration error; insufficient storage.

The 3174 does not have enough storage to support all the hosts that were defined on the primary link. The controller is operational, but some or all secondary hosts (Host ID's 1B-1H) have been deconfigured.

B1 = The number of hosts (Host ID's 1A-1H) on the primary link that have been successfully IMLed.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Either reconfigure the Control disk or obtain the necessary storage.

- To reconfigure, refer to "Planning to Configure" in the *3174 Planning Guide*. Change the "Include in IML" to 0 on the Multi-Host Definition Panel for the hosts that were deconfigured.
- To determine how much storage you need to support your current configuration, refer to the "Planning for Controller Storage" in the *3174 Planning Guide*. Contact your IBM representative to obtain the additional storage.

For Service Personnel Only: No action is required.

399 28HG B1 to B11

Description: The controller is configured for an I-frame size that is too large to be supported on the available active link. The I-frame is downgraded to the supported maximum I-frame size for the link that is currently available and active.

B1-B6 = Destination LAN Address
 B7 = Destination Service Access Point (SAP)
 B8B9 = Customized I-frame size
 B10B11 = Downgraded I-frame size

Alert Sent = None.

Possible Cause:

- Control microcode is customized incorrectly.
- The active routes to the link station does not support the I-frame size.
- Controller processing timed out before finding an active link that supports the I-frame size.

Status Codes

User Action: Either reconfigure the Control disk or check the status of the links in your LAN to see which one is failing.

- To reconfigure, refer to customizing question 941 (gateway Configuration Support S and B), 380 (non-gateway Configuration Support A), or 382 (non-gateway Configuration Support B) in the *3174 Planning Guide*.
- To check the status of the links, use online test 9 (refer to "Online Tests" in the *3174 Customer Problem Determination Guide*).

For Service Personnel Only: No action is required.

399 29HG

Description: A link in the Token-Ring Network has caused the I-frame size to be downgraded. This could cause degraded performance on the affected link stations.

Alert Sent = Temporary.

Possible Cause:

- No active link to support the I-frame size.
- Controller processing timed out before finding an active link that supports the I-frame size.

User Action: To check the status of the links, use online test 9 (refer to "Online Tests" in the *3174 Customer Problem Determination Guide*).

For Service Personnel Only: No action is required.

399 30HG B1B2 B3B4

Description: Hardware/microcode mismatch.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause: Encrypt/decrypt adapter.

User Action: The encrypt/decrypt adapter in location 24 must be removed. This feature is only available on Models 1R and 2R. (It is also available as an RPQ on Models 11R and 12R.) It is not supported by Configuration B microcode.

For Service Personnel Only: No action is required.

399 31HG or 31HG B1B2

Description: Configuration error, insufficient storage, or some features have been deconfigured.

B1B2 = The amount of storage needed (31HG only).

Alert Sent = Temporary.

Possible Cause:

- The controller does not have enough storage to support all the customized features.
- Feature microcode was not found.
- Feature was not merged to the Control Extension diskette.
- Control Extension diskette not found.

User Action: Either reconfigure the Control disk, merge the DSL microcode, or obtain the necessary storage.

- To reconfigure, refer to "Planning for Controller Storage" in the *3174 Planning Guide*.
- To merge DSL microcode, refer to the *3174 Utilities Guide*.
- To obtain the additional storage, contact your IBM representative.
- Verify that you have the correct diskette in drive 2 or that you copied the correct diskette to the hard drive.

For Service Personnel Only: No action is required.

399 33HG B1B2

Description: A User-Defined Terminal Table (UDT) was not built because the ASCII sequences that you defined are too long.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Redefine the UDT table by specifying shorter ASCII sequences. Refer to the *3174 Planning Guide* and *3174 Asynchronous Emulation Adapter Description and Reference manual*.

For Service Personnel Only: No action is required.

399 34HG B1B2

Description: FRU ID failure where:

TYPE = 9001 = incorrect FRU number.

LOCA = Location of the failing FRU.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.
3. Exchange the logic board.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

399 35HG B1B2 B3B4

Description: Channel adapter error.

Alert Sent = Temporary.

Possible Cause:

- Channel adapter with no Driver/Receiver
- Channel Driver/Receiver with no adapter
- Processor

User Action: Request service.

For Service Personnel Only:

For Models 1L and 11L:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H and 21L:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

399 36HG B1B2 B3B4

Description: Incorrect PIO bus configuration.

Note: Multiple TYPE and LOCA fields are displayed to indicate the cards that are installed incorrectly or cards that follow a failing card.

Alert Sent = Temporary.

Possible Cause: A card is failing or is installed incorrectly in one or more of the following locations: 22, 23, or 24.

User Action: Request service.

For Service Personnel Only: Go to Map 0420: 'PIO Bus Isolation' in the maintenance manual for your model.

399 37HG B1B2 B3B4

Description: Hardware/Microcode mismatch.

Alert Sent = Temporary.

Possible Cause:

- The microcode does not support the hardware configuration of the controller.
- The cards in the controller are not installed in the correct locations.

User Action: Request service.

Status Codes

For Service Personnel Only:

1. Verify that the adapters are installed in the correct locations.
2. Verify that the installed adapters are supported by the microcode you are using.

Refer to Chapter 3 in the maintenance manual for your model.

399 38HG

Description: Asynchronous Emulation Adapter Multiple Logical Terminal has been deconfigured.

Alert Sent = Temporary.

Possible Cause: You configured for more features than the storage can support.

User Action: No immediate action is required.

To correct the condition, install enough storage to support AEA MLT or reconfigure without AEA MLT.

Refer to "Planning for Controller Storage" in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

399 39HG

Description: Local Format Storage (LFS) has been deconfigured.

Alert Sent = Temporary.

Possible Cause: You configured for more features than the storage can support.

User Action: No immediate action is required.

To correct the condition, install enough storage to support LFS or reconfigure without LFS.

Refer to "Planning for Controller Storage" in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

399 40HG

Description: Disk error. The controller has completed its IML and is operational except for the ES Connection Adapter.

Alert Sent = Temporary.

Possible Cause:

- Diskette
- Fixed disk

User Action:

1. Use Online Test 1, Option 5 to see if there are any recent status codes in the range of 384 to 393, and perform the recovery action for that status code.
2. Perform an **ALT 2 IML**; see page 2-3.
3. For diskette drives (HG01 or HG02):

Try another Control diskette.

For fixed disk drives (HG03 or HG04):

Run the "Fixed Disk Media Tests" on page 2-5.

4. Request service.

For Service Personnel Only: Exchange the FRU indicated by the HG number.

399 41HG B1B2 B3B4

Description: ES Connection Adapter error. The rest of the controller is operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause: ES Connection Adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

399 42HG B1B2 B3B4

Description: ISDN Adapter FRU ID failure.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause: ISDN Adapter

User Action: Request service.

For Service Personnel Only:

1. Reseat the FRU indicated by TYPE and LOCA.
2. Replace the FRU.

399 43HG

Description: You have configured for the 8-KB RU size and there is not enough storage to support it. The function has been deconfigured and the RU size has been set to 4 KB. The controller is still operational.

Alert Sent = Temporary.

Possible Cause: You configured for more features than the 3174 storage can support.

User Action: No immediate action is required.

To correct the condition, install enough storage to support 8-KB RUs or reconfigure without 8-KB RUs.

Refer to "Planning for Controller Storage" in *3174 Planning Guide*.

For Service Personnel Only: No action is required.

399 44HG B1B2

Description: One or more of the following 3174-Peer functions has been deconfigured:

1. 3174-Peer
2. Bridge
3. Peer-OLT-Update.

B1 = One of the following codes:

00 = 3174-Peer deconfigured.

01 = Bridge deconfigured.

02 = Peer-OLT-Update deconfigured.

B2 = Reason Code Values =

00 = Bridge configuration file I/O error.

01 = Customization error.

02 = Insufficient storage for IML.

03 = The LAN Adapter is not Type 9351.

04 = The LAN Adapter is not present.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Determine the deconfigured function and cause of the deconfiguration indicated in B2.

If B2 = 00 or 01: Reconfigure the Peer Communication function.

If B2 = 02: Refer to "Storage Planning Procedure" in the *3174 Planning Guide*.

If B2 = 03 or 04: You must obtain the 16/4-Mbps LAN Adapter to use the Peer Communication function. Contact your IBM representative.

For Service Personnel Only: No action is required.

399 45HG

Description: The controller contains the Hardware Group 27 Terminal Adapter (supports an additional thirty-two 3270 terminals). The controller does not have enough storage to support more than thirty-two 3270 terminals, so the terminal support is downgraded to 32.

The controller is still operational, but only the Hardware Group 26 Terminal Adapter can be used.

Additional storage is required to support more than thirty-two 3270 terminals.

Alert Sent = Temporary.

Status Codes

Possible Cause: N/A

User Action: To keep support for sixty-four 3270 terminals, perform one of the following actions:

- Reconfigure the Control disk to reduce some of the other features for which you are configured, such as MLT or Multi-host Support.

To reconfigure, refer to "Planning to Configure" and "Planning for Controller Storage" in the *3174 Planning Guide*.

- Obtain the storage necessary to support your current configuration.

To determine how much storage you need, refer to "Planning for Controller Storage" in the *3174 Planning Guide*. Contact your IBM representative to obtain the additional storage.

For Service Personnel Only: No action is required.

399 46HG

Description: You have configured for 8K I-frames (question 386), but the 16/4-Mbps Token-Ring Adapter is not installed.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No immediate action is required, but take the following action to correct this condition:

- If you do not want 8K frames, change your response to question 386.
- If you want 8K frames, install a 16/4-Mbps Token-Ring Adapter.

For Service Personnel Only: No action is required.

399 47HG

Description: You have configured for 3174-Peer Bridge support, but the 16/4-Mbps Token-Ring Adapter is not installed.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No immediate action is required, but to correct the condition:

- If you do not want 3174-Peer Bridge support, change your response to question 651 to N.
- If you want 3174-Peer Bridge support, install a 16/4-Mbps Token-Ring Adapter.

For Service Personnel Only: No action is required.

401 01HG

Description: A command has been received that is valid for the 3174, but the command is not valid for the attached terminal to which it was sent, or an incorrect select command chain sequence has been received.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

401 02HG B1B2

Description: For SNA controllers: An incorrect command was received, or a Connect command has not been received.

For non-SNA controllers: An incorrect command was received.

- SNA adapter sense = 8000 (I), or 8200 (NI).
- Non-SNA adapter sense = 8000.

B1B2 = Sense Data.

To interpret the sense data, refer to the *3174 Functional Description*.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If possible, find out if one or all programs are failing.
3. Report this information to your system programmer.

For Service Personnel Only: Run a host access method trace.

401 03HG B1B2 B3B4 B5B6 B7B8

Description: An incorrect command in the data stream has been received.

The first byte in the data stream is not a valid command for the particular host configuration, or the command in a 3270 DS-structured field is incorrect.

For non-SNA, the "Read Modify All" command was received.

B1B2 B3B4 = one of the following codes:

- If the error is contained in a write structured field (WSF):
 - B1B2 = the displacement in hex (zero origin) from the beginning of the WSF transmission to the structured field (SF) containing the error. (See Note 1.)
 - B3B4 = the displacement in hex (1 origin) from the beginning of the SF in error to the byte in error. (See Note 2.)
- If the error is contained in a data stream that begins with a command other than a WSF:
 - B1B2 = 0000.
 - B3B4 = The displacement in hex (zero origin) from the beginning of the transmission to the byte in error. (See Note 2.)

B5B6 = The data in error.

B7B8 = Type of structured field or 0000 if the transmission does not contain a WSF.

Notes:

1. If data chaining is in use, this value will be set to FFFF, indicating a displacement cannot be calculated.
2. If the data stream ended without containing sufficient data to process an SBA, SFE, RA, EUA, MF, or SA order, then the value of B3B4 will be set to 0001.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

401 04HG B1B2 B3B4 B5B6 B7B8

Description: A device in the "data chain" state received one of the following incorrect commands:

- Write
- Erase all unprotected
- Read Buffer
- Read Modified.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

401 05HG B1B2 B3B4 B5B6 B7B8

Description: A device in the "data chain" state received an Erase Write or an Erase Write alternate command and the write control character (WCC) did not have the reset bit on.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

Status Codes

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

401 06HG B1B2 B3B4 B5B6 B7B8

Description: An incorrect command was received when an Ack reply was available to be sent inbound from the device.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

402 01HG B1B2 B3B4

Description: Data stream error. A Modify Field Attribute order was sent when the current buffer address did not contain a field attribute.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

402 02HG B1B2 B3B4 B5B6 B7B8

Description: The address following a Set Buffer Address (SBA) order, a Repeat to Address (RA) order, or an Erase Unprotected to Address (EUA) order is not valid for the receiving device buffer; or it is the wrong format.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

402 03HG B1B2 B3B4 B5B6 B7B8

Description: The "type/pair" values following a Set Attribute (SA) order, a Start Field Extended (SFE) order, a Modify Field (MF) order, or a Graphic Escape (GE) order are incorrect.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: Refer to the *3174 Functional Description* for an explanation of the orders and the "type/pair" values.

402 04HG B1B2 B3B4 B5B6 B7B8

Description: During processing of a Load Programmed Symbols Set, which is a structured field, an incorrect alias was detected in byte 4 of the structured field.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: Refer to "Load Programmed Symbols" in the *3174 Functional Description*.

402 05HG B1B2 B3B4 B5B6 B7B8

Description: Data was received after a Read, a Read Modified, or an Erase All Unprotected command. Data should not be received after these commands.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

402 06HG B1B2 B3B4 B5B6 B7B8

Description: The data stream ended before all the required data bytes were received on a Set Buffer Address (SBA), a Repeat to Address (RA), a Start Field (SF), a Start Field Extended (SFE), a Modified Field (MF), an Erase Unprotected to Address (EUA), or a Set Attribute (SA) order.

Refer to *3174 Functional Description* for an explanation of these orders.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

402 07HG B1B2 B3B4 B5B6 B7B8

Description: An unsupported order or an incorrect control code between hex 01 and 3F was received in the data stream.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

Status Codes

403 02HG B1B2 B3B4 B5B6 B7B8

Description: During structured field processing, an incorrect parameter was detected in the data stream.

Refer to *3174 Functional Description* for an explanation of structured field formats and parameter values.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

403 03HG B1B2 B3B4 B5B6 B7B8

Description: Read partition state error.

For SNA:

The current read state detected was "Retry Enter."

For non-SNA:

One of the following states was detected while processing a "Read Partition Query":

- Date-pending read partition
- Data-pending stacked enter
- Retry read partition
- Retry stacked enter.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

403 05HG B1B2 B3B4 B5B6 B7B8

Description: An error was detected in the data stream where commands were being chained because a Write command or an Erase/Write command with the Start Print bit on in the Write Control Character (WCC) was not the last command in the chain.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

404 01HG B1B2 B3B4 B5B6 B7B8

Description: An error occurred during processing of a structured field. The device that received the data stream does not have the hardware to support the structured field in the data stream; for instance, load program symbols may have been sent to a 3278 that does not have the ECSA feature.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

404 02HG B1B2 B3B4 B5B6 B7B8

Description: Incorrect "data chain" structured field sequence.

For data chain information, see page 2-33.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

404 03HG B1B2 B3B4 B5B6 B7B8

Description: In a logical transmission:

- A data chain structured field must be the first in a logical transmission but it was in some other location.
- A "Select IPDS Mode" structured field is not first in the logical transmission, and it does not follow a data chain structured field.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

404 04HG B1B2 B3B4 B5B6 B7B8

Description: A read partition structured field appeared after a data chain (begin or continue).

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

404 05HG B1B2 B3B4 B5B6 B7B8

Description: A structured field spanned transmissions.

B1B2 = Displacement in hex (0 origin) from the beginning of the transmission to the byte in error.

B3B4 = 0003 to indicate that the structured field type was in error.

B5B6 = Data in error.

B7B8 = Type of structured field that spanned transmissions. The following structured field types are currently not allowed to span transmissions:

- Data chain
- Select IPDS mode
- Read partition.

Alert Sent = Temporary.

Possible Cause: N/A

Status Codes

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

404 06HG B1B2 B3B4 B5B6 B7B8

Description: A Load Format Storage structured field must be loaded before a Present Format structured field can be received.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

404 07HG B1B2 B3B4 B5B6 B7B8

Description: The Format Name that was specified in the Present Format structured field was not previously loaded.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

404 08HG B1B2 B3B4 B5B6 B7B8

Description: A data stream error occurred when a locally stored format was sent to an attached terminal.

See status code 401 03HG for the definitions of B1 through B8.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

404 09HG B1B2 B3B4 B5B6 B7B8

Description: A Present Format Structured field cannot be completed.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause:

- No format group was selected.
- The currently selected group name is incorrect.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

404 10HG

Description: An error occurred during the format presentation of the Operator Selected Format process.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

405 01HG

Description: Bisynchronous buffer overflow.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

406 01HG

Description: The bisynchronous transmission block is larger than 3500 bytes. This exceeds the buffer size of the receiving terminal.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

406 02HG

Description: The bisynchronous transmission block is larger than 3500 or 7000 bytes. This exceeds the buffer size of the receiving terminal.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

406 03HG B1B2 B3B4 B5B6 B7B8

Description: A buffer overflow condition was detected. More than 3000 bytes of uncompressed Program Symbols data were received (BSC only).

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

406 04HG B1B2 B3B4 B5B6 B7B8

Description: More data was sent in one transmission than would fit in the printer's intelligent printer data stream (IPDS) buffer.

Note: The capacity of the IPDS buffer is a 2-byte field in the 3270 IPDS query reply. See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: N/A

Status Codes

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 01HG B1B2 B3B4 B5B6 B7B8

Description: Incorrect structured field length for a copy command. Any field length other than 0 or 7 is incorrect.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 02HG B1B2 B3B4 B5B6 B7B8

Description: Additional data was received after the structured field containing the Copy command. The copy command must be the last structured field in a Write Structured Field (WSF).

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 03HG B1B2 B3B4 B5B6 B7B8

Description: The address for the terminal to be copied *from* is not in the range of valid host addresses.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: Refer to the *3174 Functional Description* for a description of the BSC copy command.

407 04HG B1B2 B3B4 B5B6 B7B8

Description: The terminal that data is to be copied from is a distributed function terminal. BSC copies are not allowed to or from distributed function terminals. Refer to the *3174 Functional Description* for a description of the BSC copy commands.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset**.
2. Contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 05HG B1B2 B3B4 B5B6 B7B8

Description: During a BSC copy operation, one or both of the terminals were in explicit partition state. For a BSC copy to be performed, neither of the terminals can be in explicit partition state.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 06HG B1B2 B3B4 B5B6 B7B8

Description: The *from* terminal was busy during a copy operation.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 07HG B1B2 B3B4 B5B6 B7B8

Description: The *from* terminal is allocated for local copy only. BSC copy is not allowed.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 08HG B1B2 B3B4 B5B6 B7B8

Description: The *from* terminal had a recoverable parity error during a BSC copy operation. The data that was to be copied may no longer be intact.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 09HG B1B2 B3B4 B5B6 B7B8

Description: The *from* terminal buffer contents are protected and cannot be copied.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

Status Codes

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 10HG B1B2 B3B4 B5B6 B7B8

Description: Copy terminal buffer sizes are incompatible.

The screen buffer of the device to be copied *to* is smaller than the screen buffer of the device to be copied *from*. Copy is not allowed.

Refer to the *3174 Functional Description* for a description of BSC copy command.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 11HG B1B2 B3B4 B5B6 B7B8

Description: Extended function copy is not allowed. Either the terminal to be copied *from* is a printer or the terminal to be copied *to* is a display. Extended function copy is allowed only from a display to a printer.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

407 12HG B1B2 B3B4 B5B6 B7B8

Description: A BSC copy command was received from the host specifying a *from* device that belongs to a different host.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data fields.

For Service Personnel Only: No action is required.

408 01HG B1B2 B3B4

Description: A data stream error has been detected (BSC).

B1B2 = First 2 bytes of the transmission (after STX). Normally, if no error had occurred, these 2 bytes would be the escape character and command.

B3B4 = Number of bytes in the line buffer.

Alert Sent = None.

Possible Cause:

- The Escape (ESC) character is missing from the start of the Command sequence.
- There is no data.
- A Read Modified All command has been received.
- A Write Structured Field command was received followed by a chained command (chained to the WSF).

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: Run a host access method trace.

409 01HG

Description: An incorrect character generator code point (hex 04, 06 or 07) was found in the data from an attached device to be sent inbound to the host. The character will be changed to a hex 00 and sent up to the host.

Alert Sent = None.

Possible Cause: N/A

User Action: At the attached terminal press **Reset**.

For Service Personnel Only: No action is required.

410 01HG

Description: RU length error. More than 4096 bytes of data were received. This is an application program error.

SNA sense code = X'1002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

410 02HG

Description: The RU currently being loaded in the attached printer's buffer is larger than the maximum specified in the Bind command (LU type 1).

SNA sense code = X'1002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only:

1. Refer to the RU length description for Type 1 SLUs in the *3174 Functional Description*.
 2. Run a host access method trace.
-

410 04HG

Description: CRV received, but either the controller does not support Encrypt/Decrypt, or an Encrypt/Decrypt session was not specified in the Bind command. Encrypt/Decrypt is specified in byte 26 of the Bind command. Refer to the *3174 Functional Description* for a description of the Bind command.

SNA sense code = X'1003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

Status Codes

410 05HG

Description: The encrypted RU did not contain an integral multiple of 8 bytes, or the padding count was not within the correct range.

SNA sense code = X'1001'.

See "SNA Sense Codes" on page 2-41.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

410 06HG

Description: Host function is not supported.

SNA sense code = X'1003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- Function specified by a formatted request code.
- Specified by a field in the RU.
- Specified by a control character.
- Encrypt/Decrypt session not established.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

410 07HG

Description: A data flow control, session control, network control, or FM data request was received by a terminal, which does not support any requests in that category.

SNA sense code = X'1007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: VTAM message 10 was sent to the printer instead of a display.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

410 08HG

Description: Host function not supported. The unsupported request was sent to the physical unit (PU), or an incorrect logical unit (LU).

SNA sense code = X'1003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- Function specified by a formatted request code.
- Specified by a field in the RU.
- Specified by a control character.
- Encrypt/Decrypt session not established.

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

410 09HG B1B2

Description: Request/Response unit (RU) data error, (LU 6.2).

B1B2 = Extended sense data.

SNA sense code = X'1001'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- A logical record has been truncated by an End Chain indicator.
- A FM data or LUSTAT request that requested a definite response was received.
- The data at the beginning of the Transaction Program's receive buffer starts on a logical boundary and contains a PS header or a logical record with an incorrect length field.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

410 10HG

Description: Channel adapter request/response unit (RU) length overrun (LU 6.2). The RU, or request/response unit, received exceeded 4096 bytes.

SNA sense code = X'1002'.

See "SNA Sense Codes" on page 2-41.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

410 11HG

Description: Request/Response unit (RU) length overrun, (LU 6.2). The RU, or request/response unit, received exceeded the maximum length specified in the Bind.

SNA sense code = X'1002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

410 12HG B1

Description: Request/Response unit (RU) length underrun, (LU 6.2). The RU or request/response unit received was too short.

B1 = Byte 0 of the request/response header.

SNA sense code = X'1002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

410 14HG

Description: Isolated Pacing Message (IPM) Format error (LU 6.2). The following problems may have been detected in a received IPM:

- The IPM format is not equal to 0.
- The next window size in a solicited IPM equals 0.
- The reset window indicator is set in a solicited IPM.
- The reset window indicator is not set in an unsolicited IPM.
- An incorrect IPM type was received.

SNA sense code = X'1001'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

411 01HG B1B2 B3B4 B5B6 B7B8

Description: The destination ID specified in the destination/origin structured field is incorrect.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: Incorrect destination specified or the device does not exist.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

411 02HG B1B2 B3B4 B5B6 B7B8

Description: An OEM data structured field spanning error occurred.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: An incorrect span value was specified.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

411 03HG B1B2 B3B4 B5B6 B7B8

Description: The outbound OEM data structured field maximum limit was exceeded.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: An error was detected in the data stream received from the host.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

411 04HG

Description: An OEM data structured field or a destination/origin structured field was received for a background session.

Alert Sent = Temporary.

Possible Cause: An error was detected in the data stream received from the host.

User Action:

1. At the attached terminal, press **Reset**. Do not initiate any transaction that requires OEM data.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

411 05HG B1B2 B3B4 B5B6 B7B8

Description: An incorrect command was received during OEM spanning.

See status code 401 03HG for the definitions of B1 through B8.

Alert Sent = Temporary.

Possible Cause: An error was detected in the data stream received from the host.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

411 06HG

Description: OEM data was not sent as definite response.

Alert Sent = Temporary.

Possible Cause: An error was detected in the data stream received from the host.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

411 07HG

Description: An OEM data structured field was sent in the same transmission as a write control character with the start print bit set.

Alert Sent = Temporary.

Possible Cause: An error was detected in the data stream received from the host.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: No action is required.

412 01HG

Description: Incorrect OAF - DAF combination. A request was addressed to a physical unit, but the OAF was not the SSCP.

SNA sense code = X'800F'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

Status Codes

412 02HG

Description: The controller received a message from the host for an unbound logical unit.

SNA sense code = X'8005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

412 03HG

Description: Bad DAF. The controller received a message from the host for a terminal address that is not configured.

SNA sense code = X'8004'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: Determine what addresses are valid for the 3174. Refer to questions 104 and 116 in the *3174 Planning Guide*. This should be verified with the addresses being sent by the host. Contact your system programmer.

For Service Personnel Only: No action is required.

412 04HG

Description: The controller received a message from the host before receiving an Activate Physical Unit (ACTPU).

SNA sense code = X'8008'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

412 05HG

Description: The controller received a message from the host for a terminal that is not active. An Activate Logical Unit (ACTLU) is required.

SNA sense code = X'8009'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

412 06HG

Description: The FID value in the transmission header (TH) was incorrect for this node.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

412 07HG

Description: The controller received an incomplete transmission header (TH).

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

412 08HG B1B2

Description: A request or response unit was received with an incorrect origin address field (OAF).

B1 = Byte 3 of the transmission header (origin address field).

B2 = Byte 0 of the request/response header.

SNA sense code = X'8005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

415 01HG

Description: A request was received with an exception response, but the Bind command did not specify exception response requests.

SNA sense code = X'4006'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only:

1. Refer to "Bind command" in the *3174 Functional Description*.
 2. Run a host access method trace.
-

415 02HG

Description: A request was received with definite response, but the Bind command did not specify definite response requests.

SNA sense code = X'4007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only:

1. Refer to "Bind command" in the *3174 Functional Description*.
2. Run a host access method trace.

Status Codes

415 03HG

Description: A request with the format indicator (FI) bit set in the Request Header was received; however, the session was not bound with FM header support.

SNA sense code = X'400F'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only:

1. Refer to the "Bind command" in the *3174 Functional Description*.
 2. Run a host access method trace.
-

415 04HG

Description: An incomplete Request Header (RH) was received. The session has been terminated by the controller.

SNA sense code = X'4005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- Communication line error
- Application program error

User Action:

1. Reestablish the session.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

415 05HG

Description: The RU category is specified incorrectly.

SNA sense code = X'4011'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Application program.

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

415 06HG B1B2 B3B4

Description: The change direction (CD) indicator bit was set in a session control request, and it is not supported.

B1-B3 = Bytes 0 through 2 of the request header.

B4 = Byte 0 of the request unit.

SNA sense code = X'400D'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

415 07HG

Description: The request/response unit (RU) contains an incomplete request/response header (RH).

SNA sense code = X'4005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 08HG B1 B9

Description: An FM data request was received with the begin bracket (BB) bit set, but the request did not specify begin chain, or the request did not contain an attach header.

B1-B3 = Bytes 0 through 2 of the request header.

B4-B8 = Bytes 0 through 4 of the request unit (RU).

B9 = Number of RU bytes logged that are valid.

SNA sense code = X'4003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 09HG B1B2 B3

Description: Conditional end bracket or end bracket not allowed.

B1-B3 = Bytes 0 through 2 of the request header.

SNA sense code = X'4004'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- An FM data or LUSTAT request was received with the End Bracket (EB) bit set. The EB bit is not supported for FM profile 19.
- An FM data request was received with the Conditional End Bracket (CEB) bit set, but the request did not specify End Chain.
- An FM data or LUSTAT request was received with the CEB bit set, but the request specified a response category of RQE2 or RQE3.
- An FM data or LUSTAT request was received with the Begin Bracket (BB) and CEB bits set, and the response category set to exception response. The bidder LU cannot send a request with the BB bit set, the CEB bit set, and specify a response category of any type of exception response.
- A first in chain FM data request was received with the BB bit set, and the last in chain FM data request was received with the CEB bit set and the response category set to exception response.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 10HG B1B2 B3

Description: An FM data request was received that specified a definite response but did not specify end chain.

B1-B3 = Bytes 0 through 2 of the request header.

SNA sense code = X'4007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Status Codes

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 11HG B1 B9

Description: Change direction is not allowed.

B1–B3 = Bytes 0 through 2 of the request header.
B4–B8 = Bytes 0 through 4 of the request unit (RU).
B9 = Number of RU bytes logged that are valid.

SNA sense code = X'4009'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- A BIS, RTR, or SIGNAL request was received with the Change Direction (CD) bit set.
- An FM data or LUSTAT request was received with the CD bit set, but the request specified a Response Category of RQD1.
- An FM data request was received with the CD bit set, but the request did not specify End Chain.
- An FM data or LUSTAT request was received with the CD bit set and the Conditional End Bracket (CEB) bit set. CD, CEB cannot be generated by transaction program verbs.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 12HG B1 B10

Description: Incorrect specification of a request code.

B1 = Byte 0 of the transmission header.
B2–B4 = Bytes 0 through 2 of the response header.
B5–B9 = Bytes 0 through 4 of the response unit (RU).
B10 = Number of RU bytes logged that are valid.

SNA sense code = X'4012'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- An expedited Data Flow Control (DFC) response was received, but it was not a SIGNAL response. The only expedited DFC response supported by LU 6.2 is a SIGNAL response.
- A normal flow DFC response was received and it had a request code which was different from the request code of the last DFC request sent.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 13HG B1B2 B3

Description: Incorrect setting of QRI with bidder's begin bracket.

B1–B3 = Bytes 0 through 2 of the request header.

SNA sense code = X'4018'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- An FM data or LUSTAT request was received with the begin bracket (BB) bit set, but the queued response indicator (QRI) bit was not set. A request from the bidder that carries begin bracket must also carry QRI. Also, a begin bracket chain from the bidder is the only chain that can be received with the QRI bit set.
- An FM data or LUSTAT request which specified begin chain was received with the QRI bit set, but the BB bit was not set.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 14HG B1B2 B3

Description: Incorrect indicators on last in chain (LIC) request.

B1–B3 = Bytes 0 through 2 of the request header.

SNA sense code = X'4019'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- An FM data or LUSTAT request which specified End Chain and a Response Category of Exception Response was received, but neither the change direction bit nor the conditional end bracket (CEB) bit were set.
- An FM data request that specified End Chain and a Response Category of RQD1 was received, but the CEB bit was not set.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 15HG B1 B9

Description: The pacing indicator was set on in a session control request or response. Pacing is not supported.

B1–B3 = Bytes 0 through 2 of the request/response header.

B4–B8 = Bytes 0 through 4 of the request/response unit (RU).

B9 = Number of RU bytes logged that are valid.

SNA sense code = X'4008'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

415 16HG B1 B9

Description: The chaining indicators for a request or a response were specified incorrectly. DFC and SC requests and all responses must flow "Only in Chain."

B1–B3 = Bytes 0 through 2 of the request/response header.

B4–B8 = Bytes 0 through 4 of the request/response unit (RU).

B9 = Number of RU bytes logged that are valid.

SNA sense code = X'400B'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

Status Codes

415 17HG B1 B9

Description: DR11, DR21, or ERI bits in the request/response header were specified incorrectly on a request or a response.

B1–B3 = Bytes 0 through 2 of the request/response header.

B4–B8 = Bytes 0 through 4 of the request/response unit (RU).

B9 = Number of RU bytes logged that are valid.

SNA sense code = X'4014'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 18HG B1B2 B3B4 B5

Description: A request was received with the format indicator specified incorrectly in the request header.

B1 = Byte 3 of transmission header (Origin Address Field).

B2–B4 = Bytes 0 through 2 of the request header.

B5 = Byte 0 of the request unit.

SNA sense code = X'400F'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 19HG B1B2 B3B4

Description: A request was received with the code selection indicator set. Alternate code is not supported.

B1–B3 = Bytes 0 through 2 of the request header.

B4 = Byte 0 of the request unit.

SNA sense code = X'4010'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 20HG B1 B10

Description: The RU category was specified incorrectly in a request or a response.

B1 = Byte 0 of the transmission header.

B2–B4 = Bytes 0 through 2 of the request/response header.

B5–B9 = Bytes 0 through 4 of the request/response unit (RU).

B10 = Number of RU bytes logged that are valid.

SNA sense code = X'4011'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 21HG B1 B9

Description: The sense data indicator (SDI) and the response type indicator (RTI) were specified incorrectly on a response.

B1–B3 = Bytes 0 through 2 of the response header.
B4–B8 = Bytes 0 through 4 of the response unit (RU).
B9 = Number of RU bytes logged that are valid.

SNA sense code = X'4013'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 22HG B1B2 B3B4

Description: The bracket indicators (BBI, CEBI, and EBI) in the request header were specified incorrectly in a request.

B1–B3 = Bytes 0 through 2 of the request header.
B4 = Byte 0 of the request unit.

SNA sense code = X'400C'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

415 23HG B1B2 B3B4

Description: The queued response indicator (QRI) bit was specified incorrectly in a request.

B1–B3 = Bytes 0 through 2 of the request header.
B4 = Byte 0 of the request unit.

SNA sense code = X'4015'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 24HG B1B2 B3B4

Description: The enciphered data indicator (EDI) was specified incorrectly in a request.

B1–B3 = Bytes 0 through 2 of the request header.
B4 = Byte 0 of the request unit.

SNA sense code = X'4016'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

Status Codes

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 25HG B1B2 B3B4

Description: The padded data indicator (PDI) was specified incorrectly in a request.

B1–B3 = Bytes 0 through 2 of the request header.

B4 = Byte 0 of the request unit.

SNA sense code = X'4017'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

415 26HG

Description: RSP QRI error (LU 6.2): A response to a begin bracket request must have the QRI bit on.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

416 01HG

Description: A request was received with an incorrect sequence number. This is an application program error.

SNA sense code = X'2001'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

416 02HG

Description: Chaining error. This is an application program error.

SNA sense code = X'2002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

416 03HG

Description: Bracket error. This is an application program error.

SNA sense code = X'2003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

416 04HG

Description: A request was received that can be processed only if Data Traffic is active. Data Traffic is in a reset state. This is an application program error.

SNA sense code = X'2005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

416 05HG

Description: Half-duplex error. The logical unit (LU) was not in the correct Send/Receive state to process the request.

SNA sense code = X'2004'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

416 06HG

Description: Encrypt/Decrypt protocol error.

SNA sense code = X'2009'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause:

- A request unit (RU) carrying change direction (CD) was received, and it is not a mandatory Encrypt/Decrypt session and not an encrypted data session. Additionally, the logical unit is in a Crypto verification (CRV) pending state.
- It is a mandatory Encrypt/Decrypt session, and the logical unit is in a CRV pending state.

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

Status Codes

416 07HG B1 B9

Description: A negative FM data or data flow control response with an incorrect sense code was received. A list of FM data and supported DFC requests and the valid sense codes that can be received in a negative response are:

- BIS and SIGNAL requests - Negative responses are not allowed
- RTR requests - X'08190000'
- LUSTAT and FMD requests which carry Begin Bracket - X'08460000', X'088B0000'
- LUSTAT and FMD requests which do not carry Begin Bracket - X'08460000'.

B1-B3 = Bytes 0 through 2 of the response header.
B4-B8 = Bytes 0 through 4 of the response unit (RU).
B9 = The number of RU bytes logged that are valid.

SNA sense code = X'2012'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 09HG B1B2 B3B4 B5B6

Description: A normal flow DFC or FM data request was received with a sequence number that was different from what was expected.

B1B2 = Bytes 4 and 5 of the transmission header.
B3-B5 = Bytes 0 through 2 of the request header.
B6 = Byte 0 of the request unit.

SNA sense code = X'2001'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 10HG B1 B9

Description: A chaining error was detected.

B1-B3 = Bytes 0 through 2 of the request header.
B4-B8 = Bytes 0 through 4 of the request unit (RU).
B9 = The number of RU bytes logged that are valid.

SNA sense code = X'2002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 11HG B1 B9

Description: A request was received and the 3174 was not in the receive state.

B1–B3 = Bytes 0 through 2 of the request header.

B4–B8 = Bytes 0 through 4 of the request unit (RU).

B9 = The number of RU bytes logged that are valid.

SNA sense code = X'2004'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 12HG

Description: A request with the begin bracket (BB) bit set on was received after a bracket initiation stopped (BIS) request was received.

SNA sense code = X'2008'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 13HG

Description: A normal flow request was received before the response was sent to a chain that requested definite response.

SNA sense code = X'200A'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 14HG B1B2 B3

Description: An FM data request was received with the queued response indicator (QRI) bit set differently from the way it was set for the other requests received in the same chain.

B1–B3 = Bytes 0 through 2 of the request header.

SNA sense code = X'200B'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

Status Codes

416 15HG B1 B9

Description: Response protocol error.

B1–B3 = Bytes 0 through 2 of the response header.

B4–B8 = Bytes 0 through 4 of the response unit (RU).

B9 = The number of RU bytes logged that are valid.

SNA sense code = X'200F'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 16HG

Description: A second BIS request was received on the same session, or a BIS reply was received.

SNA sense code = X'2010'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 17HG

Description: An outbound pacing overrun error has occurred.

SNA sense code = X'2011'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 18HG

Description: Begin bracket not accepted because a Bracket Initiation Stopped (BIS) request is outstanding and the host or source node is expecting a BIS reply.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: The session limit has to be increased by the host application or source node. Then the session must be re-initiated by the host application or source node program.

416 19HG B1 B9

Description: Bracket error.

B1–B3 = Bytes 0 through 2 of the request/response header.

B4–B8 = Bytes 0 through 4 of the request/response unit (RU).

B9 = The number of RU bytes logged that are valid.

SNA sense code = X'2003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

416 20HG

Description: RTR not required (LU 6.2)

SNA sense code = X'0819'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

417 01HG

Description: Session limit exceeded. A Bind command was received with an OAF that is different from the primary logical unit (PLU) to which the session is already bound.

SNA sense code = X'0805'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

417 02HG

Description: Session limit exceeded. A Bind request was received for an LU 6.2 session that was already bound.

SNA sense code = X'0805'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated by the host application or source node program.

For Service Personnel Only: No action is required.

418 01HG

Description: Printer not available. A request was received for an deconfigured printer or one that is busy with a local copy function, or FM data was received that exceeded the pacing counts established by the Bind.

SNA sense code = X'0801'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. Check the configuration of the controller. Refer to questions 116 and "Planning for PAM" or "Planning for Device Definition" in the *3174 Planning Guide*.
2. Contact the system programmer.

For Service Personnel Only: Run a host access method trace.

Status Codes

418 02HG

Description: Bracket bid reject (No RTR). A BID has been received, but the operator has already initiated a bracket, or the operator has ownership of the keyboard.

SNA sense code = X'0813'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. Host recovery.
If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

418 03HG

Description: Bracket Bid reject. A begin bracket or BID has been received for a printer that is busy with a local copy function. A ready to receive (RTR) will be sent when the printer becomes available.

SNA sense code = X'0814'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. Host recovery. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

418 04HG

Description: Receiver in transmit mode.

SNA sense code = X'081B'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. Host recovery. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

418 05HG

Description: Function not executable.

SNA sense code = X'081C'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset**.
2. If the failure continues, try another terminal or refer to the terminal documentation.
3. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

418 06HG

Description: Change direction required. A Read type command was received without change direction or with an end bracket.

SNA sense code = X'0829'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, try another terminal or refer to the terminal documentation.
3. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

418 07HG

Description: An LU2 or LU3 terminal received a WCC with the start print bit on, but it was not sent in definite response mode, or exception response mode and change direction.

SNA sense code = X'0843'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

418 08HG

Description: The terminal is owned by an alternate session.

SNA sense code = X'082D'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

418 09HG

Description: A Bind request was received when the 3174 was waiting to receive an UnBind response, (LU 6.2).

SNA sense code = X'0815'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Session activation must be retried by the host application program or source node, once the existing session has been terminated. If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

418 10HG

Description: A bracket bid was rejected because the session is already in use. A ready to receive (RTR) request is sent to the host or source node when the session becomes available.

SNA sense code = X'0814'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

Status Codes

419 01HG

Description: Insufficient resources (LU 6.2).

SNA sense code = X'0812'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: The 3174 has no more resources to support another session.

User Action: Perform one of the following actions:

- Decrease the number of sessions at your work station and try to reestablish the session.
- Verify that the 3174 is configured correctly.

For Service Personnel Only: No action is required.

419 02HG

Description: Insufficient 3174 buffer space (LU 6.2).

Alert Sent = None.

Possible Cause: Insufficient resources to process the request.

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

420 01HG to 08HG B1B2

Description: Bind Reject error.

QA =

- 01 = Profile error.
- 02 = Primary protocol error.
- 03 = Secondary protocol error.
- 04 = Common protocol error.
- 05 = Incorrect screen size.
- 06 = Logical Unit (LU) profile error.
- 07 = Logical Unit 1 (LU1) error.
- 08 = Encrypt/Decrypt error.

B1B2 = Location of the failing byte in the Bind command.

SNA sense code = X'0835' with displacement (2 bytes = Displacement from the beginning of the transmission to the bytes in error).

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer and report the information in the extended data.

For Service Personnel Only: Check the Bind command data. The location of the bytes in the Bind command that should be checked are indicated by extended data bytes B1 and B2. Refer to "Bind command" in the *3174 Functional Description*.

420 09HG

Description: Encrypt/Decrypt master key value mismatch between the host and the controller.

SNA sense code = X'0821'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. The Encrypt/Decrypt master key value may have to be reentered. Refer to the *3174 Utilities Guide*.
3. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

420 10HG

Description: Incorrect Crypto verification (CRV) or Crypto session type.

SNA sense code = X'0821'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. At the attached terminal, press **Reset** and retry the operation.
2. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

420 11HG B1B2 B3

Description: Bind rejected. A Bind command was received that had one of the following errors in the bytes specifying the pacing window size, or the maximum RU size (LU 6.2):

- The Secondary Receive Pacing Window size was 0.
- The Secondary Send Maximum RU size was 0.
- The Primary Send Maximum RU size was specified to be less than 256.

B1B2 = Location of the failing byte in the Bind command.

B3 = Contents of the failing byte.

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: The session must be re-initiated by the source node.

For Service Personnel Only: Check the Bind command data. The location of the bytes in the Bind command that should be checked are indicated by extended data bytes B1 and B2. Refer to the *3174 Functional Description* for a description of the Bind command.

420 12HG B1B2

Description: Bind rejected. A Bind command was received that had one of the following errors in the bytes specifying the user data fields (LU 6.2):

- A length error was detected in one of the user data subfields.
- The mode name user data field had an unsupported mode name specified.

B1B2 = Location of the failing byte in the Bind command.

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: The session must be re-initiated by the source node.

For Service Personnel Only: Check the Bind command data. The location of the bytes in the Bind command that should be checked is indicated by extended data bytes B1 and B2. Refer to the *3174 Functional Description* for a description of the Bind command.

420 13HG B1B2

Description: Bind rejected. A Bind command was received that had errors in the bytes specifying the length of the LU names or the URC field length (LU 6.2).

Status Codes

B1B2 = Location of the failing byte in the Bind request.

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: The session must be re-initiated by the source node.

For Service Personnel Only: Check the Bind command data. The location of the bytes in the Bind command that should be checked is indicated by extended data bytes B1 and B2. Refer to the *3174 Functional Description* for a description of the Bind command.

420 14HG B1B2

Description: A Bind command was received that had an error in the byte specifying the synchronization level. A level other than CONFIRM or ALL was specified (LU 6.2).

B1B2 = Location of the failing byte in the Bind request.

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the failure continues, contact the system programmer or source node support personnel to correct the error in the source node. The session must be re-initiated by the source node.

For Service Personnel Only: Check the Bind command data. The location of the bytes in the Bind command that should be checked is indicated by extended data bytes B1 and B2. Refer to "Bind command" in the *3174 Functional Description*.

420 17HG

Description: Bind Request length error (LU 6.2).

Alert Sent = None.

Possible Cause: Microcode problem processing Bind request or response.

User Action: Reactivate the session. If the failure continues, request service.

For Service Personnel Only: Contact your next level of support.

420 18HG

Description: An LU 6.2 Bind was received over a link that is no longer active.

Alert Sent = None.

Possible Cause: N/A

User Action: Reactivate the session.

For Service Personnel Only: No action is required.

420 19HG

Description: The fully qualified procedure ID (FQPCID) is already in use (LU 6.2). A Bind with a duplicate FQPCID was received.

SNA sense code = X'083B'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: Reactivate the session.

For Service Personnel Only: No action is required.

420 20HG

Description: Parallel sessions/CNOS not supported (LU 6.2).

Possible Cause: Program error at source node.

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

420 21HG

Description: A Bind was received with a duplicate session ID. The Session ID is already in use (LU 6.2).

SNA sense code = X'0852'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

420 22HG

Description: PLU Name not valid (LU 6.2): An independent CPSVCMG Bind request was received whose PLU name was not the same as the adjacent CP name received in the XID3 at link activation.

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

420 23HG

Description: LFSID cannot be assigned (LU 6.2).

Alert Sent = Temporary.

Possible Cause: No resources are left to support another session.

User Action: Decrease the number of sessions and try to reestablish the session.

For Service Personnel Only: No action is required.

420 24HG

Description: Bind Usage field error (LU 6.2).

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: One of the following program errors at the source node:

- Multiple RU chaining was not specified.
- Immediate request mode was not specified.
- Definite or exception response mode was not specified.
- EB allowed was specified.

Status Codes

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

420 25HG

Description: Bind Profile error (LU 6.2).

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

420 26HG

Description: Bind Byte 7 in error (LU 6.2).

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

420 27HG

Description: Bind Staging error (LU 6.2).

SNA sense code = X'0835'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: Program error at source node.

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

421 01HG

Description: Host session not active, due to an Encrypt/Decrypt adapter failure.

SNA sense code = X'0848'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. Press **Reset** at the affected terminal and use your local logon/logoff procedures to reestablish a noncryptographic session.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

422 01HG

Description: A Network Services request was received that is not supported.

SNA sense code = X'1003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

422 02HG

Description: An incorrect or unsupported Network Services (NS) header was received.

SNA sense code = X'1007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

422 03HG

Description: The maximum number of REQMS/RTM requests have been queued in the controller.

SNA sense code = X'0815'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: At the attached terminal, press **Reset** and retry the operation.

For Service Personnel Only: No action is required.

422 04HG

Description: Incorrect REQMS type received. This is an application program error.

SNA sense code = X'080C'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

422 05HG B1B2 B3B4

Description: An NMVT (RTM) or CSCF request was received with incorrect parameters.

B1B2 = SNA sense code.

B3B4 = Extended sense code.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

Status Codes

422 06HG B1B2 B3B4 B5B6 B7B8

Description: A signal request was received with an incorrect extension value, or a LUSTAT request was received with an incorrect status value.

B1–B3 = Bytes 0 through 2 of the request header.

B4–B8 = Bytes 0 through 4 of the request unit.

SNA sense code = X'1005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

422 07HG B1B2

Description: Category not supported.

B1 = Byte 3 of the transmission header (origin address field).

B2 = Byte 0 of the request/response header.

SNA sense code = X'1007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

422 08HG B1 to B10

Description: The requested function is not supported.

B1 = Byte 0 of the transmission header.

B2–B4 = Bytes 0 through 2 of the request header.

B5–B9 = Bytes 0 through 4 of the request unit (RU).

B10 = The number of RU bytes logged that are valid.

SNA sense code = X'1003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

422 09HG B1 to B10

Description: An incorrect FM header was received.

B1–B7 = Bytes 0 through 6 of the request unit (RU).

B8 = The number of RU bytes logged that are valid.

B9B10 = Extended sense data.

SNA sense code = X'1008'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

422 10HG B1B2 B3B4

Description: An incorrect NMVT request was received.

B1B2 = SNA sense code.

B3B4 = Extended sense code.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. Retry the operation.
2. If the failure continues, contact the system programmer.
3. Request service.

For Service Personnel Only: Contact your next level of support.

422 11HG

Description: Exception Response not allowed (LU 6.2).

Alert Sent = Temporary.

Possible Cause: Program error at source node. RQE1, RQE2, or RQE3 is not allowed on a DEALLOCATE_ABEND type FMH7. It must flow with RQD1.

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

423 51HG

Description: Response Time Monitor (RTM) counter overflow.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required. The host system should send the RTM request to reset the counter.

For Service Personnel Only: No action is required.

424 01HG B1B2

Description: Session route inoperable (LU 6.2).

B1B2 = Path Control ID.

Alert Sent = None.

Possible Cause: Link failure

User Action: Reactivate the link.

For Service Personnel Only: No action is required.

430 01HG

Description: The local logical unit (LU) could not start the local transaction program because it is permanently disabled.

SNA sense code = X'084C 0000'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: There is a 3174 hardware or microcode error.

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

Status Codes

430 03HG B1B2 B3B4 B5B6 B7B8

Description: Local transaction program parameter error.

B1–B8 = Transaction Program Name.

Alert Sent = Temporary.

Possible Cause: There is a 3174 hardware or microcode error.

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

430 04HG B1 to B16

Description: The SNA distribution services transaction program detected an error while sending data (DS.SEND) to NetView DM.

B1–B4 = SNA/DS Message Unit ID

B5–B8 = SNA/DS SNA Registered Sense Code

B9B10 = SNA/DS Message Unit Type

B11B12 = LU6.2 Return Code

B13B14 = DS.SEND detailed Error code

B15B16 = Reserved.

For a description of the SNA Registered Sense Codes, refer to the *3174 Central Site Customizing User's Guide*.

Alert Sent = None.

Possible Cause:

- 3174 Hardware failure
- 3174 Microcode error
- Host programming error

User Action:

1. Retry the operation on another 3174.
2. If the failure continues, contact the system programmer.
3. Request service.

For Service Personnel Only: Contact your next level of support.

430 05HG B1 to B16

Description: The SNA distribution services transaction program detected an error while receiving data (DS.RECEIVE) from NetView DM.

B1–B4 = SNA/DS Message Unit ID

B5–B8 = SNA/DS SNA Registered Sense Code

B9B10 = SNA/DS Message Unit Type

B11B12 = LU6.2 Return Code

B13B14 = DS.RECEIVE detailed Error code

B15B16 = Reserved.

For a description of the SNA Registered Sense Codes, refer to the *3174 Central Site Customizing User's Guide*.

Alert Sent = None.

Possible Cause:

- 3174 Hardware failure
- 3174 Microcode error
- Host programming error

User Action:

1. Retry the operation on another 3174.
2. If the failure continues, contact the system programmer.
3. Request service.

For Service Personnel Only: Contact your next level of support.

430 14HG or 24HG

Description: Additional Product Engineering data for status code 430-04.

Alert Sent = None.

Possible Cause: N/A

User Action: See status code 430 04HG.

For Service Personnel Only: No action is required.

430 15HG or 25HG

Description: Additional Product Engineering data for status code 430-05.

Alert Sent = None.

Possible Cause: N/A

User Action: See status code 430 05HG.

For Service Personnel Only: No action is required.

430 51HG B1B2

Description: The local logical unit (LU) could not start the local transaction program because it is temporarily disabled.

B1B2 = Extended sense data.

SNA sense code = X'084B 6031'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: Retry the operation. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

431 01HG B1B2 B3B4

Description: Unrecognized sense code.

B1-B4 = Unrecognized sense code.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

433 01HG

Description: A bracket initiation stopped (BIS) request was received after the local logical unit had processed its waiting requests due to the receipt of a previous BIS request.

Alert Sent = None.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

433 02HG B1 to B15

Description: Inbound request processing error.

B1-B6 = Bytes 0 through 5 of the transmission header.

B7-B9 = Bytes 0 through 2 of the request header.

B10-B14 = Bytes 0 through 4 of the request unit (RU).

B15 = The number of RU bytes logged that are valid.

Alert Sent = None.

Possible Cause: 3174 Microcode error

Status Codes

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

433 03HG B1 to B15

Description: Inbound response processing error.

B1-B6 = Bytes 0 through 5 of the transmission header.
B7-B9 = Bytes 0 through 2 of the response header.
B10-B14 = Bytes 0 through 4 of the response unit (RU).
B15 = The number of RU bytes logged that are valid.

Alert Sent = None.

Possible Cause: 3174 Microcode error

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

433 04HG7rlb. B1 to B15

Description: Outbound request processing error.

B1-B6 = Bytes 0 through 5 of the transmission header.
B7-B9 = Bytes 0 through 2 of the request header.
B10-B14 = Bytes 0 through 4 of the request unit (RU).
B15 = The number of RU bytes logged that are valid.

Alert Sent = None.

Possible Cause: 3174 Microcode error

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

433 05HG B1 to B15

Description: Outbound response processing error.

B1-B6 = Bytes 0 through 5 of the transmission header.
B7-B9 = Bytes 0 through 2 of the response header.
B10-B14 = Bytes 0 through 4 of the response unit (RU).
B15 = The number of RU bytes logged that are valid.

Alert Sent = None.

Possible Cause: 3174 Microcode error

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

434 01HG B1B2 B3B4 B5

Description: End user not authorized.

B1-B3 = Bytes 0 through 2 of the request/response header.
B4B5 = Extended sense data.

SNA sense code = X'080F'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

435 02HG

Description: An unexpected pacing request was received.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

435 03HG B1

Description: An unexpected pacing response was received (LU 6.2).

B1, if present = Secondary send window size.

Alert Sent = None.

Possible Cause: Program error at source node

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

436 01HG B1 to B10

Description: A stray response was received.

(A response that has a sequence number different from the current bracket sequence number.)

B1B2 = Bytes 4 and 5 of the transmission header.

B3B4 = Bytes 0 and 1 of the response header.

B5-B9 = Bytes 0 through 4 of the response unit (RU).

B10 = The number of RU bytes logged that are valid.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

436 02HG

Description: A late signal request was received.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

436 03HG

Description: Uncorrelated UnBind received (LU 6.2).

Alert Sent = None.

Possible Cause: Program error at source node

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

436 04HG

Description: An UnBind request was received for an LU 6.2 session.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

Status Codes

437 01HG B1 to B10

Description: A response was received that cannot be correlated to a previously sent request.

B1B2 = Bytes 4 and 5 of the transmission header.

B3B4 = Bytes 0 and 1 of the response header.

B5-B9 = Bytes 0 through 4 of the response unit (RU).

B10 = The number of RU bytes logged that are valid.

SNA sense code = X'200E'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session may have to be re-initiated.

For Service Personnel Only: No action is required.

440 01HG B1B2 B3B4

Description: A NetView DM function was rejected by the 3174 because of an exception condition.

B1-B4 = SNA registered sense code.

Alert Sent = None.

Possible Cause: N/A

User Action:

For the NetView DM operator:

Refer to "SNA Registered Sense Codes" in the *3174 Central Site Customizing User's Guide* for the recovery action.

For Service Personnel Only: No action is required.

441 01HG B1B2 B3B4 B5B6 B7B8

Description: The disk being used to store the central site library data is full.

B1-B8 = The name of the last library member that was stored.

Alert Sent = None.

Possible Cause: N/A

User Action:

For Library disks only:

Copy half of your library members to another library disk. Then delete those library members from the disk you were using.

For all other disks:

If you require disk space, you will have to delete, remove, or accept any data objects that are no longer required.

For Service Personnel Only: No action is required. Refer to the *3174 Central Site Customizing User's Guide*.

442 01HG B1 to B9

Description: This is an informational status code to indicate that the controller has been modified by a central site change management (CSCM) operation.

B1 = The command where:

X'41' = Delete

X'31' = Send (Destruction=Allowed)

X'62' = Send (Destruction=No)

X'81' = Install

X'83' = Remove

X'85' = Accept

B2-B9 = The sixth field of the canonical name of the data object or the fifth field of the canonical name if the data object is a patch.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

460 01HG

Description: Error in printer authorization matrix.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Press **Reset**. If the failure continues, contact the system programmer.

For Service Personnel Only: Check the format of the print matrix program.

468 01HG B1B2

Description: Printer-detected error in LU1 data stream. Incorrect parameters in the data stream.

B1B2 = SNA sense code set by the printer.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Retry the operation. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

468 02HG

Description: A printer-detected error in a Load Structured Field order.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Retry the operation. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

497 01HG

Description: Segmenting error. The host system has sent an incorrect segment. The current LU session will be unbound.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Restart the session. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

497 02HG

Description: Segmenting error with no host notification. The host system has sent an incorrect segment.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

497 03HG B1B2 B3B4

Description: Segmenting error (LU 6.2).

B1 = Byte 0 of the transmission header.

B2 = Byte 3 of the transmission header.

B3B4 = Bytes 4 and 5 of the transmission header.

SNA sense code = X'8007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Temporary.

Possible Cause: The source node generated an incorrect segment.

Status Codes

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

498 01HG

Description: Negative response received. An incorrect request was sent to the host.

Alert Sent = None.

Possible Cause: N/A

User Action: At the attached terminal, press **Reset** and retry the operation. If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

498 03HG B1 to B9

Description: Negative response received.

B1-B3 = Bytes 0 through 2 of the response header.

B4-B8 = Bytes 0 through 4 of the response unit (RU).

B9 = The number of RU bytes logged that are valid.

Alert Sent = None.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel.

For Service Personnel Only: No action is required.

498 04HG

Description: A negative response to a signal request was received.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

498 05HG B1B2 B3B4

Description: The session could not be established.

See "SNA Sense Codes" on page 2-41.

B1-B4 = sense code.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

499 01HG

Description: Exception request. An upstream node detected an error.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: At the attached terminal, press **Reset** and retry the operation. If the failure continues, contact the system programmer.

For Service Personnel Only: Run a host access method trace.

499 02HG B1B2 B3B4 B5B6

Description: An exception request was received.

B1B2 = Bytes 4 and 5 of the transmission header.

B3-B6 = Sense data in the received exception request.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If the problem continues, contact the system programmer or source node support personnel. The session must be re-initiated.

For Service Personnel Only: No action is required.

500 01HG or 02HG

Description: Communication is now available. The condition causing the communication failure has been corrected and communication with the host can now resume.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

500 03HG

Description: An SNA command protocol error encountered while processing an inbound buffer.

Possible Cause: A non-DLUS host is trying to issue an SNA command to a device that is already served by a DLUS.

User Action: Contact the system programmer.

For Service Personnel Only: No action is required.

501 01HG to 04HG B1B2 B3B4

Description: Data communication equipment (DCE) failure. QA = 01-04 where:

01 = Data Set Ready (DSR) not present.

02 = Ready for Sending (RFS) or
Clear to Send (CTS) not present.

03 = Modem error.

04 = Write Timeout error.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Delayed.

Possible Cause:

- Modem
- Communication interface cable
- Communication Adapter
- Concurrent Communication Adapter
- Logic board

User Action:

1. Verify that the modem is turned on and the communication interface cable is connected with the Test/Oper switch in the Operate position.
2. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

Status Codes

501 05HG B1B2 B3B4

Description: Data communication equipment (DCE) or communication adapter failure (X.21).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Delayed.

Possible Cause:

- Modem
- Communication adapter
- Concurrent Communication Adapter

User Action:

1. Press the **COMM** key; the Call Ready indicator should be restored.
2. Retry the call (if dial).
3. Perform one of the following actions:
 - For Models 1L through 64R, refer to CPD 0300 in *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R, refer to CPD 0310 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

501 06HG B1B2

Description: Loss of Contact with the Frame Relay network—Modem Error.

B1 = TYPE.

B2 = LOCA.

Alert Sent = Yes.

Possible Cause:

- Modem malfunction
- Communication Adapter cable
- Communication Adapter

User Action: Wait. If the problem persists, check the modem and run Communication Adapter cable wrap test found in the maintenance manual for your model.

For Service Personnel Only: No action is required.

503 01HG or 02HG

Description: Channel Interface switch is in the offline position.

Alert Sent = None.

Possible Cause:

- The Channel Interface switch is offline.
- Channel adapter.
- Operator panel.

User Action:

1. Put the Channel Interface switch online.
2. Perform an **ALT 2 IML**; see page 2-3. Record the results.
3. Request service.

For Service Personnel Only: Go to MAP 0900 in the maintenance manual for your model.

503 03HG

Description: The 3174 has completed its IML or has had its logical paths to the host removed, and is waiting for at least one logical path to be established or reestablished. This is only an informational message unless it remains displayed.

Alert Sent = None.

Possible Cause: The host has not yet attempted contact with the 3174 over the ES Connection channel.

User Action: If this code remains in the display, have the host operator vary the controller online. Refer to *ES Connection Link Fault Isolation*. If the results of this manual indicate a 3174 problem, request service.

For Service Personnel Only: Refer to *ES Connection Link Maintenance*.

504 01HG

Description: Disconnected from line (switched) (SDLC).

Alert Sent = Delayed.

Possible Cause:

- Host
- Communication adapter

User Action:

1. Try to reestablish the connection.
2. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

1. Run the communication adapter wrap tests. Refer to “How to Run Communication Adapter Optional Tests” in Chapter 2 of the maintenance manual for your model.
2. Go to MAP 0300 in the maintenance manual for your model.

504 02HG

Description: Disconnect received.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: The 3174 is waiting for the host to re-open the link. If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

504 03HG

Description: Normal initialization sequence (X.21 or X.25).

Alert Sent = None.

Possible Cause: N/A

User Action: Initiate a call, or wait for an incoming call.

For Service Personnel Only: No action is required.

504 04HG B1

Description: X.21 network problem. A call progress signal of type 2X, 6X, or 44, 45, 49 for the short hold mode has exceeded the maximum number of retries allowed.

B1 = Call Progress Signal.

Alert Sent = Delayed.

Possible Cause: X.21 network

User Action: Examine the call progress signal. See “Call Progress Signal Code” on page 2-32.

- For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
- For Models 82R and 92R:
Refer to CPD 0310 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

1. Run the communication adapter wrap tests. Refer to “How to Run Communication Adapter Optional Tests” in Chapter 2 of the maintenance manual for your model.
2. Go to MAP 0300 in the maintenance manual for your model.

Status Codes

504 05HG

Description: Unexpected condition. Maximum number of retries exceeded (X.21).

Alert Sent = Delayed.

Possible Cause: X.21 network

User Action:

1. Press the **COMM** key.
2. Retry the call.
3. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 82R and 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

1. Run the communication adapter wrap tests. Refer to "How to Run Communication Adapter Optional Tests" in Chapter 2 of the maintenance manual for your model.
 2. Go to MAP 0300 in the maintenance manual for your model.
-

504 06HG

Description: X.21 network problem. A character was received other than + or Bell.

Alert Sent = Delayed.

Possible Cause: X.21 network

User Action:

1. Press the **COMM** key.
2. Retry the call.
3. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 82R and 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

1. Run the communication adapter wrap tests. Refer to "How to Run Communication Adapter Optional Tests" in Chapter 2 of the maintenance manual for your model.
 2. Go to MAP 0300 in the maintenance manual for your model.
-

504 07HG

Description: X.21 clearing sequence has been executed in response to the network CLEAR request.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Press the **COMM** key.
2. Initiate an outgoing call or wait for the incoming call. Operator action is required.

For Service Personnel Only: No action is required.

504 08HG B1

Description: X.21 network problem. A timeout has occurred, indicating that the expected network action did not take place while the controller was attempting to execute the OPEN function request.

B1 = Error completion modifier bits (MM).

These bits indicate which timer expired.

See "X.21 Error Completion Modifier Bits" on page 2-31.

Alert Sent = Delayed.

Possible Cause: X.21 network

User Action:

1. Check the status of the X.21 network. The state change may go to call ready or call ready with call progress signal.
2. Press the **COMM** key to restore the Call Ready indicator.

For Service Personnel Only: No action is required.

504 09HG

Description: Write Halt X.21 short-hold mode. A write halt function has been issued when the communication link was not active.

Alert Sent = Delayed.

Possible Cause: X.21 network

User Action: Use the EXT, DISC keys on the primary dial terminal (PDT) to return to call-ready mode. Retry the call.

- For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
- For Models 82R and 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

1. Run the communication adapter wrap tests. Refer to "How to Run Communication Adapter Optional Tests" in Chapter 2 of the maintenance manual for your model.
2. Go to MAP 0300 in the maintenance manual for your model.

504 10HG

Description: Incorrect selection sequence: X.21 short hold mode.

Alert Sent = Delayed.

Possible Cause: Communication adapter

User Action: Use the EXT, DISC keys on the primary dial terminal (PDT) to return to call-ready mode. Retry the call.

- For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
- For Models 82R and 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

1. Run the communication adapter wrap tests. Refer to "How to Run Communication Adapter Optional Tests" in Chapter 2 of the maintenance manual for your model.
2. Go to MAP 0300 in the maintenance manual for your model.

504 11HG B1

Description: A disconnect was received from the host (SDLC).

B1 = SDLC address..

Alert Sent = None.

Possible Cause: N/A

User Action: Contact the host operator to reestablish the connection.

For Service Personnel Only: No action is required.

504 12HG

Description: Normal initialization sequence (Frame Relay).

Alert Sent = None.

Possible Cause: The Communication Adapter is open. The 3174 is waiting for the Permanent Virtual Connection (PVC) associated with this host to become active.

User Action: No action is required.

For Service Personnel Only: No action is required.

Status Codes

505 01HG

Description: Normal message after an IML. The host system must send one of the following messages:

- Connect command (HG = 16 or 17)
- Set Normal Response Mode (SNRM) [Type 1 [EIA/V.35] and Type 2 [X.21] Communication adapters HG11, HG51, or HG52).
- Set Asynchronous Balanced Mode Extended (LAN Adapter HG31 or HG41).
- QSM ([X.25] HG11, HG51, or HG52)

Alert Sent = None.

Possible Cause: N/A

User Action: If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

505 02HG

Description: A disconnect command was received when the controller was not initialized.

Possible Cause: N/A

User Action: A connect command is required. If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

505 03HG

Description: A system reset was received when the controller was not initialized.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: At the terminal:

1. Wait; the host will retry.
2. Call the host operator.

For Service Personnel Only: No action is required.

505 04HG

Description: A control command was received that was not a Connect or a Disconnect.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: A connect command is required from the host. If the problem continues, contact the host operator.

For Service Personnel Only: No action is required.

505 06HG B1 to B11

Description: An incorrect connect command was received.

B1–B11 = The control command connect function bytes.

Refer to the control command in the local (SNA) chapter of the *3174 Functional Description*.

For microcode releases before Configuration Support B Release 1, only 10 bytes of extended data are present.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: A valid connect command is required. If the failure continues, contact the system programmer and report the data in the extended data field.

For Service Personnel Only: No action is required.

505 07HG

Description: A connect command was received after the controller was already connected. An Activate Physical Unit (ACTPU) is required.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

505 08HG

Description: A disconnect command was received while the physical unit (PU) was active. A connect command is required.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

505 10HG

Description: Host activation; Activate Physical Unit (ACTPU) is required.

Alert Sent = None.

Possible Cause: N/A

User Action: Contact the host operator.

For Service Personnel Only: No action is required.

505 11HG B1B2

Description: The ES Connection Adapter has detected a "loss of light" or "loss of sync" condition.

B1B2 = Link Error Log Register.

Alert Sent = Delayed.

Possible Cause:

- Channel cable loose, disconnected, or damaged
- Defective hardware at the host or ESCD *
- Defective ES Connection Adapter in the 3174
- Host or ESCD turned off
- Dirty cable connector

User Action:

1. Check the channel cable to make sure that it is securely fastened.
2. Check the channel cable for damage.
3. Use online test 13 to check the ES Connection Adapter.
4. Contact the host operator to verify operation at the host site.
5. Request service for the 3174.

For Service Personnel Only: Go to MAP 930 in the maintenance manual.

505 12HG or 13HG B1B2

Description: The ES Connection Adapter has detected a link error ("Not Operational Sequence" received from the host).

B1B2 = Link Error Log Register.

Alert Sent = Delayed.

Possible Cause:

- Channel cable loose, disconnected, or damaged
- Software problem at the host
- Dirty cable connector

User Action:

1. Check the channel cable to make sure that it is securely fastened.

Status Codes

2. Check the channel cable for damage.
3. Request service.

For Service Personnel Only: Go to MAP 930 in the maintenance manual.

505 14HG B1B2

Description: A request to take the 3174 offline has been entered on the operator panel keypad, but the 3174 has not yet gone offline.

Alert Sent = None.

Possible Cause: N/A

User Action: Wait. The 3174 should go offline shortly and the status code will be removed from the display. If it remains displayed, request service.

For Service Personnel Only: Go to MAP 930 in the maintenance manual.

506 01HG

Description: Waiting for DCE Ready (X.25).

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. This is normal at start-up. If 506 remains displayed, see status code 506 02.

For Service Personnel Only: No action is required.

506 02HG

Description: DCE not available/open timeout (X.25). The 3174 is retrying.

Alert Sent = Delayed.

Possible Cause:

- X.25 network
- Communication adapter

User Action: Contact the host operator.

- For Models 1L through 64R:

Go to CPD 0300 in the *3174 Customer Problem Determination Guide*.

- For Models 81R through 92R:

Go to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

506 03HG B1B2 B3B4

Description: Opening Adapter (Frame Relay).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause: The 3174 is trying to open the adapter to bring up the physical link.

User Action: Wait. If the status code persists, check the modem and run the Communication Adapter cable wrap test.

For Service Personnel Only: No action is required.

506 04HG B1B2 B3B4

Description: Open Adapter Timeout (Frame Relay).

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = None.

Possible Cause: The 3174 timed out while trying to open the adapter.

User Action: Wait. If the status code persists, check the modem and run the Communication Adapter cable wrap test.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

506 05HG B1B2 B3B4

Description: Adapter Opened (Frame Relay).

B1B2 = TYPE

B3B4 = LOCA.

Alert Sent = None.

Possible Cause: The Communication Adapter has been opened.

User Action: No action is required.

For Service Personnel Only: No action is required.

507 01HG B1B2 B3B4

Description: Not all hosts on this link are active. This status code provides a means of displaying the status of the hosts on the operator panel.

B1–B4 = Each of these eight digits corresponds to the status of a host. The first digit corresponds to the xA host; the second digit corresponds to xB; ...the fourth digit corresponds to xD. The last four digits are applicable to the primary link only, and correspond to 1E, 1F, 1G, and 1H, in that order.

HG 16 and 17 (SNA and non-SNA):

- 0 = Host not configured.
- 1 = Host is configured, but not online or connected.
- 2 = Host is configured and online/connected.
- 3 = Host is configured and active.

HG 11, 31, 51, and 52:

- 0 = Host not configured.
- 1 = Host is configured, but not active.
- 3 = Host is configured and active.

Possible Cause: N/A

User Action: Perform the following actions:

- Press the **Advance** key to display the status of the hosts.
- Follow your local procedures to establish the desired connections/activations.

For Service Personnel Only: No action is required.

508 01HG

Description: The controller has been taken offline by the offline keying sequence (entering 1700 on the operator panel keypad).

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is only an informational message. To bring the controller back online, perform the online keying sequence as follows:

- Press **Clear**.
- Key in **1701**.
- Press **Enter**.

For Service Personnel Only: No action is required.

513 02HG B1B2

Description: X.25 call timeout. The 3174 was waiting for a response to a Call Request packet, and a timeout occurred.

B1B2 = Reserved.

Note: The extended data does not appear at the operator panel.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: If in the call-ready state, the call may be retried via a Dial key sequence. If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

Status Codes

531 01HG or 02HG B1

Description: Command reject (SDLC) If present, B1 = SDLC Address.

Host recovery.

Alert Sent = None.

Possible Cause:

- NR sequence error
- Data with a command that does not require data
- Incorrect command

User Action: If the failure continues, contact the host operator.

For Service Personnel Only: No action is required.

531 51HG to 60HG

Description: Negative Acknowledgment (NAK) sent or received (BSC). QA = 51-60 where:

51 = NAK sent by the 3174.

52 = NAK received from the host.

53 = ENQ or Temporary Time Delay (TTD) received from the host.

54 = Overrun or Underrun.

55 = Host sent data in response to a WACK from the 3174.

56 = Write Retry (SDLC).

57 = Overrun.

58 = Underrun.

59 = Frame Check Sequence (FCS) error.

60 = Primary abort (SDLC).

Alert Sent = None.

Possible Cause:

- Modem
- Communication link
- Grounding problems

User Action: Contact the host operator.

- For Models 1L through 64R:

Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.

- For Models 81R through 92R:

Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

531 61HG B1

Description: The 3174 is busy. A receiver not ready (RNR) was sent to the host because receive buffer space was unavailable. A receiver ready will be sent when buffer space becomes available.

B1 = Number of RNR sent to the host in hex.

Controller-recoverable.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

531 62HG B1

Description: A write retry was received from the host.

B1 = SDLC address.

Host recovery.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

531 63HG B1

Description: An overrun condition was detected by the 3174.

B1 = SDLC address.

Host recovery.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

531 64HG B1

Description: An underrun condition was detected by the 3174.

B1 = SDLC address.

Host recovery.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

531 67HG B1

Description: Secondary busy. The controller does not have receive buffers available at this time. When receive buffers are available, the controller sends a receiver ready (RR) to the host.

B1 = SDLC address.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

531 68HG B1

Description: Overrun (BSC).

B1 = Type of overrun where:

B1 = 10 = Control overrun.

B1 = 08 = Buffer overrun.

B1 = 04 = Byte overrun.

Alert Sent = None.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

Status Codes

531 69HG

Description: Underrun (BSC).

Alert Sent = None.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

531 70HG B1B2 B3

Description: The LAN Adapter is retransmitting a frame.

B1B2 = The Token-Ring ID.

B3 = Reserved for engineering use.

Alert Sent = None.

Possible Cause: Token-Ring media failure

User Action: No action is required. The host automatically forces the retransmission of the frame.

For Service Personnel Only: No action is required.

531 71HG B1B2

Description: The LAN Adapter is busy. A receiver not ready (RNR) was sent to the host because receive buffer space is unavailable. A receiver ready is sent to the host when buffer space becomes available.

B1B2 = The Token-Ring ID.

Controller-recoverable.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

531 80HG B1 to B13

Description: There are excessive retransmits on the logical link.

B1 = Link characteristics, where:

bit 1 = The link carries 2.0 traffic to this LAN attached 3174.

bit 2 = The link carries 2.1 traffic.

bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.

bit 4 = The link is customized.

bit 5 = The link traverses a bridge.

bits 6-8 = Reserved.

B2-B7 = Remote MAC Address.

B8 = Remote SAP.

B9 = Local SAP.

B10B11 = Error count.

B12 = Threshold increment value.

B13 = Threshold increment interval (minutes).

If this error is detected by a Token-Ring host-attached 3174 on a host link, then:

Alert Sent = None.

Otherwise:

Alert Sent = Performance.

Possible Cause: The I-frame size is not optimized for the configuration.

User Action: No action is required unless this condition reoccurs. If it does, perform the following actions:

- Review the maximum frame sizes at both ends of the logical link and adjust them if needed.
- Review the network traffic distribution and balance the loads appropriately.

For Service Personnel Only: No action is required.

531 81HG B1 to B13

Description: There is an excessive receive buffer depletion on the logical link.

B1 = Link characteristics, where:

bit 1 = The link carries 2.0 traffic to this LAN attached 3174.

bit 2 = The link carries 2.1 traffic.

bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.

bit 4 = The link is customized.

bit 5 = The link traverses a bridge.

bits 6–8 = Reserved.

B2–B7 = Remote MAC Address.

B8 = Remote SAP.

B9 = Local SAP.

B10B11 = Error count.

B12 = Threshold increment value.

B13 = Threshold increment interval (minutes).

If this error is detected by a LAN host-attached 3174 on a host link, then:

Alert Sent = None.

Otherwise:

Alert Sent = Performance.

If this is a Frame Relay link,

B1–B5 = Reserved

B6–B7 = DLCI

B8 = Remote SAP

B9 = Local SAP

B10–B13 = Reserved

Alert Sent = None.

Possible Cause: The receive buffer size is not optimized for the configuration.

User Action: No action is required unless this condition reoccurs. If it does, perform the following actions:

- Review the maximum frame sizes at both ends of the logical link and adjust them if needed.
- Review the network traffic distribution and balance the loads appropriately.

For Service Personnel Only: No action is required.

532 01HG

Description: Count exceeded; wrong-length message (SDLC).

Alert Sent = None.

Possible Cause:

Incorrect specification of the buffer size in the NCP.

The controller supports segment elements up to 521 bytes:

512 bytes of data.

6 bytes transmission header (TH)

3 bytes request/response header (RH)

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

532 02HG

Description: Timeout (SDLC). This controller has not received any data from the host in the last 20 to 25 seconds. The timeout condition is reset upon receipt of a valid frame or a frame containing a poll. Valid host data is present for other controllers.

Alert Sent = None.

Possible Cause:

- Host
- Communication link
- Communication adapter

User Action:

Status Codes

1. Verify that the TEST/OPER switch on the end of the communication cable is set to OPER.
2. Contact the host operator.
3. If the failure continues, perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

532 03HG

Description: Idle Timeout (SDLC). The host system has not sent any data on this line for 20 to 25 seconds. The idle timeout is reset upon receipt of a valid frame for any other controller on this line.

Alert Sent = None.

Possible Cause:

- Host
- Communication link
- Communication adapter

User Action:

1. Verify that the TEST/OPER switch on the end of the communication cable is set to OPER.
2. Contact the host operator.
3. If the failure continues, perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

532 04HG

Description: Connection problem (SDLC)

Alert Sent = None.

Possible Cause:

- Communication link
- Host

User Action: If the failure continues, contact the host operator or system programmer:

- For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

532 06HG B1

Description: Count exceeded. Wrong length message (SDLC). Data was received from a station downstream from the gateway controller that is too large for the receive buffer.

B1 = SDLC address.

Alert Sent = None.

Possible Cause:

- Incorrect specification of the buffer size in the NCP.
- The controller supports segment elements up to 521 bytes:
 - 512 bytes of data.
 - 6 bytes transmission header (TH)

3 bytes request/response header (RH)

User Action: If the failure continues, contact the system programmer.

For Service Personnel Only: No action is required.

532 07HG B1

Description: NPRO Timeout. The host system has not sent any data to the Token-Ring gateway controller in the last 2 minutes for the downstream controller indicated in the extended data byte B1. Valid data is present for other controllers.

B1 = SDLC address.

Alert Sent = None.

Possible Cause: N/A

User Action: Contact the host operator.

For Service Personnel Only: No action is required.

532 10HG

Description: BSC line idle. Host recovery. A valid poll or selection addressing sequence is required.

Alert Sent = None.

Possible Cause:

- Host
- Communication link
- Communication adapter
- Modem
- Communication interface cable

User Action:

1. Verify that the Test/Oper switch on the end of the communication interface cable is set to Oper.
2. Contact the host operator.
3. If the failure continues, perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

532 11HG

Description: Read Write timeout retry exceeded (BSC). Host recovery. A valid poll or selection-addressing is required.

Alert Sent = None.

Possible Cause:

- Host
- Communication link

User Action: If the failure continues, contact the host operator or system programmer.

For Service Personnel Only: No action is required.

532 12HG

Description: 15 negative acknowledgments (NAKs) received (BSC). Host recovery. A valid poll or selection-addressing is required.

Alert Sent = None.

Possible Cause:

- Host problem
- Communication link
- Communication adapter

Status Codes

User Action:

1. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.
 2. If the failure continues, contact the host operator or the system programmer.
- For Service Personnel Only:** Go to MAP 0300 in the maintenance manual for your model.
-

532 13HG

Description: 16 wrong acknowledgments (BSC). Host recovery. A valid poll or selection-addressing is required.

Alert Sent = None.

Possible Cause:

- Host problem
- Communication link

User Action: If the failure continues, contact the host operator or system programmer.

For Service Personnel Only: No action is required.

532 20HG

Description: X.25 receive timeout. The controller has not received a valid frame within the length of time specified during configuration.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Verify that the configured timeout value is of sufficient length. Refer to question 450 in the *3174 Planning Guide*.
2. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

532 21HG

Description: X.25 packet timeout. The 3174 is either waiting for the X.25 network to recover or is attempting to open the link.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. If the failure continues, contact the host operator or system programmer.
2. Perform one of the following actions:
 - For Models 1L through 64R:
Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.
 - For Models 81R through 92R:
Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

532 22HG

Description: Set Asynchronous Balanced Mode (SABM) received when initialized.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is attempting to reset the link.
2. Verify that the X.25 network is operating normally.
3. Contact the host operator or system programmer.

For Service Personnel Only: No action is required.

532 23HG B1B2 B3

Description: Frame Reject Response (FRMR) received.

B1–B3 = FRMR information.

Refer to an X.25 protocol manual for FRMR data explanation.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is attempting to reset the link.
2. If the failure continues, verify that the X.25 network is operating normally.

For Service Personnel Only: No action is required.

532 24HG

Description: An unexpected Unnumbered Acknowledgment (UA) command was received.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is attempting to reset the link.
2. If the failure continues, verify that the X.25 network is operating normally.

For Service Personnel Only: No action is required.

532 25HG

Description: The 3174 has received $N(p)+1$ I-frames containing the same send sequence number. $N(p)$ = The value in customizing question 451.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is attempting to reset the link.
2. If the failure continues, verify that the X.25 network is operating normally.

For Service Personnel Only: No action is required.

532 26HG B1B2 B3

Description: The 3174 has sent a Frame Reject Response (FRMR) after receiving an incorrect I-frame but with a good FCS.

Refer to an X.25 protocol manual for FRMR data explanation.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu" to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

B1–B3 = FRMR information.

Alert Sent = Delayed.

Possible Cause: N/A

Status Codes

User Action:

1. Wait. The 3174 is waiting for the DCE to reset the link.
2. If the failure continues, verify that the X.25 network is operating normally.

For Service Personnel Only: No action is required.

532 27HG

Description: The 3174 has unexpectedly received a frame with the final bit on (X.25).

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Wait. The 3174 is attempting to reset the link.

For Service Personnel Only: No action is required.

532 38HG

Description: Link retries have exceeded the maximum limit (X.25).

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is attempting to recover.
2. If the failure continues, contact the host operator or system programmer.

For Service Personnel Only: No action is required.

532 40HG

Description: Loss of Contact with the Frame Relay network.

Alert Sent = Yes.

Possible Cause: The number of LMI protocol errors has exceeded the threshold. Loss of contact with the Frame Relay network is assumed.

User Action: Verify correct operation of the Frame Relay network.

For Service Personnel Only: No action is required.

533 01HG Log Data: B1B2 B3B4 Display Data LCDD

Description: Clear packet sent. Packet or Logical Link Control level error.

Log data:

B1B2 = Cause Code (CC) and Diagnostic Code (DD).

B3B4 = One of the following codes:

1. LLC header (when DD indicates an LLC error)
2. Diagnostic code modifier followed by 00 (when the clear packet is used to reject an incoming call)
3. Reserved.

Display Data:

L = Clear packet sent, if L is displayed.

CC = Cause code/Diagnostic Code Modifier.

DD = Diagnostic code.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Initiate an outgoing call or wait for an incoming call to re-open the circuit.
2. Use the cause and diagnostic codes to further define the problem. See "X.25 Cause and Diagnostic Codes" on page 2-21.

For Service Personnel Only: No action is required.

533 02HG Log data: B1B2 B3B4 Display Data: MCCDD

Description: Reset packet sent. Packet or Logical Link Control level error.

Log data:

B1B2 = Cause Code (CC) and Diagnostic Code (DD).

B3B4 = One of the following codes:

1. LLC header (when DD indicates an LLC error)
2. Reserved (when DD indicates other than an LLC error).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data.

Display Data:

M = Reset packet sent, if M is displayed.

CC = Cause code.

DD = Diagnostic code.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is attempting to recover.
2. Verify that the X.25 network is operating normally. Use the cause and diagnostic codes to further define the problem. See "X.25 Cause and Diagnostic Codes" on page 2-21.

For Service Personnel Only: No action is required.

533 03HG Log data: B1B2 Display Data: NCCDD

Description: Restart packet sent. Packet or Logical Link Control level error.

Log data:

B1B2 = Cause Code (CC) and Diagnostic Code (DD).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data.

Display Data:

N = Restart packet sent, if N is displayed.

CC = Cause code.

DD = Diagnostic code.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is trying to recover.
2. Use the cause and diagnostic codes to further define the problem. See "X.25 Cause and Diagnostic Codes" on page 2-21.

For Service Personnel Only: No action is required.

Status Codes

533 04HG Log data: B1B2 Display Data: PCCDD

Description: Clear packet received.

Log data:

B1B2 = Cause Code (CC) and Diagnostic Code (DD).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data.

Display Data:

P = Clear packet received, if P is displayed.

CC = Cause code.

DD = Diagnostic code.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Initiate an outgoing call or wait for an incoming call to re-open the circuit.
2. Use the cause and diagnostic codes to further define the problem. See "X.25 Cause and Diagnostic Codes" on page 2-21.

For Service Personnel Only: No action is required.

533 05HG Log data: B1B2 Display Data: QCCDD

Description: Reset packet received.

Log data:

B1B2 = Cause Code (CC) and Diagnostic Code (DD).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data.

Display Data:

Q = Reset packet received, if Q is displayed.

CC = Cause code.

DD = Diagnostic code.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is trying to recover.
2. Use the cause and diagnostic codes to further define the problem. See "X.25 Cause and Diagnostic Codes" on page 2-21.

For Service Personnel Only: No action is required.

533 06HG Log data: B1B2 Display Data: RCCDD

Description: Restart packet received.

Log data:

B1B2 = Cause Code (CC) and Diagnostic Code (DD).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data.

Display Data:

R = Restart packet received, if R is displayed.

CC = Cause code.

DD = Diagnostic code.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Wait. The 3174 is trying to recover.
2. Use the cause and diagnostic codes to further define the problem. See "X.25 Cause and Diagnostic Codes" on page 2-21.

For Service Personnel Only: No action is required.

534 01HG B1 to B3

Description: Lost STATUS message.

- B1 = 3174 LMI send sequence number.
- B2 = 3174 LMI receive sequence number.
- B3 = number of seconds the 3174 waited for the STATUS message.

Alert Sent = None.

Possible Cause: The 3174 has not received a STATUS message from the Frame Relay network in a time interval equal to T391 seconds.

User Action: Verify the correct operation of the Frame Relay network if this error occurs frequently.

For Service Personnel Only: No action is required.

534 03HG B1 to B16

Description: Sequence number error in LMI message.

- B1 = 3174 LMI send sequence number.
- B2 = 3174 LMI receive sequence number.
- B3 = send sequence number in LMI message from network.
- B4 = received sequence number in LMI message from network.
- B5–B16 = up to 12 bytes of received LMI message.

Alert Sent = None.

Possible Cause: An error occurred in the Local Management Interface (LMI) between the 3174 and the Frame Relay network. A sequence number did not have the expected value.

User Action: Verify the correct operation of the Frame Relay network if this error occurs frequently.

For Service Personnel Only: No action is required.

534 04HG B1 to B16

Description: Protocol error in LMI message.

- B1 = 3174 LMI send sequence number.
- B2 = 3174 LMI receive sequence number.
- B3 =
 - 01 = LMI message too short.
 - 02 = not a STATUS or STATUS ENQUIRY message.
 - 03 = PVC is reported to be not Active and not New, but a New indication was not seen previously.
 - 04 = Information Element (IE) with bad format.
 - 05 = Report Type IE not found.
 - 06 = Link Integrity Verification (LIV) IE not found.
 - 07 = PVC is reported to be Active and not New, but a New indication was not seen previously.
- B4 = displacement within the LMI message of the first byte or first IE in error, when applicable.
- B5–B16 = up to 12 bytes of LMI message, starting at the first byte or first IE in error, when applicable.

Possible Cause: A protocol error was found in a Local Management Interface (LMI) message.

User Action: Verify the correct operation of the Frame Relay network if this error occurs frequently.

For Service Personnel Only: No action is required.

534 05HG B1B2 B3B4 B5B6

Description: Committed Information Rate (CIR) Exceeded.

- B1B2 = DLCI number in hex
- B3B4 = actual throughput rate in KB/1.1 second
- B5B6 = CIR in KB/1.1 second

Alert Sent = Yes.

Status Codes

Possible Cause: The DLCI throughput during the last 1.1-second interval is greater than the CIR assigned by the Frame Relay network.

User Action: Request a higher CIR if this event is logged often.

For Service Personnel Only: No action is required.

534 06HG B1 to B6

Description: Frame Relay fragmentation error—Invalid offset field.

B1B2 = DLCI number in hex.

B3B4 = Received offset value.

B5B6 = Expected offset value.

Alert Sent = None.

Possible Cause: A Frame Relay fragment has been received with an invalid offset field. A prior fragment might have been lost. The fragment with the invalid offset field is discarded, as well as all previous fragments with the same fragmentation sequence number.

User Action: No action is required. The end users will attempt to recover.

For Service Personnel Only: No action is required.

534 07HG B1 to B6

Description: Frame Relay fragmentation error—Lost fragment.

B1B2 = DLCI number in hex

B3B4 = received fragment sequence number

B5B6 = expected fragment sequence number.

Alert Sent = None.

Possible Cause: The latest fragment received over this DLCI has a different fragmentation sequence number from the previous fragment, and that previous fragment did not have the final bit ON. Some fragments might have been lost. This fragment and previous ones are discarded.

User Action: No action is required. The end users will attempt to recover.

For Service Personnel Only: No action is required.

534 08HG B1B2 B3B4 B5 to B12

Description: Frame Relay fragmentation error—Fragment too short.

B1B2 = DLCI number in hex

B3B4 = number of bytes in the first fragment following the offset field

B5–B12 = contents of the first fragment following the offset field. Only the number of bytes indicated by the B3B4 are significant.

Alert Sent = None.

Possible Cause: There are fewer than 12 bytes, not including the fragmentation header, in the first fragment. This fragment and subsequent fragments in the same sequence are discarded.

User Action: No action is required. The end users will attempt to recover.

For Service Personnel Only: No action is required.

534 09HG B1B2 B3B4 B5 to B16

Description: Frame Relay fragmentation error—SNA data.

B1B2 = DLCI number in hex

B3B4 = number of bytes in the first fragment after the offset field

B5–B16 = reserved.

Alert Sent = None.

Possible Cause: The 3174 does not support fragmentation of SNA data. SNA segmentation must be used to break up SNA data.

User Action: Adjust the configuration of the 3174's remote partner.

For Service Personnel Only: No action is required.

534 10HG B1 to B3

Description: Inactive, unknown, or invalid DLCI number.

B1B2 = DLCI number in hex
 B3 =

- 01 = invalid
- 02 = unknown
- 03 = not active

Alert Sent = None.

Possible Cause: The DLCI number in the frame received from the Frame Relay network is unknown, invalid, or not active. The frame is discarded.

User Action: No action is required.

For Service Personnel Only: No action is required.

534 11HG

Description: No Frame Relay receive buffer.

Alert Sent = Yes.

Possible Cause: There are no buffers to receive a frame from the Frame Relay network. The frame is discarded. Incomplete fragment sequences may be discarded to free up buffers.

User Action: Customize for more buffers by incrementing the response to Question 566, if the error occurs often.

For Service Personnel Only: No action is required.

540 01HG or 02HG B1B2

Description: Host Channel or 3174 Hardware Failure.

QA = 01 = Bus Out Check (data) (Outbound data for ES Connection Adapter Hardware Group 17).

QA = 02 = Bus Out Check (command) (Outbound data for ES Connection Adapter Hardware Group 17).

B1B2 = Sense data.

Alert Sent = Delayed.

Possible Cause: N/A

User Action:

1. Press **Reset** and retry the operation.
2. If this code remains in the display, have the host operator vary the controller online.
3. Request service.

For Service Personnel Only:

For a Channel Adapter (HG16):

1. Check the bus out channel cable, check the pins on the cable and in the Bus/Tag tailgate assembly.
2. Go to MAP 0910 in the maintenance manual for your model, if the problem is isolated to this controller.

For an ES Connection Adapter (HG17):

1. Check the cable connector.
 2. Go to MAP 0930 in the maintenance manual for your model, if the present problem is isolated to the controller.
 3. Refer to *ES Connection Link Fault Isolation*.
-

540 03HG

Description: The channel has generated a selective reset to clear an error condition.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: No action is required. This is only an informational message.

For Service Personnel Only: No action is required.

Status Codes

540 04HG B1B2 B3B4

Description: Data streaming error. The data streaming mode of data transfer has been activated for a channel write or read operation.

During the data transfer, one of the following conditions occurred:

- The channel has failed to respond to the last Service-In/Data-In signal.
- The end of the data transfer has been signaled and the channel adapter has determined that the In-Tag/Out-Tag (Service-Out/Service-In, Data-Out/Data-In) count does not match.

B1B2 = SNA sense code.

B3B4 = SNA sense code.

SNA sense code = X'2006' or X'0102'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Delayed.

Possible Cause: Data-rate between the host channel and the controller is incompatible.

User Action: No action is required.

For Service Personnel Only: No action is required.

540 07HG

Description: Incorrect count on a read command. A read command was issued that stopped the data transfer before all the data was sent from the 3174 buffer.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: If the failure continues, contact the system programmer. The read channel program is incorrect.

For Service Personnel Only: No action is required.

540 08HG

Description: A write, write break, or control command was received that contains an incorrect count in the link header.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Host programming error. Contact the system programmer.

For Service Personnel Only: No action is required.

540 09HG

Description: Old Read Start command received.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. The data is re-sent by the controller.

For Service Personnel Only: No action is required.

540 10HG B1

Description: A Write or Write Break channel CCW was received that contains a function code that is not valid in the link header.

B1 = Link characteristics, where:

Bit 1 = Carries PU 2 traffic to this LAN-attached 3174.

Bit 2 = Carries T2.1 traffic.

Bit 3 = Carries PU 2 traffic between the 3174 gateway and a LAN-attached PU 2.

Bit 4 = The link is customized.

Bit 5 = The link traverses a bridge.

Bit 6-8 = Reserved.

Alert Sent = Delayed.

Possible Cause: Host programming error

User Action: Contact the system programmer.

For Service Personnel Only: No action is required.

540 51HG B1B2

Description: Controller initiated Command Retry.

B1B2 = Sense data.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. Host recovery.

Note: If status code 540 01 or 540 04 is in the event log, perform the specified recovery actions for those status codes. Refer to "Test 1: Display Logs Menu" in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

540 52HG B1B2 B3B4

Description: The 3174 has detected one of the following errors where:

- A multiple "established logical path" has been issued to the same controller Host ID.
- An incorrect "established logical path" has been issued.
- A frame has been issued to a deconfigured device.
- A frame has been received that exceeded the maximum size allowed.

B1 = Reserved

B2 = 80 = multiple ELP

B2 = 40 = incorrect ELP

B2 = 20 = frame to deconfigured device

B2 = 10 = frame size exceeded

B3 = Reserved

B4 = Reserved.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless system degradation occurs due to 540-52 errors. Have the host operator vary the controller online. Contact the system programmer and inform him of B2 contents.

For Service Personnel Only: No action is required.

540 53HG B1B2

Description: The 3174 has detected a link level error (an unexpected delimiter).

B1 = Reserved

B2 = 10 = Unexpected delimiter.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless system degradation occurs due to 540-53 errors; refer to *ES Connection Link Fault Isolation*.

If the results of this manual indicate a 3174 problem, request service.

For Service Personnel Only: Refer to *ES Connection Link Maintenance*.

540 54HG B1B2

Description: The ES Connection Adapter's bit error rate threshold has been exceeded.

B1 = Reserved

B2 = 80 = Bit error rate threshold exceeded.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless system degradation occurs due to 540-54 errors; refer to *ES Connection Link Fault Isolation*.

If the results of this manual indicate a 3174 problem, request service.

For Service Personnel Only: Refer to *ES Connection Link Maintenance*.

Status Codes

540 55HG B1B2

Description: Not enough host buffer space is available for the data being sent by the 3174.

B1B2 = Sense data.

SNA sense = 4000.

Non-SNA sense = 0400.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action: Contact system programmer.

For Service Personnel Only: No action is required.

541 01HG B1B2

Description: Intervention required for an attached terminal.

Note: This status code is logged when intensive mode or trace is set on.

B1B2 = Sense data.

Alert Sent = None.

Possible Cause:

- Terminal power is turned off
- Terminal security keylock turned on
- Printer out of paper

User Action:

1. Verify that the attached terminal is turned on and ready.
2. On printers, verify that paper is installed correctly.
3. Use the terminal documentation for further problem isolation.

For Service Personnel Only: No action is required.

550 01HG

Description: For X.25, the Call Connected packet is longer than 512 bytes. The remainder of the packet has been discarded.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

550 02HG

Description: For X.25, flow-control negotiation has taken place and some of the values found in the Call Connected packet are different from those in the Call Request packet.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

551 01HG B1B2 B3B4

Description: X.25 diagnostic packet was received.

B1 = Diagnostic code.

B2-B4 = Explanation for the failure.

Alert Sent = None.

Possible Cause: N/A

User Action:

For B1, see "X.25 Cause and Diagnostic Codes" on page 2-21 for information.

For B2–B4, refer to an X.25 protocol manual for diagnostic packet information.

For Service Personnel Only: No action is required.

551 02HG B1

Description: Packet discarded (X.25 network).

B1 = Diagnostic code (DD).

Alert Sent = None.

Possible Cause: N/A

User Action: See “X.25 Cause and Diagnostic Codes” on page 2-21 for information.

For Service Personnel Only: No action is required.

551 03HG

Description: Exchange ID received (XID).

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

551 04HG

Description: Qtest received.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

551 05HG

Description: Qtest sent.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

551 06HG B1

Description: Test received.

B1 = SDLC address.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

551 07HG B1

Description: Test sent.

B1 = SDLC address.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

Status Codes

551 12HG B1B2 B3B4

Description: Number of DLCIs exceeds configured maximum.

B1 = Configured LMI type
B2 = Configured number of DLCIs
B3B4 = DLCI number of excess PVC in hex

Alert Sent = None.

Possible Cause: The Frame Relay subscription includes more PVCs (DLCIs) than the answer to customization question 552. Data coming from excess PVCs is discarded.

User Action: Reconfigure with the correct number of DLCIs.

For Service Personnel Only: No action is required.

551 13HG B1B2

Description: FECN Received.

B1B2 = DLCI number of the congested PVC, in hex

Alert Sent = None

Possible Cause: The 3174 received a frame with the Forward Explicit Congestion Notification (FECN) bit ON in the address field, indicating congestion in the Frame Relay network.

User Action: No action is required.

For Service Personnel Only: No action is required.

551 14HG B1B2

Description: BECN Received.

B1B2 = DLCI number of the congested PVC, in hex

Alert Sent = None

Possible Cause: The 3174 received a frame with the Backward Explicit Congestion Notification (BECN) bit ON in the address field, indicating congestion in the Frame Relay network.

User Action: No action is required.

For Service Personnel Only: No action is required.

551 15HG B1 to B16

Description: Unsupported encapsulation header.

Possible Cause: A frame was received from the Frame Relay network with an unsupported encapsulation header.

B1–B16 = First 16 bytes of the received frame

Alert Sent = None

User Action: No action is required. The frame is discarded.

For Service Personnel Only: No action is required.

551 16HG B1 to B3

Description: Online Frame Relay parameter change.

B1 = Reserved
B2 = the old value of the Transmit Polling Interval parameter.
B3 = the new value of the Transmit Polling Interval parameter.

Alert Sent = None.

Possible Cause: A Frame Relay parameter value has been changed by means of a RAS test frame.

User Action: No action is required. The change is in effect until the next IML of the 3174. In order to effect a permanent change, the customization must be modified.

For Service Personnel Only: No action is required.

552 01HG B1B2

Description: PVC status change to New.

B1B2 = DLCI number, in hex

Alert Sent = None

Possible Cause: A STATUS message indicates that a PVC has changed status to New.

User Action: No action is required.

For Service Personnel Only: No action is required.

552 02HG B1B2

Description: PVC status change to Active.

B1B2 = DLCI number, in hex

Possible Cause: A STATUS message indicates that a PVC has changed status to Active.

User Action: No action is required.

For Service Personnel Only: No action is required.

552 03HG B1 to B3

Description: PVC status change to Inactive or Deleted.

B1B2 = DLCI number, in hex

B3 =
 01 = inactive
 02 = deleted

Alert Sent = Yes

Possible Cause: A STATUS message indicates that a PVC has changed status to Inactive or Deleted.

User Action: No action is required.

For Service Personnel Only: No action is required.

553 01HG

Description: A call is being established (X.21 and X.25).

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

559 01HG

Description: X.25 Gateway inactivity timeout.

Alert Sent = None.

Possible Cause: An X.25 Token-Ring gateway virtual circuit has disconnected due to no activity during the time define in Q943.

User Action: No action is required.

For Service Personnel Only: No action is required.

560 01HG B1

Description: A call progress signal, class 2X or 6X, has been received from the network (X.21).

B1 = Call progress signal.

See Table 2-16 on page 2-32.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Wait. The system is retrying.

Status Codes

2. If the failure continues, perform one of the following actions:

- For Models 1L through 64R:

Refer to CPD 0300 in the *3174 Customer Problem Determination Guide*.

- For Models 82R and 92R:

Refer to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in Chapter 2 of the maintenance manual for your model.

560 03HG

Description: A character other than + or Bell was received (X.21).

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Wait. The system is retrying.

Note: If the retries are not successful, status code 504 06 is displayed on the operator panel. Perform the specified recovery action for that status code.

For Service Personnel Only: No action is required.

560 04HG

Description: Unexpected condition (X.21).

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Wait. The system is retrying.

For Service Personnel Only: No action is required.

561 01HG B1

Description: A call progress signal type OX has been received from the network.

B1 = Call progress signal. See Table 2-16 on page 2-32.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Use the call progress signal to further define the problem.

For Service Personnel Only: No action is required.

561 02HG

Description: X.21 network format error. An incorrect character has been detected.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Host recovery.

For Service Personnel Only: No action is required.

561 03HG

Description: X.21 network. During the reception of a call progress signal, or DCE-provided information, the controller did not have enough buffer space available to receive all of the data that was sent.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Host recovery.

For Service Personnel Only: No action is required.

562 01HG B1

Description: X.21 network. Call progress signal received. Class 4X, 5X, 7X, or 8X.

B1 = Call progress signal. See Table 2-16 on page 2-32.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Retry the call. Use the call progress signal to further define the problem.

For Service Personnel Only: No action is required.

562 02HG

Description: X.21 network is not ready for communication.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Host activation is required. Contact the host operator.

For Service Personnel Only: No action is required.

562 03HG

Description: X.21 network. Clear timeout.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Host recovery. The system returns to call ready.

For Service Personnel Only: No action is required.

563 01HG B1

Description: XID error at first connect time. X.21 short-hold mode

B1 = 0X = Return code where:

- 01 = Length of dial digits is not the same as the received length.
- 02 = The called port was busy and did not send an alternate length.
- 03 = Length of alternate dial digits is not the same as the received length.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Check the dial number of the primary before using the EXT, DISC keys at the primary dial terminal (PDT) to return to call-ready mode and redialing. If the failure continues, request service.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

563 02HG B1

Description: XID error during a reconnect. X.21 short-hold mode.

B1 = 0X = Return code where:

- 01 = XID is not valid format 1.
- 02 = SHI flag is not on.
- 03 = SHSI flag is not on.
- 04 = Length of dial digits is not the same as the received length.
- 05 = Dial digits not the same as the first connection.
- 06 = XID length error, or no XID received.
- 07 = Received XID is less than the minimum for XID format 1.
- 08 = Node ID is not correct in the XID received from the 3174.
- 09 = XID is not the first frame received after the connection that was initiated by the 3174.

Alert Sent = Delayed.

Possible Cause: N/A

User Action: Check the dial number of the primary and the 3174 before using the EXT, DISC keys on the primary dial terminal to return to call-ready mode and redialing. If the failure continues, request service.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model.

Status Codes

580 01HG B1B2 B3B4 B5B6

Description: A failure occurred during an attempt to open the Token-Ring Adapter. Testing of the local Token-Ring lobe was unsuccessful.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = Open error code where:

B5 = is always 00.

B6 = X Y where:

X = 1 = Lobe media test.

X = 2 = Physical insertion.

X = 3 = Address verification.

X = 4 = Roll call poll.

X = 5 = Request parameters.

Y = 1 = Function failure.

Y = 2 = Signal loss.

Y = 3 = Wire fault.

Y = 4 = Frequency error.

Y = 5 = Timeout.

Y = 6 = Ring failure.

Y = 7 = Ring beaconing.

Y = 8 = Duplicate node address.

Y = 9 = Request parameters.

Y = A = Remove received.

Y = B = IMPL force received.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = Delayed.

Possible Cause:

- Token-Ring media access unit
- LAN Adapter
- Lobe cables

User Action:

1. Re-IML.
2. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. For further problem determination, refer to the section describing Open Errors in the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

580 02HG B1B2

Description: A failure occurred during an attempt to open the LAN Adapter because of ring protocol errors.

B1B2 = Open error code.

See status code 580 01 for the definition of the open error code (bytes B5 and B6).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = Delayed.

Possible Cause: Lobe

User Action: Perform the actions shown in status code 580 01HG.

For Service Personnel Only: No action is required.

580 03HG B1 to B16

Description: A failure occurred during an attempt to open the Token-Ring Adapter. The adapter received a beaconing MAC frame from the ring.

B1B2 = Open error code.

See status code 580 01 for the definition of the open error code (bytes B5 and B6).

B3B4 = Beacon type where:

0001 = Set recovery mode.

0002 = Ring Signal Loss.

0003 = Monitor contention failed, no contention frames received.

0004 = Monitor contention failed, contention frames received.

B5-B10 = Address of beaconing adapter.

B11-B16 = Nearest Active Upstream Neighbor (NAUN).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Logs Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = None.

Possible Cause: Fault domain

User Action:

1. Perform the following actions:
 - Verify that customization question 384 (Ring Speed of the Token-Ring Network) matches the current ring speed.
 - Contact the host operator to try to re-open the adapter.
2. Consult the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

580 04HG B1B2

Description: An open failure occurred. The Token-Ring Adapter received a Remove Station MAC frame.

B1B2 = Open error code.

See status code 580 01 for the definition of the open error code (bytes B5 and B6).

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = Delayed.

Possible Cause: A Remove command was issued by the Token-Ring Network Manager.

User Action:

1. Contact the host operator; find out the status of the Token Ring.
2. Refer to the *Token-Ring Network Problem Determination Guide*.
3. Re-IML.

For Service Personnel Only: No action is required.

580 05HG B1B2 B3B4 B5B6 B7B8

Description: Wire fault. An open or short circuit has been detected in the lobe data path.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = The Token-Ring ID number.

B7B8 = The Token-Ring status code.

For a description of the Token-Ring status code, see "Token-Ring Status Codes" on page 2-36.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = Delayed.

Possible Cause:

- Token-Ring multistation access unit
- Token-Ring Adapter
- Lobe cables

Status Codes

User Action:

1. Re-IML.
2. If the failure continues, refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. For further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.
4. Request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

580 06HG B1B2 B3B4 B5B6 B7B8

Description: The Token-Ring Adapter has removed itself from the ring as a result of the auto-removal process.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = The Token-Ring ID number.

B7B8 = The Token-Ring status code.

For a description of the Token-Ring status code, see "Token-Ring Status Codes" on page 2-36.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = None.

Possible Cause:

- Token-Ring Adapter
- Token-Ring multistation access unit
- Lobe cables

User Action:

1. Re-IML.
2. If the failure continues, refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. For further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.
4. Request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

580 07HG B1B2 B3B4

Description: A Remove MAC frame was received from the Token Ring.

B1B2 = The Token-Ring ID number.

B3B4 = The Token-Ring status code.

For a description of the Token-Ring status code, see "Token-Ring Status Codes" on page 2-36.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = Delayed.

Possible Cause: A Remove command was issued by the Token-Ring Network microcode.

User Action:

1. Contact the Token-Ring network administrator to obtain the status of the Token Ring.
2. Re-IML.
3. If the failure continues, go to CPD 0400 in the *3174 Customer Problem Determination Guide*.
4. To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

580 08HG B1 to B16

Description: The Token Ring is inoperative.

B1B2 = The Token-Ring ID number.
 B3B4 = Beacon type.
 B5–B10 = Address of beaconing adapter.
 B11–B16 = Nearest active upstream neighbor (NAUN).

See status code 580 03 for a description of the beacon type.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu," to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = None.

Possible Cause: Fault domain

User Action: For further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

580 11HG B1 to B15

Description: Token-Ring Adapter open error.

B1B2 = TYPE.
 B3B4 = LOCA.
 B5 = LAN characteristics, where:
 bit 1 = The LAN carries 2.0 traffic for this 3174.
 bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
 bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
 bit 4 = The LAN carries traffic for this 3174-Peer bridge.
 bit 5 = The LAN carries traffic for TCP/IP.
 bits 6–8 = Reserved.

B6–B11 = Local MAC Address.

B12B13 = Ring ID.

B14B15 = Open error code: See status code 580 01 for the definition of the open error code (bytes B5 and B6).

Alert Sent = Permanent.

Possible Cause:

- Defective lobe wire
- Defective Token-Ring Adapter

User Action:

1. Refer to the section on open errors in the *IBM Token-Ring Network Problem Determination Guide*. It is not necessary to re-open the Token-Ring Adapter. The 3174 will periodically re-open the adapter.
2. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. Request Service.

For Service Personnel Only: Go to MAP 0610 or 0600 in the maintenance manual for your model.

580 12HG B1 to B15

Description: Token-Ring Adapter open error. The Token Ring is beaconing.

B1B2 = TYPE.
 B3B4 = LOCA.
 B5 = LAN characteristics, where:
 bit 1 = The LAN carries 2.0 traffic for this 3174.
 bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
 bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
 bit 4 = The LAN carries traffic for this 3174-Peer bridge.
 bit 5 = The LAN carries traffic for TCP/IP.
 bits 6–8 = Reserved.

B6–B11 = Local MAC address.

B12B13 = Ring ID.

B14B15 = Open error code: See status code 580 01 for the definition of the open error code (bytes B5 and B6).

If this error is detected by a Token-Ring host-attached 3174, then:

Alert Sent = None.

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Status Codes

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- Defective media access unit
- Damaged Token-Ring connector cables

User Action: Refer to the section on open errors in the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

580 13HG B1 to B15

Description: Token-Ring Adapter open error: A Remove Frame was received.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics, where:

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = The LAN carries traffic for this 3174-Peer bridge.

bit 5 = The LAN carries traffic for TCP/IP.

bits 6-8 = Reserved.

B6-B11 = Local MAC address.

B12B13 = Ring ID.

B14B15 = Open error code: See status code 580 01 for the definition of the open error code (bytes B5 and B6).

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: A Remove command was issued by a Token-Ring Network manager.

User Action:

- Contact the LAN network manager operator for instructions.
- Re-open the Token-Ring Adapter using one of the following methods:
 - Re-IML.
 - If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the 3174 gateway itself will not cause a Token-Ring Adapter reset.
 - Online Test: You can perform Online Test 9, Option 13.

For Service Personnel Only: No action is required.

580 14HG B1 to B15

Description: LAN Adapter open error.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics, where:

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = The LAN carries traffic for this 3174-Peer bridge.

bit 5 = The LAN carries traffic for TCP/IP.

bits 6-8 = Reserved.

B6-B11 = Local MAC address.

B12B13 = Ring ID.

B14B15 = Open error code: See status code 580 01 for the definition of the open error code (bytes B5 and B6).

If the LAN adapter or LAN with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: A general LAN failure occurred

User Action:

1. Re-open the LAN Adapter using one of the following methods:
 - Re-IML.
 - If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the 3174 gateway itself will not cause a LAN Adapter reset.
 - Online Test: You can perform Online Test 9, Option 13.
2. Refer to the section on open errors in the *IBM Token-Ring Network Problem Determination Guide*.
3. Refer to CPD 0400 for Token-Ring, and CPD 0700 for Ethernet in the *3174 Customer Problem Determination Guide*.
4. Request Service.

For Service Personnel Only: Go to Map 0610 or 0600 in the maintenance manual for your model.

580 15HG B1 to B15

Description: Token-Ring lobe wire fault.

- B1B2 = TYPE.
 B3B4 = LOCA.
 B5 = LAN characteristics, where:
- bit 1 = The LAN carries 2.0 traffic for this 3174.
 - bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
 - bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
 - bit 4 = The LAN carries traffic for this 3174-Peer bridge.
 - bit 5 = The LAN carries traffic for TCP/IP.
 - bits 6–8 = Reserved.
- B6–B11 = Local MAC Address.
 B12B13 = Ring ID.
 B14B15 = New Ring status.

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- Defective Token-Ring Adapter
- Defective media access unit
- Defective lobe cables

User Action:

1. Refer to the section on open errors in the *IBM Token-Ring Network Problem Determination Guide*. It is not necessary to re-open the Token-Ring Adapter. The 3174 will periodically re-open the adapter.
2. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. Request Service.

For Service Personnel Only: Go to Map 0610 or 0600 in the maintenance manual for your model.

580 16HG B1 to B15

Description: The Token-Ring Adapter was auto-removed.

- B1B2 = TYPE.
 B3B4 = LOCA.
 B5 = LAN characteristics, where:
- bit 1 = The LAN carries 2.0 traffic for this 3174.
 - bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
 - bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
 - bit 4 = The LAN carries traffic for this 3174-Peer bridge.
 - bit 5 = The LAN carries traffic for TCP/IP.
 - bits 6–8 = Reserved.
- B6–B11 = Local MAC Address.
 B12B13 = Ring ID.
 B14B15 = New Ring Status.

If this error is detected by a Token-Ring host-attached 3174, then:

Alert Sent = None.

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Status Codes

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- Defective LAN Adapter
- Defective media access unit
- Defective lobe cables

User Action:

1. Refer to the *IBM Token-Ring Network Problem Determination Guide*.
2. Re-open the Token-Ring Adapter using one of the following methods:
 - Re-IML.
 - If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the 3174 gateway itself will not cause a token-ring adapter reset.
 - Online Test: You can perform Online Test 9, Option 13.

For Service Personnel Only: No action is required.

580 17HG B1 to B15

Description: A Token-Ring Remove MAC frame was received from a Token-Ring network manager. The adapter removed itself from the ring.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics, where:

- bit 1 = The LAN carries 2.0 traffic for this 3174.
- bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
- bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
- bit 4 = The LAN carries traffic for this 3174-Peer bridge.
- bit 5 = The LAN carries traffic for TCP/IP.
- bits 6-8 = Reserved.

B6-B11 = Local MAC Address.

B12B13 = Ring ID.

B14B15 = New Ring status.

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. Contact the LAN network manager operator for instructions.
2. Re-open the Token-Ring Adapter using one of the following methods.
 - Re-IML.
 - If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the 3174 gateway itself will not cause a Token-Ring Adapter reset.
 - Online Test: You can perform Online Test 9, Option 13.

For Service Personnel Only: No action is required.

580 18HG B1 to B15

Description: The Token Ring is permanently beaconing.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics, where:

- bit 1 = The LAN carries 2.0 traffic for this 3174.
- bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
- bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
- bit 4 = The LAN carries traffic for this 3174-Peer bridge.
- bit 5 = The LAN carries traffic for TCP/IP.
- bits 6-8 = Reserved.

B6-B11 = Local MAC Address.

B12B13 = Ring ID.

B14B15 = Beacon Type.

If this error is detected by a Token-Ring host-attached 3174, then:

Alert Sent = None.

If the Token-Ring Adapter or Token Ring with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- Defective media access unit
- Damaged Token-Ring connector cables

User Action: Refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

580 19HG B1 to B15

Description: Ethernet Adapter open error (media).

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Reserved.

B14B15 = Open error code: 0001

If the Ethernet Adapter with the error carries the alert focal point link:

Alert Sent = Delayed

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- Transceiver not working
- Cable fault
- Cable disconnected
- Hub not connected (10BASE-T)

User Action: Perform the following actions:

1. Make sure that all the cables are connected.
2. Wait for the 3174 to re-open the adapter periodically. If the problem persists, request service.

For Service Personnel Only: Go to MAP 0630 in the maintenance manual for your model.

580 20HG B1 to B15

Description: Ethernet Adapter open error (AUI overcurrent).

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Reserved.

B14B15 = Open error code: 0002

If the Ethernet Adapter with the error carries the alert focal point link:

Alert Sent = Delayed

Status Codes

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- Defective cable
- Defective Ethernet Adapter

User Action: Perform the following actions:

1. Replace the cable.
2. Wait for the 3174 to re-open the adapter periodically. If the problem persists, request service.

For Service Personnel Only: Go to MAP 0630 in the maintenance manual for your model.

580 45HG B1B2 B3B4 B5B6 B7B8

Description: The 8250 Hub Backplane Management Facility has requested a backplane change for the WNM. The token-ring adapter is being opened with the new backplane configuration.

B1B2 = TYPE

B3B4 = LOCA

B5B6 = New backplane configuration data

B7B8 = Old backplane configuration data

where:

B5/B7 = Network Assignment

02 = Isolated

09 = Network 1

0A = Network 2

0B = Network 3

0C = Network 4

0D = Network 5

0E = Network 6

0F = Network 7

B6/B8 = Ring speed

00 = 16 MB

10 = 4 MB

Note: This status code is cleared when the token-ring adapter re-opens.

Possible Cause: N/A

User Action: None. The WNM will re-open on a new network.

For Service Personnel Only: N/A

580 58HG B1 to B16

Description: A temporary beaconing condition occurred on the Token Ring.

B1B2 = The Token-Ring ID number.

B3B4 = Beacon type.

B5-B10 = Address of beaconing adapter.

B11-B16 = Nearest active upstream neighbor (NAUN).

See status code 580 03 for a description of the beacon type.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- One station named in the fault domain
- Temporary degradation of the specified fault domain

User Action: If the failure continues, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

580 68HG B1 to B15

Description: The Token Ring is temporarily beaconing.

- B1B2 = TYPE.
- B3B4 = LOCA.
- B5 = LAN characteristics, where:
 - bit 1 = The LAN carries 2.0 traffic for this 3174.
 - bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
 - bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
 - bit 4 = The LAN carries traffic for this 3174-Peer bridge.
 - bit 5 = The LAN carries traffic for TCP/IP.
 - bits 6–8 = Reserved.
- B6–B11 = Local MAC Address.
- B12B13 = Ring ID.
- B14B15 = Beacon Type.

If this error was detected by a Token-Ring host-attached 3174 or if soft errors are not reportable (Question 905 = 0 or 2), then:

Alert Sent = None.

Otherwise:

Alert Sent = Permanent.

Possible Cause: There is a temporary degradation of transmission in the specified fault domain due to electromagnetic interference.

User Action: No action is required unless the error reoccurs. If it does, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

581 01HG B1 to B14

Description: Open failure. The LAN Adapter detected a duplicate adapter address on the LAN, or the universal address specified during customizing is not the same as the adapter's universal address.

B1B2 = Open error code.

See status code 580 01 for the definition of the open error code (bytes B5 and B6).

B3–B8 = Universal address (address on the LAN Adapter card).

B9–B14 = Locally administered address (address entered during configuration).

See status code 580 01 for a definition of the open error code.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1, "Display Log Menu" to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = None.

Possible Cause: N/A

User Action: A unique address has to be assigned to each adapter on the LAN. If the address for the 3174 must be changed, the controller has to be reconfigured.

For releases lower than C5:

- If this is the gateway controller, refer to question 900 in the *3174 Planning Guide*.
- If this 3174 is not the gateway controller, refer to question 106 in the *3174 Planning Guide*.

For release C5 and higher:

- If this is a token ring, refer to question 80 in the *3174 Planning Guide*.
- If this is an Ethernet, refer to question 84 in the *3174 Planning Guide*.

Note: If you used the universal address and you have to recustomize this controller to change the address, the gateway controller must also be changed.

For Service Personnel Only: No action is required.

581 11HG B1 to B15

Description: There are duplicate node addresses on the LAN.

B1B2 = TYPE.

B3B4 = LOCA.

- B5 = LAN characteristics, where:
 - bit 1 = The LAN carries 2.0 traffic for this 3174.
 - bit 2 = The LAN carries 2.1 traffic for this APPN 3174.
 - bit 3 = The LAN carries DSPU traffic for this 3174 gateway.
 - bit 4 = The LAN carries traffic for this 3174-Peer bridge.

Status Codes

bit 5 = The LAN carries traffic for TCP/IP.

bits 6–8 = Reserved.

B6–B11 = Local MAC Address.

B12B13 = Ring ID.

B14B15 = Open error code: See status code 580 01 for the definition of the open error code (bytes B5 and B6).

If the LAN Adapter or LAN with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

For releases lower than C5:

- Review the LAN addresses (question 106 for non-gateway controllers and question 900 for gateway or APPN controllers)
- Change the appropriate product to remove the duplicate address.

For release C5 and higher:

- If this is a token ring, refer to question 80 in the *3174 Planning Guide*.
- If this is an Ethernet, refer to question 84 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

581 12HG B1 to B16

Description: LAN Adapter open error: The universal address specified did not match the universal address of the adapter.

B1B2 = TYPE.

B3B4 = LOCA.

B5–B10 = Adapter universally administered MAC Address.

B11–B16 = Customized MAC Address.

If the LAN adapter or LAN with the error carries the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: The universally administered address was specified incorrectly.

User Action: Perform one of the following actions and then Re-IML:

- Re-customize the 3174 (question 106 or 900) with the correct universal address of the LAN Adapter in use.
- Re-customize the 3174 (question 106) with zero, and the adapter will open automatically with its universal address.

For Service Personnel Only: No action is required.

581 45HG

Description: A Hub Mailbox Requested Ring Speed Change Conflict

Possible Cause:

The response to customization question 384 or 911 specified a ring speed of 16 Mbps and the ring speed jumper setting or the Hub Management Module specified a ring speed of 4 Mbps.

User Action:

Perform one of the following actions:

- Re-customize the WNM; respond to question 384 or 911 with 0 (4 Mbps).
- For an unmanaged Hub, set the WNM ring speed jumpers to 16 Mbps if that is the ring speed of your network.
- From the Hub Management Module, set the ring speed to 16 Mbps if that is the ring speed of your network.

For Service Personnel Only: N/A

583 02HG B1 to B14

Description: A Frame Reject (FRMR) was sent. An unacceptable LAN frame was received.

- B1B2 = The Token-Ring ID number.
- B3-B7 = Reserved.
- B8 = Previous primary state.
- B9-B14 = Gateway address.

See "Link States" on page 2-40, for a description of the primary state.

Alert Sent = None.

Possible Cause: Logical fault in the gateway

User Action: No action is required. The gateway decides whether to disconnect or reconnect the link between the gateway and the controller.

If your gateway is the 3174 LAN 3270 Gateway feature, the response to customization question 380 should match the F-field response in customization question 941.

For Service Personnel Only: No action is required.

583 03HG B1 to B16

Description: A disconnect mode (DM) or disconnect (DISC) command was received (LAN communication check).

The DM command is used to report that the link station is in asynchronous disconnected mode and is logically disconnected from the link.

The DISC command is used to terminate an asynchronous balanced mode of operation previously set by a Set Asynchronous Balanced Mode Extended (SABME) command.

- B1B2 = The Token-Ring ID number.
- B3-B9 = DLC statistics where:
 - B3 = Last command/response received.
 - B4 = Last command/response sent.
 - B5 = Link primary state.
 - B6 = Link secondary state.
 - B7 = N(S) Transmitter send sequence number.
 - B8 = N(S) Transmitter receive sequence number.
 - B9 = Last N(R) received.
 - B10 = Previous primary state.

B11-B16 = Gateway address.

See "Link States" on page 2-40 for a description of the primary state.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1: "Display Logs Menu" to see the extended data. Refer to the *3174 Customer Problem Determination Guide*.

Alert Sent = None.

Possible Cause: Logical fault in the gateway

User Action:

1. Contact the host operator to reactivate the link.
2. If the failure continues, go to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. Request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

Status Codes

583 04HG B1 to B14

Description: A Frame Reject (FRMR) was received (LAN communication check).

B1B2 = The Token-Ring ID number.

B3-B7 = Reserved.

B8 = Previous primary state.

B9-B14 = Gateway address.

See "Link States" on page 2-40, for a description of the primary state.

Alert Sent = None.

Possible Cause: Logical fault in the gateway

User Action: No action is required. The controller attempts to recover.

If the controller cannot recover, status code 583 09 is displayed.

For Service Personnel Only: No action is required.

583 05HG B1 to B9

Description: A link station that is already in the link open state received a Set Asynchronous Balanced Mode Extended Mode command (LAN communication check).

B1B2 = The Token-Ring ID number.

B3 = Previous primary state.

B4-B9 = Gateway address.

See "Link States" on page 2-40, for a description of the primary state.

Alert Sent = None.

Possible Cause: Logical fault in the gateway

User Action: No action is required. The controller attempts to recover.

If the controller cannot recover, status code 583 09 is displayed.

For Service Personnel Only: No action is required.

583 06HG B1 to B15

Description: An unexpected Set Asynchronous Balanced Mode Extended (SABME) command was received by a link station that is already opened (LAN communication check).

B1B2 = The Token-Ring ID number.

B3-B8 = Gateway address.

B9-B14 = Remote station address.

B15 = Remote service access point.

Alert Sent = None.

Possible Cause: Logical fault in the remote device

User Action: No action is required. If the failure continues, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

583 07HG B1 to B9

Description: A link timeout occurred (LAN timeout on T1 response timer) (LAN communication check).

B1B2 = The Token-Ring ID number.

B3 = Previous primary state.

B4-B9 = Gateway address.

See "Link States" on page 2-40, for a description of the primary state.

Alert Sent = None.

Possible Cause:

- The gateway is no longer attached to the LAN
- Transmission congestion
- The data path of the LAN is no longer operational.

User Action: No action is required. The controller attempts to recover.

If the controller cannot recover, status code 583 09 is displayed.

For Service Personnel Only: No action is required.

583 08HG B1 to B9

Description: A link timeout occurred (LAN timeout on TI response timer) (LAN communication check).

B1B2 = The Token-Ring ID number.

B3 = Previous primary state.

B4-B9 = Gateway address.

See "Link States" on page 2-40, for a description of the primary state.

Alert Sent = None.

Possible Cause:

- The gateway is no longer attached to the Token Ring
- Transmission congestion
- The data path of the Token-Ring network is no longer operational.

User Action: No action is required. The controller attempts to recover.

If the controller cannot recover, status code 583 09 is displayed.

For Service Personnel Only: No action is required.

583 09HG B1 to B11

Description: Link recovery was unsuccessful (LAN communication check).

B1B2 = The Token-Ring ID number.

B3B4 = Cause code:

- Bit 0: Link Lost
- Bit 1: DM or DISC received or acknowledged
- Bit 2: FRMR received
- Bit 3: FRMR sent
- Bit 4: SABME received for an open station
- Bit 5: SABME received station open
- Bit 6: Reserved
- Bit 7: Reserved
- Bit 8: TI timer expired.

B5-B11 = DLC statistics where:

- B5 = Last command/response received.
- B6 = Last command/response sent.
- B7 = Link primary state.
- B8 = Link secondary state.
- B9 = Send count (NS).
- B10 = Receive count (NR).
- B11 = Last received (NR).

See "Link States" on page 2-40, for a description of the primary state.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Contact the host operator to reactivate the link.
2. To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

583 10HG B1 to B15

Description: An LLC frame reject (FRMR) response was sent.

B1 = Link characteristics, where:

- bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
- bit 2 = The link carries 2.1 traffic.
- bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
- bit 4 = The link is customized.

Status Codes

bit 5 = The link traverses a bridge.

bits 6–8 = Reserved.

B2–B7 = Remote MAC Address.
B8 = Remote SAP.
B9 = Local SAP.
B10 = Previous primary state.
B11–B15 = FRMR data.

Alert Sent = Permanent. It depends on the FRMR reason code.

If this is a Frame Relay link,

B1–B5 = Reserved.
B6–B7 = DLCI.
B8 = Remote SAP.
B9 = Local SAP.
B10 = Previous primary state.
B11–B15 = FRMR data.

Alert Sent = None.

Possible Cause: The frame size configuration may be incorrect.

User Action:

1. Check the FRMR data in the extended data for the cause of the frame reject. If the cause was "1-field too long", verify that the configuration data relating to the frame size for the station at each end of the link is correct. If necessary, reconfigure to resolve any mismatches.
2. Re-connect the logical link.
3. To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

583 11HG B1 to B15

Description: An LLC frame reject (FRMR) response was received.

B1 = Link characteristics, where:
bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
bit 2 = The link carries 2.1 traffic.
bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
bit 4 = The link is customized.
bit 5 = The link traverses a bridge.
bits 6–8 = Reserved.

B2–B7 = Remote MAC Address.
B8 = Remote SAP.
B9 = Local SAP.
B10 = Previous primary state.
B11–B15 = FRMR data.

Alert Sent = Permanent. It depends on the FRMR reason code.

If this is a Frame Relay link,

B1–B5 = Reserved.
B6–B7 = DLCI.
B8 = Remote SAP.
B9 = Local SAP.
B10 = Previous primary state.
B11–B15 = FRMR data.

Alert Sent = None.

Possible Cause: The frame size configuration may be incorrect.

User Action:

1. Check the FRMR data in the extended data for the cause of the frame reject. If the cause was "1-field too long", verify that the configuration data relating to the frame size for the station at each end of the link is correct. If necessary, reconfigure to resolve any mismatches.
2. Re-connect the logical link.
3. To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

583 12HG B1 to B12

Description: An LLC DM or DISC was received or a DISC was acknowledged.

B1 = Link characteristics, where:
 bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
 bit 2 = The link carries 2.1 traffic.
 bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
 bit 4 = The link is customized.
 bit 5 = The link traverses a bridge.
 bits 6–8 = Reserved.

B2–B7 = Remote MAC Address.
 B8 = Remote SAP.
 B9 = Local SAP.
 B10 = Previous primary state.
 B11B12 = Primary or secondary state.

Alert Sent = None.

If this is a Frame Relay link,

B1–B5 = Reserved.
 B6–B7 = DLCI.
 B8 = Remote SAP.
 B9 = Local SAP.
 B10 = Previous primary state.
 B11–B12 = Primary or secondary state.

Alert Sent = None.

Possible Cause:

- Normal shutdown
- Forced shutdown due to an error

User Action: No action is required if this is a normal disconnect sequence (initiated by the host or workstation operator).

If this is not the case, perform the following actions:

- Re-connect the logical link.
- Request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

583 13HG B1 to B12

Description: An LLC SABME was received on a link that was already open.

B1 = Link characteristics, where:
 bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
 bit 2 = The link carries 2.1 traffic.
 bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
 bit 4 = The link is customized.
 bit 5 = The link traverses a bridge.
 bits 6–8 = Reserved.

B2–B7 = Remote MAC Address.
 B8 = Remote SAP.
 B9 = Local SAP.
 B10 = Previous primary state.
 B11B12 = Primary or secondary state.

Alert Sent = Permanent.

If this is a Frame Relay link,

B1–B5 = Reserved.
 B6–B7 = DLCI.
 B8 = Remote SAP.
 B9 = Local SAP.

Status Codes

B10 = Previous primary state.
B11–B12 = Primary or secondary state.

Alert Sent = None.

Possible Cause: Another station has incorrectly tried to reset a logical link.

User Action: No action is required if this is a normal disconnect sequence (initiated by the host or workstation operator). If this is not the case, perform the following actions:

- Re-connect the logical link.
- To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

583 14HG B1 to B12

Description: An LLC unexpected SABME was received.

B1 = Link characteristics, where:
bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
bit 2 = The link carries 2.1 traffic.
bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
bit 4 = The link is customized.
bit 5 = The link traverses a bridge.
bits 6–8 = Reserved.
B2–B7 = Source MAC Address of the SABME that was received.
B8 = Source SAP of the SABME that was received.
B9 = Local SAP.
B10 = Previous primary state.
B11B12 = Primary or secondary state.

If the LAN Adapter or LAN with the error carries the alert focal point link or if this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

If this is a Frame Relay link,

B1–B5 = Reserved.
B6–B7 = DLCI.
B8 = Remote SAP.
B9 = Local SAP.
B10 = Previous primary state.
B11–B12 = Primary or secondary state.

Alert Sent = None.

Possible Cause: Another station's link activation logic is incorrect.

User Action: No action is required unless this error occurs each time a certain station tries to connect to the 3174. If this happens, check the configuration data at both stations to verify that the ring addresses and SAP values are correct.

For Service Personnel Only: No action is required.

583 15HG B1 to B12

Description: LLC link timeout: T1 response timer. For Frame Relay, this is the Transmit Acknowledgment timer.

B1 = Link characteristics, where:
bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
bit 2 = The link carries 2.1 traffic.
bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
bit 4 = The link is customized.
bit 5 = The link traverses a bridge.
bits 6–8 = Reserved.
B2–B7 = Remote MAC Address.
B8 = Remote SAP.
B9 = Local SAP.
B10 = Previous primary state.
B11B12 = Primary or secondary state.

Alert Sent = Permanent.

If this is a Frame Relay link,

B1–B5 = Reserved.
 B6–B7 = DLCI.
 B8 = Remote SAP.
 B9 = Local SAP.
 B10 = Previous primary state.
 B11–B12 = Primary or secondary state.

Alert Sent = None.

Possible Cause:

- A remote station is no longer attached to the LAN or Frame Relay Network
- Transmission congestion
- The data path of the LAN is no longer operational
- Verify response to Question 4 of End User's Productivity Functions.

User Action: Perform the following actions:

1. Re-connect the logical link.
2. To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

583 16HG B1 to B12

Description: LLC link timeout: Ti (inactivity timer).

B1 = Link characteristics, where:
 bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
 bit 2 = The link carries 2.1 traffic.
 bit 3 = The link carries 2.0 traffic between this 3174 gateway and a LAN-attached PU 2.0.
 bit 4 = The link is customized.
 bit 5 = The link traverses a bridge.
 bits 6–8 = Reserved.

B2–B7 = Remote MAC Address.
 B8 = Remote SAP.
 B9 = Local SAP.
 B10 = Previous primary state.
 B11B12 = Primary or secondary state.

Alert Sent = Permanent.

Possible Cause:

- A remote station is no longer attached to the LAN.
- Transmission congestion.
- The data path of the LAN is no longer operational.

User Action: Perform the following actions:

- Re-connect the logical link.
- To perform further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

Status Codes

584 01HG B1 to B11

Description: An I-frame counter overflow occurred.

B1B2 = The Token-Ring ID number.
B3 = The counter that overflowed:
01 = T1 timer expired counter.
04 = Valid I-frame transmit counter.
05 = I-frame receive error counter.
09 = I-frame transmit error counter.
0A = Valid I-frame receive counter.
B4B5 = Number of I-frames sent.
B6B7 = Number of I-frames received.
B8 = Number of frames sent in error.
B9 = Number of frames received in error.
B10B11 = Number of times the T1 timer expired.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless performance is degraded because of an excessive number of 584 errors (B3 = 05 or 09).

If performance is degraded, request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R:

Go to MAP 0600 in the maintenance manual.

584 02HG B1 to B16

Description: The receive congestion counter in the Token-Ring Adapter has exceeded its threshold. A frame was addressed to the adapter but there is insufficient buffer space available to receive the frame.

B1B2 = The Token-Ring ID number.
B3 = Line errors counter.
B4 = Internal errors counter.
B5 = Burst errors counter.
B6 = ARI/FCI errors counter.
B7 = Abort delimiter counter.
B8 = Reserved.
B9 = Lost frame counter.
B10 = Receive congestion counter.
B11 = Frame copied errors counter.
B12 = Frequency errors counter.
B13 = Token errors counter.
B14–B16 = Reserved.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless performance is degraded because of an excessive number of 584 errors. If performance is degraded, refer to *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

584 03HG B1 to B16

Description: An error counter overflow occurred for the Token-Ring Adapter other than the receive congestion counter.

B1B2 = The Token-Ring ID number.
B3–B16 = Log data.

See status code 584 02 for a description of bytes B3 through B16.

Alert Sent = None.

Possible Cause: Recoverable hardware error

User Action: No action is required unless performance is degraded because of an excessive number of 584 errors. If performance is degraded, request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

584 10HG B1 to B16

Description: LLC counter threshold exceeded.

- B1–B6 = Remote MAC Address.
- B7 = Remote SAP.
- B8 = Local SAP.
- B9 = LLC counter indicator

- bit 1 = Transmit I-Frames threshold exceeded
- bit 2 = Received I-Frames threshold exceeded
- bit 3 = Transmit Errors threshold exceeded
- bit 4 = Received Errors threshold exceeded
- bit 5 = T1 Expired threshold exceeded
- bit 6–6 = Reserved.

- B10–B13 = LLC counter data
- B14–B16 = Reserved

Alert Sent = None.

If this is a Frame Relay link,

- B1–B4 = Reserved.
- B5–B6 = Remote DLCI.
- B7 = Remote SAP.
- B8 = Local SAP.
- B9–B16 = LLC counter data.

Alert Sent = None.

Possible Cause: One of the link counters maintained by the LLC microcode has reached a threshold.

User Action: No action is required unless the counter that overflowed (high order bit = 1) is an error counter. If this occurs frequently and seems to degrade performance, request service.

For Service Personnel Only: Contact your next level of support.

584 11HG B1 to B16

Description: Token-Ring Adapter error log counter overflow.

- B1B2 = Ring ID.
- B3–B16 = Adapter counter data.

Alert Sent = None.

Possible Cause: Temporary hardware error

User Action: No action is required unless the Token-Ring communications appear to cease and the logical links time out. In that case, request service.

For Service Personnel Only: Contact your next level of support.

584 12HG B1 to B16

Description: The Ethernet adapter's error log counter has overflowed.

- B1B2 = Reserved.
- B3B16 = Adapter counter data

where:

- B3 = Frame alignment errors
- B4 = FCS errors
- B5 = Single collision frames
- B6 = Multiple collision frames

Status Codes

B7 = SQE test errors
B8 = Reserved
B9 = Late collisions
B10 = Internal MAC transmit errors
B11 = Carrier sense lost errors
B12 = Excessive collisions
B13 = Frame too long errors
B14 = Frame too short errors
B15 = Internal MAC receive errors
B16 = Reserved

Alert Sent = None

Possible Cause: Temporary hardware error

User Action: No action is required unless LAN communications appear to cease and the logical links time out. In that case, request service.

For Service Personnel Only: Contact your next level of support.

585 01HG B1 to B15

Description: Ethernet media error.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Reserved.

B14B15 = New LAN status (0001).

If the Ethernet Adapter with the error carries the alert focal point link:

Alert Sent = Delayed

Otherwise:

Alert Sent = Permanent

Possible Cause:

- Transceiver not working
- Cable fault
- Cable disconnected
- Hub not connected (10BASE-T)

User Action: Perform the following actions:

1. Make sure that all cables are connected.
2. Wait for the 3174 to re-open the adapter periodically. If the problem persists, request service.

For Service Personnel Only: Go to MAP 0630 in the maintenance manual for your model.

585 02HG B1 to B15

Description: Ethernet AUI overcurrent error.

B1B2 = TYPE.

B3B4 = LOCA.

B5 = LAN characteristics

bit 1 = The LAN carries 2.0 traffic for this 3174.

bit 2 = The LAN carries 2.1 traffic for this APPN 3174.

bit 3 = The LAN carries DSPU traffic for this 3174 gateway.

bit 4 = Reserved.

bit 5 = The LAN carries TCP/IP traffic for this 3174.

B6B11 = Local MAC address.

B12B13 = Reserved.

B14B15 = New LAN status (0002).

If the Ethernet Adapter with the error carries the alert focal point link:

Alert Sent = Delayed

Otherwise:

Alert Sent = Permanent

Possible Cause: The Ethernet cable may be damaged.

User Action: Perform the following actions:

1. Replace the cable.
2. Wait for the 3174 to re-open the adapter periodically. If the problem persists, request service.

For Service Personnel Only: Go to MAP 0630 in the maintenance manual for your model.

590 01

Description: A distributed function terminal has not received a poll from the controller.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Check the signal cable connections at the terminal and at the controller.
2. At the terminal, turn the power switch Off and then back On.
3. Use the terminal documentation for further problem isolation.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

595 01HG

Description: Incorrect numbers were entered for the online/offline procedure.

Alert Sent = None.

Possible Cause: N/A

User Action: Press the **Clear** key and enter the correct numbers for the procedure:

- 1700 to go offline
- 1701 to go online.

For Service Personnel Only: No action is required.

599 01HG

Description: Local mode.

Alert Sent = None.

Possible Cause: N/A

User Action: Press the **COMM** key to establish the call-ready state for SVC operations, or to establish the communication state for PVC operations.

For Service Personnel Only: No action is required.

6XX 1xHG B1

Description: Distributed function terminal detected permanent errors.

B1 = The distributed function terminal (DFT) error log qualifier.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: For a description of the qualifier, refer to your terminal documentation concerning problem determination.

For Service Personnel Only: No action is required.

6XX 5xHG B1

Description: Distributed function terminal detected temporary errors.

B1 = The distributed function terminal (DFT) error log qualifier.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: For a description of the qualifier, refer to your terminal documentation concerning problem determination.

For Service Personnel Only: No action is required.

Status Codes

7XX

Description: Distributed function terminal detected program check.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: For a description, refer to your terminal documentation concerning problem determination or see "DFT Device Program Error Codes" on page 2-67.

For Service Personnel Only: No action is required.

802 01

Description: You attempted to connect to a host that you are unauthorized to use.

Alert Sent = None.

Possible Cause: N/A

User Action: Select the default host.

If required, the Control disk can be reconfigured to allow you to select another host. Refer to "Planning for the AEA and TCP/IP" in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

802 02

Description: An ASCII device was unable to establish communication with a IBM/3270 host through an Asynchronous Emulation Adapter (AEA) port. Although, the AEA port was not in use, the AEA port had not timed out and disconnected from its previous switched connection. The switched disconnect timer has to expire before this AEA port becomes available for use.

Alert Sent = None.

Possible Cause: N/A

User Action: Wait for the timer to expire, then try to establish the connection again.

The timeout value for the timer is set during customizing. Refer to question 741 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

802 03

Description: An attempt was made to establish communication with an ASCII host but there are no Asynchronous Emulation Adapter ports available.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Retry the connection request later. At that time a port may be available.
2. Check the status of the Asynchronous Emulation Adapter ports by using online test 12, option 2.

Refer to Test 12 in "Online Tests" in the *3174 Customer Problem Determination Guide* manual.

For Service Personnel Only: No action is required.

802 04

Description: An outgoing call on an Asynchronous Emulation Adapter (AEA) port occurred at the same time a call was coming in.

Alert Sent = None.

Possible Cause: N/A

User Action: Retry the call. If the failure occurs repeatedly, request service.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

802 05

Description: The host connection is in progress.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. Wait until the host connection has completed.

For Service Personnel Only: No action is required.

802 06

Description: A return to a previous host connection was attempted, but a previous host connection does not exist.

Alert Sent = None.

Possible Cause: N/A

User Action: Select a host.

For Service Personnel Only: No action is required.

802 07

Description: An attempt was made to test an Asynchronous Emulation Adapter (AEA) port that is being used.

Alert Sent = None.

Possible Cause: N/A

User Action: Verify that the correct port number was entered in the test request.

If you are running a transmit test, it may be necessary to reset the terminal being tested before obtaining a valid test result.

- If the terminal is attached to a direct or switched communication line, to reset it, turn the terminal's power switch Off and then back On.
- If the terminal is attached to a nonswitched line, use the "Break" sequence.

For Service Personnel Only: No action is required.

802 08HG B1

Description: A printer was unable to connect to its default ASCII host destination because all of the Asynchronous Emulation Adapter ports that can be used by the printer are busy or out of service.

B1 = The station ID of the printer.

Alert Sent = None.

Possible Cause: N/A

User Action: Perform one of the following actions every 10 or 15 minutes:

- Turn the printer power Off and then back On to establish the connection with the ASCII host.
- Bring up the connection menu on a nearby display and refresh the ASCII host status. When the status of the printer's default destination is DIAL, ?, or UP, then turn the printer power Off and then On.

For Service Personnel Only: No action is required.

803 01

Description: An attempt was made to communicate with an ASCII host, but the keyboard attached to the terminal is not supported for 3270 terminal to ASCII host communication.

Alert Sent = None.

Possible Cause: N/A

User Action: Use a terminal that has a keyboard that is supported for communication with an ASCII host.

The supported keyboards are:

- U.S. English typewriter keyboard
- APL keyboard
- Text keyboard.

For Service Personnel Only: No action is required.

Status Codes

803 02 or 03

Description: An incorrect host number was entered.

The connection menu contains the valid host numbers or names.

Alert Sent = None.

Possible Cause: N/A

User Action: Select a valid host number or name.

For Service Personnel Only: No action is required.

803 04

Description: An incorrect key was pressed.

The valid PF keys are displayed on the connection menu.

Alert Sent = None.

Possible Cause: N/A

User Action: Press a valid key. Check the keyboard maps for the terminal you are using. These keyboard maps are found in the *Terminal User's Reference for Expanded Functions*.

For Service Personnel Only: No action is required.

804 10HG or 20HG B1 to B9

Description: Communication on an Asynchronous Emulation Adapter (AEA) port was disconnected. The inactivity timer expired because of no data flow activity on this port.

The timeout period for each AEA port is specified during configuration. Refer to question 742 in the *3174 Planning Guide*.

QA = 10 or 20 where:

10 = The port is configured for a terminal or printer.

20 = The port is configured for a host.

B1B2 = Number of framing errors detected.

B3B4 = Number of overrun errors detected.

B5B6 = Number of parity errors detected.

B7B8 = Reserved.

B9 = Station ID.

The errors shown in the extended data bytes B1–B9 are provided to indicate the condition of the telephone link. For switched connections it is normal for some of these errors to be indicated. If an excessive number of errors are shown, this most likely indicates a noisy switched connection.

This status code is logged in intensive mode only.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. This is normal AEA operation.

If you want to change the timeout value you can reconfigure the Control disk. Refer to question 742 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

805 10HG B1 to B9

Description: A switched connection was attempted to one of the Asynchronous Emulation Adapter (AEA) ports and the password was entered incorrectly three times. The AEA adapter disables the connection.

B1–B9 = Reserved.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Obtain the correct password in order to establish communication with the controller. Follow your local recovery procedures.

For Service Personnel Only: No action is required.

806 10HG or 20HG B1 to B9

Description: Asynchronous Emulation Adapter buffer overflow.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause:

- Flow control was specified incorrectly during configuration.
- The ASCII station does not use flow control.
- The terminal being used is not compatible with the host.

User Action:

1. If flow control was specified during configuration; verify that the terminal and the host are set up for the same flow control. Refer to question 731 in the *3174 Planning Guide*.
2. If flow control was specified correctly, it may be possible to use a lower line speed. Refer to questions 733 and 734 in the *3174 Planning Guide*.
3. Request service.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

807 10HG or 20HG B1 to B9

Description: A port on an Asynchronous Emulation Adapter (AEA) timed out after waiting 30 seconds to receive data terminal ready (DTR).

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause:

- The null modem or direct connect cable is wired incorrectly
- Attached terminal, printer, or host
- AEA communication adapter cable
- Asynchronous emulation adapter
- Normal condition if a direct-attached ASCII host is switched off.

User Action: Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

808 10HG or 20HG B1 to B9

Description: A port on an Asynchronous Emulation Adapter (AEA) timed out after waiting 30 seconds for data terminal ready (DTR) to turn off. The adapter was trying to disconnect the attached terminal, printer, or host.

For a description of B1 through B9, see status code 804 10HG.

Notes:

1. The AEA disconnect protocol is to drop data set ready (DSR), clear to send (CTS), and carrier detect (CD). The adapter then waits 30 seconds for the attached terminal, printer, or host to drop data terminal ready (DTR).
2. If the attached terminal does not use the required disconnect protocol, disregard this status code.
3. This status code is logged in intensive mode only.

Alert Sent = None.

Possible Cause:

- The null modem or direct cable is wired incorrectly.
- The AEA port may be configured incorrectly.
- The attached terminal, printer, or host does not use the required disconnect protocol.

User Action:

1. Verify that the attached terminal printer or host uses the required disconnect protocol. See the notes in the description column.
2. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

Status Codes

809 10HG or 20HG B1 to B9

Description: A port on an Asynchronous Emulation Adapter (AEA) detected that data terminal ready (DTR) dropped from the attached terminal, printer, or host.

For a description of B1 through B9, see status code 804 10HG.

Note: This status code is logged in intensive mode only.

Alert Sent = None.

Possible Cause:

- The attached terminal, printer, or host was switched off.
- The AEA communication adapter cable for the terminal, printer, or host was disconnected.
- The attached terminal or printer dropped DTR while going into setup mode. (This is normal for some ASCII devices.)

User Action:

1. Verify that the attached terminal, printer, or host is switched on.
2. Verify that the interface cable from the AEA adapter to the terminal, printer, or host is securely connected.
3. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

810 10HG or 20HG B1 to B9

Description: A port on an Asynchronous Emulation Adapter (AEA) detected that data carrier detect (DCD) dropped from the attached terminal, printer, or host. The communication attachment is through a switched modem.

For a description of B1 through B9, see status code 804 10HG.

Note: This status code is logged in intensive mode only.

Alert Sent = None.

Possible Cause:

- The attached terminal, printer, or host was switched off.
- Modem
- Telephone connection.

User Action:

1. Verify that the attached terminal, printer or host is switched on.
2. Verify that the interface cable between the AEA and the modem is securely connected.
3. Retry the dial connection.
4. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

811 20HG B1 to B9

Description: A port on an Asynchronous Emulation Adapter (AEA) timed out waiting for the Ready signal from the attached modem.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause:

- AEA communications cable
- Modem
- Modem configuration

User Action: Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

812 20HG B1 to B9

Description: The Asynchronous Emulation Adapter (AEA) retried the dial operation three times and the number being called did not answer.

For a description of B1 through B9, see status code 804 10HG.

Note: This status code is logged only during intensive mode.

Alert Sent = None.

Possible Cause:

For Micom or Micom-compatible modems:

The number being called does not answer.

For Hayes or Hayes-compatible modems:

1. The number being called does not answer.
2. The number being called is busy.
3. The number being called does not have compatible hardware.

User Action: Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

813 20HG B1 to B9

Description: The modem received an incorrect command from an asynchronous emulation adapter (AEA) port.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause:

- The installed modem does not match the type of modem specified during controller configuration.
- The dial digits specified for the ASCII host do not conform to the modem's requirements.

User Action:

1. Verify that the installed modem matches the type specified during controller configuration. Refer to the AEA port set definition in the *3174 Planning Guide*.
2. Verify that the dial digits specified for the ASCII host conform to the modem's requirements. In particular, if pauses are required to allow for intermediate dial tones, make sure that the pauses are included in the dial string.
3. Verify that the dial string configured in the station set definition (question 752) is correct. Refer to the *3174 Planning Guide*.
4. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

813 21HG B1B2 B3B4

Description: You have configured the Asynchronous Emulation Adapter (AEA) for a Hayes modem, but the person dialing in is using a modem type other than Hayes. One port of the AEA is disabled, however, the rest of the controller is operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

- Run a wrap, cable, or modem test to reset the disabled port. Refer to Online Test 12, in *3174 Customer Problem Determination Guide*.
- To allow this type of modem to be used, reconfigure the AEA for an IBM or other modem type.

For Service Personnel Only: No action is required.

Status Codes

814 20HG B1 to B9

Description: The modem did not send back the setup data that the Asynchronous Emulation Adapter (AEA) sent.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause:

- The installed modem does not match the type of modem specified during controller configuration.
- The cable between the AEA and the modem is not correctly connected.

User Action:

1. Verify that the installed modem matches the type specified during controller configuration. Refer to the port set definition in the *3174 Planning Guide*.
2. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

815 20HG B1 to B9

Description: An incoming call was received while an outgoing call was in progress on an Asynchronous Emulation Adapter (AEA) port.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. Retry the call.
2. Verify that the interface cable between the AEA and the modem is securely connected.
3. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

816 10HG B1 to B9

Description: An incoming call was received but the Asynchronous Emulation Adapter (AEA) did not complete the answer sequence.

The sequence is as follows:

1. The modem raises ring indicate (RI).
2. The AEA raises data terminal ready (DTR).
3. The modem raises data carrier detect (DCD).

For a description of B1 through B9, see status code 804 10HG.

Note: This status code is logged in intensive mode only.

Alert Sent = None.

Possible Cause:

- Wrong number (inadvertent call from a voice phone)
- Bad line condition preventing carrier from being received
- Asynchronous emulation adapter
- Cable from the AEA to the modem
- Telephone rotary or other call routing equipment.

User Action: No action is required, unless this error occurs frequently on the same port. In this case, verify that the modem raises its leads in the correct sequence; refer to the modem documentation.

Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

817 01HG B1B2 B3B4 B5B6 B7B8

Description: Temporary error counter overflowed (framing errors, overruns, or parity errors) on an Asynchronous Emulation Adapter port. The counter has been reset. When any one of the above counters overflows, this status code is logged.

For a description of B1 through B8, see status code 804 10HG.

Alert Sent = None.

Possible Cause:

- Modem
- Line noise
- Terminal
- Telephone line distortion
- Asynchronous Emulation Adapter (AEA)
- Microcode

User Action:

1. Use the refresh sequence for your terminal. Refer to the keyboard maps in the *Terminal User's Reference for Expanded Functions*.
2. Have the telephone line and modem checked.
3. Verify that the connections on the cable between the AEA and the modem are securely connected.
4. Verify that the parity and the number of stop bits were specified correctly during controller configuration.
5. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

817 02HG B1B2 B3B4

Description: The 3174 Asynchronous Emulation Adapter received a call from a switched line and there is excessive line noise. Only one port on the AEA is disabled and the rest of the controller is operational.

B1B2 = TYPE.

B3B4 = LOCA.

Alert Sent = Temporary.

Possible Cause: Telephone line distortion

User Action: Perform the following actions:

- Run a wrap, cable, or modem test to reset the disabled port. Refer to Online Test 12, in *3174 Customer Problem Determination Guide*.
- Have the person calling in retry the call.
- Check the phone line and modem, from which the person is calling, for correct operation.

For Service Personnel Only: No action is required.

818 10HG B1 to B9

Description: The communication connection was dropped. A user disconnected from the session by using the break key on his terminal.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. Normal operation.

For Service Personnel Only: No action is required.

818 20HG B1 to B9

Description: The communication connection was dropped. The host sent the DLE EOT sequence in the 3101 data stream which causes a disconnect.

For a description of B1 through B9, see status code 804 10HG.

Note: This status code is logged in intensive mode only.

Alert Sent = None.

Possible Cause: N/A

Status Codes

User Action: No action is required. Normal operation.

For Service Personnel Only: No action is required.

819 20HG B1 to B9

Description: An Asynchronous Emulation Adapter (AEA) has attempted to reset an attached modem. The modem has not responded correctly to the adapter.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Permanent.

Possible Cause:

- Configuration problem (modem type is specified incorrectly)
- Modem power is turned off or suspended
- Communication adapter cable
- Asynchronous Emulation Adapter (AEA)

User Action:

1. Verify that the installed modem matches the type specified during controller configuration. Refer to the AEA port set definition in the *3174 Planning Guide*.
2. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

820 10HG or 20HG B1 to B9

Description: An Asynchronous Emulation Adapter (AEA) detected an incorrect EIA lead change.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 1000 in the maintenance manual for your model.

821 10HG or 20HG B1 to B9

Description: The current session was disconnected.

For a description of B1 through B9, see status code 804 10HG.

Alert Sent = Temporary.

Possible Cause: N/A

User Action:

1. If the AEA port being used is switched, then redial.
2. If the AEA port is direct or nonswitched press carriage return on the terminal.
3. If the failure continues, the bit rate for the AEA is being exceeded. Line speeds for some of the attached terminals will have to be reduced to resolve the problem. Refer to questions 733 and 734 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

830 03HG

Description: ISDN microcode is defective.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless the network response time is degraded due to an excessive number of 830-03 errors. If the performance is degraded due to excessive errors, request service.

For Service Personnel Only:

1. Replace the FRU Type 9341 indicated by the hardware group.
2. Contact your next level of support.

831 03HG B1B2

Description: An ISDN logical link has been lost. The local link station inactivity timer or acknowledgment timer has expired, causing the remote station to be polled. The remote station did not respond to the poll.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 04HG B1B2

Description: An ISDN logical link has been lost. The remote link station sent a Disconnect Mode (DM) response to the link station. The maximum number of retries to reconnect the link have been attempted and the remote has failed to respond.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communication/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 05HG B1B2

Description: An ISDN logical link has been lost. The remote station sent a SABME command to the local link station that was already initialized.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

Status Codes

831 06HG B1B2

Description: An ISDN logical link has been lost. The local link station sent an incorrect or unsupported command or response to the remote link station. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 07HG B1B2

Description: An ISDN logical link has been lost. The local link station sent an I-field when not permitted to the remote link station. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control
- Frame Reject received

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 08HG B1B2

Description: An ISDN logical link has been lost. The local link station sent a frame with an N(r) that was not valid. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control
- Frame Reject received

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 09HG B1B2

Description: An ISDN logical link has been lost. The local link station sent a frame with an I-field that was too long. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control
- Frame Reject received

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 10HG B1B2

Description: An ISDN logical link has been lost. The remote link station sent an incorrect or unsupported command or response to the local link station. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 11HG B1B2

Description: An ISDN logical link has been lost. The remote link station sent an I-field when not permitted to the local link station. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

Status Codes

831 12HG B1B2

Description: An ISDN logical link has been lost. The remote link station sent a frame with an N(r) that was not valid. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 13HG B1B2

Description: An ISDN logical link has been lost. The remote link station sent a frame with an I-field that was too long. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in the remote node
- Logical link control

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 14HG B1B2

Description: The attempt to request a Terminal Equipment identifier (TEI) from the network has failed.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- Link setup failure
- ISDN Adapter interface/network
- ISDN TE/NT connection

User Action: Contact the personnel responsible for the ISDN connection and report the status code, ISDN Adapter, and port numbers.

For Service Personnel Only: No action is required.

831 15HG B1B2

Description: A port deactivation was detected on a D channel station.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = None.

Possible Cause: Normal end of call sequences

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

831 16HG and 17HG B1B2

Description: A counter wrap was detected, where QA indicates the type of wrap that was detected.

QA = 16 = D channel station.

QA = 17 = D channel link.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = None.

Possible Cause: Counter measurement wrap

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

831 18HG and 19HG B1B2

Description: Counter measurement wrap, where QA indicates the layer of the wrap.

QA = 18 = Physical layer.

QA = 19 = Call control layer.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = None.

Possible Cause: Counter measurement wrap

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

831 20HG to 51HG B1B2

Description: The performance counters have been reset, where QA indicates the counters.

QA = 20 = Call control layer performance.

QA = 21 = ISDN D channel station.

QA = 50 = ISDN physical layer.

QA = 51 = ISDN D channel.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

Status Codes

For Service Personnel Only: No action is required.

831 52HG B1B2

Description: An excessive number of Overrun/Underrun conditions have been detected.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- Local ISDN Adapter
- Local ISDN Adapter microcode

User Action: No action is required unless the network response time is degraded due to an excessive number of 831-52 errors. If performance is degraded due to excessive errors, request service.

For Service Personnel Only: Perform the following actions:

- Replace the ISDN Adapter indicated by the Hardware Group number.
 - Contact your next level of support.
-

831 53HG B1B2

Description: The ISDN port has lost synchronism.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause:

- ISDN Network Termination (NT1)
- ISDN Adapter

User Action: No action is required unless network response time is degraded due to an excessive number of 831-53 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 54HG B1B2

Description: The Network Termination device (NT1) received excessive transmit errors. The Detect Access Transmission Error in (DTSE-in) is an indication from the NT1 that it detected a CRC error across the U interface.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause:

- Local DCE loop
- NT1

User Action: No action is required unless network response time is degraded due to an excessive number of 831-54 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 55HG B1B2

Description: The Network Termination device (NT1) received excessive transmit errors. The Detect Access Transmission Error out (DTSE-out) is an indication from the NT1 that it detected a CRC error across the U interface.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause:

- Local DCE loop
- NT1

User Action: No action is required unless network response time is degraded due to an excessive number of 831-55 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 58HG B1B2

Description: A loss of frame alignment occurred when the ISDN Adapter port lost synchronism.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- Local ISDN Adapter
- ISDN cable connection
- ISDN Network Terminator (NT1)

User Action: No action is required unless network response time is degraded due to an excessive number of 831-58 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 59HG B1B2

Description: The received signal was lost. There is a problem in the U interface because the Network Termination Device (NT1) is not receiving signals from the carrier.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause:

- ISDN Network
- Local DCE loop

User Action: No action is required unless network response time is degraded due to an excessive number of 831-59 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

Status Codes

831 60HG B1B2

Description: The ISDN Adapter to Network Termination Device (NT1) connection could not be achieved.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN NT1 wiring
- Premises wiring

User Action: No action is required unless network response time is degraded due to an excessive number of 831-60 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 61HG B1B2

Description: An excessive number of D channel receive errors have been detected.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause:

- ISDN TE-NT connection
- ISDN Adapter interface

User Action: No action is required unless network response time is degraded due to an excessive number of 831-61 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 62HG B1B2

Description: The number of Protocol Data Units (PDUs) retransmitted has exceeded the threshold, indicating excessive link errors between two DLC stations across the D channel.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause:

- ISDN TE-NT connection
- ISDN Adapter interface

User Action: No action is required unless network response time is degraded due to an excessive number of 831-62 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 63HG B1B2

Description: The ISDN Adapter detected an excessive number of Abort sequences (HDLC seven 1s) on the D channel and unknown addresses were received. The frame was not correctly bounded by flags and did not consist of an integral number of octets (bytes).

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause: ISDN TE-NT connection

User Action: No action is required unless network response time is degraded due to an excessive number of 831-63 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Refer to procedure 0600 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

831 64HG and 65HG B1B2

Description: A port deactivation was detected, where QA indicates the type of port deactivation:

QA = 64 = D channel link port.
QA = 65 = Physical layer port.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause: The ISDN communications or Network Termination Device (NT1) port cable has been disconnected.

User Action: No action is required unless network response time is degraded due to an excessive number of 831-64 or 831-65 errors. If the performance is degraded due to an excessive number of errors, perform the following actions:

1. Verify that the ISDN cable is attached correctly at the controller and the NT1.
2. Look for other 83x status codes in the Event Log following this status code for recovery actions.

For Service Personnel Only: No action is required.

832 01HG B1B2

Description: An End of Call was detected at the B channel station.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

832 02HG and 03HG B1B2

Description: A B channel counter wrap was detected, where QA indicates the type of counter wrap:

QA = 02 = B channel station.
QA = 03 = B channel link.

Status Codes

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

832 04HG B1B2

Description: ISDN B channel data link control layer link performance counters were reset.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

832 50HG B1B2

Description: There are excessive CRC link errors between two DLC stations across the B channel.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause:

- ISDN Network
- B channel ISDN error
- ISDN communications error

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-50 errors. If the performance is degraded due to excessive errors, refer to procedure 0600 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

832 51HG B1B2

Description: There are excessive PDUs retransmitted or receive sequence errors between two DLC stations across the B channel.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause:

- ISDN Network
- B channel ISDN error
- ISDN communications error

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-51 errors. If the performance is degraded due to excessive errors, refer to procedure 0600 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

832 52HG B1B2

Description: The ISDN Adapter detected an excessive number of Abort sequences. An unknown address was received. A frame was not correctly bounded by flags and did not consist of an integral number of octets (bytes).

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause:

- Remote ISDN Adapter
- ISDN Network

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-52 errors. If the performance is degraded due to excessive errors, refer to procedure 0600 in *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

832 53HG B1B2

Description: An excessive number of Overrun/Underrun conditions have been detected on the ISDN Adapter buffer.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Performance.

Possible Cause: ISDN Adapter

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-53 errors. If the performance is degraded due to excessive errors, request service.

For Service Personnel Only:

1. Replace the ISDN Adapter indicated by the Hardware Group number.
 2. Contact your next level of support.
-

832 54HG B1B2

Description: The ISDN B channel station counters have been reset.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

832 55HG B1B2

Description: The ISDN logical link has been lost. The local link station inactivity timer or acknowledgment timer has expired, causing the remote station to be polled. The remote station does not respond to the poll.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Status Codes

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-55 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 56HG B1B2

Description: The ISDN logical link has been lost. The remote link station sent a Disconnect Mode (DM) response to the link station.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-56 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 57HG B1B2

Description: The ISDN logical link has been lost. The remote station sent a SABME command to the local link station, which was already initialized.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-57 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 58HG B1B2

Description: The ISDN logical link has been lost. The local link station sent an incorrect or unsupported command or response to the remote link station. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.

0001 = B1 channel.

0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-58 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 59HG B1B2

Description: The ISDN logical link has been lost. The local link station sent an I-field to the remote link station when it was not permitted. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

- 0000 = D channel.
- 0001 = B1 channel.
- 0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-59 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 60HG B1B2

Description: The ISDN logical link has been lost. The local link station sent a frame with an N(r) that was not valid. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

- 0000 = D channel.
- 0001 = B1 channel.
- 0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-60 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 61HG B1B2

Description: The ISDN logical link has been lost. The local link station sent a frame with an I-field that was too long. The remote link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

- 0000 = D channel.
- 0001 = B1 channel.
- 0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications program
- Logical link control

Status Codes

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-61 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 62HG B1B2

Description: The ISDN logical link has been lost. The remote link station sent an incorrect or unsupported command or response to the local link station. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-62 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 63HG B1B2

Description: The ISDN logical link has been lost. The remote link station sent an I-field to the local link station when it was not permitted. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-63 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 64HG B1B2

Description: The ISDN logical link has been lost. The remote link station sent a frame with an N(r) that was not valid. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
0001 = B1 channel.
0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-64 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 65HG B1B2

Description: The ISDN logical link has been lost. The remote link station sent a frame with an I-field that was too long. The local link station returned a Frame Reject response.

B1B2 = ISDN Channel where:

0000 = D channel.
 0001 = B1 channel.
 0002 = B2 channel.

Alert Sent = Permanent.

Possible Cause:

- ISDN communications/remote node
- Communications program in remote node
- Logical link control

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-65 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

832 66HG B1B2

Description: A B channel call termination was detected.

B1B2 = ISDN Channel where:

0000 = D channel.
 0001 = B1 channel.
 0002 = B2 channel.

Alert Sent = None.

Possible Cause:

- ISDN communications/remote node
- The port cable has been disconnected

User Action: No action is required unless the network response time is degraded due to an excessive number of 832-66 errors. If the performance is degraded due to excessive errors, contact the personnel responsible for the ISDN connection and report the status code, adapter, and port numbers.

For Service Personnel Only: No action is required.

833 01HG B1 to B4

Description: ISDN call was disconnected. The 3174 did not receive an XID response from an ISDN DSPU.

B1 = Reserved.
 B2 = ISDN Adapter hardware group.
 B3 = ISDN Adapter port number.
 B4 = ISDN Adapter B channel number.

Alert Sent = None.

Possible Cause: The DSPU may not match the 3174 configuration.

User Action: No action is required unless the DSPU cannot make a connection. If the problem persists:

1. Verify that the DSPU was customized correctly.
2. Request service.

For Service Personnel Only: Contact your next level of support.

833 02HG B1 to B11

Description: An ISDN call was disconnected. The 3174 received an incorrect XID response from an ISDN DSPU.

Status Codes

- The XID length was incorrect.
- The PUID value consisted of all zeros.
- The PUID value was not found in the 3174 customization data.
- The PUID value was already in use by another DSPU.

B1 = Return Code, where:

- 01 = The PUID is not customized or has a value of all zeros.
- 02 = The PUID is already in use.
- 03 = Incorrect XID format.

B2 = ISDN Adapter hardware group.

B3 = ISDN Adapter port number.

B4 = ISDN Adapter B channel number.

B5–B10 = XID (xtrr bbbpppp), where:

- x = XID format.
- t = Type of sending node.
- r = Reserved.
- b = Block number.
- p = PUID.

B11 = The XID length in B5–B10.

Alert Sent = None.

Possible Cause: The XID was incorrect for one of the following reasons:

User Action: No action is required unless the DSPU cannot make a connection. If the problem persists, verify that the following conditions exist:

1. The 3174 customization for the DSPU.
2. The DSPU is calling the correct phone number.
3. The DSPU is sending a SNA DLC XID format 0.
4. The DSPU PUID was not in use.

For Service Personnel Only: Contact your next level of support.

850 01HG B1 to B8

Description: Management services protocol error: An error was encountered by the MS capabilities application.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Origin CP name.

Alert Sent = Permanent.

Possible Cause: Program error at remote node. See the sense code for a detailed description.

User Action: Perform the following actions:

1. Check the error log for multiple appearances of this status code and note the CP name reported.
2. If all occurrences specify the same CP name, contact the appropriate service representative of that node.
3. If more than one CP name appears, request service and report the status code and sense data found in the log entries.

For Service Personnel Only: Contact your next level of support.

850 02HG B1 to B10

Description: Management services protocol error: A length mismatch was detected.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Origin CP name (If unavailable, this field is 0).

B9B10 = Offset to length in error from start of MDS_MU.

Alert Sent = Permanent.

Possible Cause: Program error at remote node. See the sense code for a detailed description.

User Action: Perform the following actions:

1. Check the error log for multiple appearances of this status code and note the CP name reported.
2. If all occurrences specify the same CP name, contact the appropriate service representative of that node.
3. If more than one CP name appears, request service and report the status code and sense data found in the log entries.

For Service Personnel Only: Contact your next level of support.

850 03HG B1 to B9

Description: Management services protocol error: An unknown MDS message type was detected.

B1–B4 = Sense code.
B5–B8 = Origin CP name.
B9 = Incorrect error message.

SNA Sense Code = X'0870 9002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Permanent.

Possible Cause: The parser detected an unknown message type when parsing the MDS_MU. That message type can only be a Request, Reply, or an Error.

User Action: Perform the following actions:

1. Check the error log for multiple appearances of this status code and note the CP name reported.
2. If all occurrences specify the same CP name, contact the appropriate service representative of that node.
3. If more than one CP name appears, request service and report the status code and sense data found in the log entries.

For Service Personnel Only: Contact your next level of support.

850 04HG B1 to B10

Description: Management services protocol error: An incorrect routing flag was encountered while processing the MDS_MU.

B1–B4 = Sense code.
B5–B8 = Origin CP name.
B9B10 = Incorrect routing flag subvector.

SNA Sense Code = X'0807 9003'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Permanent.

Possible Cause:

- The routing flags are not set
- The routing flags are set incorrectly

User Action: Perform the following actions:

1. Check the error log for multiple appearances of this status code and note the CP name reported.
2. If all occurrences specify the same CP name, contact the appropriate service representative of that node.
3. If more than one CP name appears, request service and report the status code and sense data found in the log entries.

For Service Personnel Only: Contact your next level of support.

850 05HG B1 to B8

Description: Management services protocol error: A required GDS, subvector, or subfield is missing from the MDS_MU.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).
B5–B8 = Origin CP name (If unavailable, this field is 0).

Alert Sent = Permanent.

Possible Cause: Program error at remote node. See the sense code for a detailed description.

User Action: Perform the following actions:

1. Check the error log for multiple appearances of this status code and note the CP name reported.
2. If all occurrences specify the same CP name, contact the appropriate service representative of that node.
3. If more than one CP name appears, request service and report the status code and sense data found in the log entries.

For Service Personnel Only: Contact your next level of support.

Status Codes

850 06HG B1 to B10

Description: An end node sent an alert that is too long for the RU limit (512 bytes) on the SSCP-PU session. Alert from end node was discarded.

B1-B4 = Origin CP name.

B5-B8 = RU length.

Alert Sent = Permanent.

Possible Cause: Alert condition at end node is too complex to be routed to a host focal point on the SSCP-PU session.

User Action: Consider using LU 6.2 session routing for alerts.

For Service Personnel Only: Contact your next level of support.

850 07HG B1 to B8

Description: MDS routing error: management services data could not be forwarded to destination.

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5-B8 = Origin CP name.

Alert Sent = None.

Possible Cause: Network configuration error or session outages.

User Action: Use the sense code to determine reason for error and correct.

For Service Personnel Only: Contact your next level of support.

850 08HG B1 to B4

Description: Management services protocol error: The number of queued end node alerts has exceeded the maximum amount allowed.

B1-B4 = Origin CP name.

Alert Sent = None.

Possible Cause: The end nodes have sent alerts when the SSCP_PU session was unavailable.

User Action: Perform the following actions:

1. Activate an SSCP_PU session on the host alert focal point link.
2. Check the error log for multiple appearances of this status code and note the CP name reported.
3. If all occurrences specify the same CP name, contact the appropriate service representative of that node.
4. If more than one CP name appears, request service and report the status code and sense data found in the log entries.

For Service Personnel Only: Contact your next level of support.

850 09HG

Description: Management Services disk error. Unable to save focal point information to disk.

Possible Cause: Refer to Problem Determination data for specific reason for failure.

B1B2 =

- 2000 = drive not ready
- 1000 = disk changed
- 0800 = disk write protected
- 0400 = media error
- 0440 = directory error
- 0420 = FAT error
- 0404 = subdirectory error
- 0200 = adapter error
- 0100 = directory full
- 0080 = disk full
- 0002 = drive incompatibility error

User Action: Correct disk problem so that information can be saved the next time focal point changes occur.

For Service Personnel Only: Contact your next level of support.

850 10HG

Description: Management Services focal point request rejected.

Possible Cause: Configuration error in focal point or 3174. Problem determination data gives the reject reason code:

- B1 =
- 01 = function not supported
 - 02 = node is not a focal point for this category
 - 03 = unable to support request at this time.

User Action: If configuration questions 614 and 615 are used, make sure they contain the correct focal point network ID and name, and that the focal point node is configured to accept alerts from the 3174. Also verify that connectivity exists to the desired focal point, and the focal point is active. After making any necessary corrections, re-IML the controller.

For Service Personnel Only: Contact your next level of support.

851 01HG B1 to B15

Description: The received XID was in a format that was not valid or that contained unacceptable values.

- B1–B4 = Sense code (see “SNA Sense Codes” on page 2-41).
- B5B6 = Internal link ID.
- B7–B14 = DLC independent descriptor.
- B15 = Link characteristics, where:
 - Bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
 - Bit 2 = The link carries T2.1 traffic.
 - Bit 3 = The link carries 2.0 traffic between the 3174 gateway and a LAN-attached PU 2.0.
 - Bit 4 = The link is customized.
 - Bit 5 = The link traverses a bridge.
 - Bit 6–8 = Reserved.

If this error is detected by a LAN host-attached 3174 on a host link, then:

Alert Sent = None.

If this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: The 3174 received an XID in which an error was found or an error vector was attached.

User Action:

1. See “SNA Sense Codes” on page 2-41.
2. Verify that your customization is correct.
3. Request service.

For Service Personnel Only: Contact your next level of support.

851 02HG B1 to B15

Description: The remote node violated XID exchange protocols.

- B1–B4 = Sense code (see “SNA Sense Codes” on page 2-41).
- B5B6 = Internal link ID.
- B7–B14 = DLC independent descriptor.
- B15 = Link characteristics, where:
 - Bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.
 - Bit 2 = The link carries T2.1 traffic.
 - Bit 3 = The link carries 2.0 traffic between the 3174 gateway and a LAN-attached PU 2.0.
 - Bit 4 = The link is customized.
 - Bit 5 = The link traverses a bridge.
 - Bit 6–8 = Reserved.

If this error is detected by a LAN host-attached 3174 on a host link, then:

Alert Sent = None.

If this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Status Codes

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- The XID was received out of sequence
- The ABM support is not valid

User Action:

1. See "SNA Sense Codes" on page 2-41.
2. Verify that your customization is correct.
3. Request service.

For Service Personnel Only: Contact your next level of support.

851 03HG B1 to B15

Description: A set mode that was not valid was received.

B1–B4 = Sense code.

B5B6 = Internal link ID.

B7–B14 = DLC independent descriptor.

B15 = Link characteristics, where:

Bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.

Bit 2 = The link carries T2.1 traffic.

Bit 3 = The link carries 2.0 traffic between the 3174 gateway and a LAN-attached PU 2.0.

Bit 4 = The link is customized.

Bit 5 = The link traverses a bridge.

Bit 6–8 = Reserved.

SNA Sense Code = X'0809 0040'.

See "SNA Sense Codes" on page 2-41.

If this error is detected by a LAN host-attached 3174 on a host link, then:

Alert Sent = None.

If this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: A mode setting command was received prior to the completion of XID negotiations.

User Action:

1. See "SNA Sense Codes" on page 2-41.
2. Verify that your customization is correct.
3. Request service.

For Service Personnel Only: Contact your next level of support.

851 04HG B1 to B15

Description: A remote node detected an error in XID negotiations.

B1–B4 = Sense code.

B5B6 = Internal link ID.

B7–B14 = DLC independent descriptor, where:

B7–B12 = Link address.

B13 = SAP (always X'00' for SDLC).

B14 = Reserved.

B15 = Link characteristics, where:

Bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.

Bit 2 = The link carries T2.1 traffic.

Bit 3 = The link carries 2.0 traffic between the 3174 gateway and a LAN-attached PU 2.0.

Bit 4 = The link is customized.

Bit 5 = The link traverses a bridge.

Bit 6–8 = Reserved.

SNA Sense Code = X'0809 0049'.

See "SNA Sense Codes" on page 2-41.

If this error is detected by a LAN host-attached 3174 on a host link, then:

Alert Sent = None.

If this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. See "SNA Sense Codes" on page 2-41.
2. Check the error at the remote node.
3. Request service.

For Service Personnel Only: Contact your next level of support.

851 05HG B1 to B15

Description: There is not enough storage to establish a link.

B1–B4 = Sense code.

B5B6 = Internal link ID.

B7–B14 = DLC independent descriptor, where:

B7–B12 = Link address.

B13 = SAP (always X'00' for SDLC).

B14 = Reserved.

B15 = Link characteristics, where:

Bit 1 = The link carries 2.0 traffic to this LAN-attached 3174.

Bit 2 = The link carries T2.1 traffic.

Bit 3 = The link carries 2.0 traffic between the 3174 gateway and a LAN-attached PU 2.0.

Bit 4 = The link is customized.

Bit 5 = The link traverses a bridge.

Bit 6–8 = Reserved.

SNA Sense Code = X'0812 001A'.

See "SNA Sense Codes" on page 2-41.

If this error is detected by a LAN host-attached 3174 on a host link, then:

Alert Sent = None.

If this error is detected on the alert focal point link, then:

Alert Sent = Delayed.

Otherwise:

Alert Sent = Permanent.

Possible Cause:

- No dynamic LSBs are available
- The Address Space Manager (ASM) could not get a resource

User Action:

1. Compare the number of active links and active sessions with the maximum allowed. If the number of active links or sessions is less than the number allowed, verify that APPN customization is correct.

Note: This condition can occur when the number of active links and sessions have reached the number allowed by this node. Recustomize APPN if you want to allow more links through this node.

2. Request service.

For Service Personnel Only: Contact your next level of support.

851 06HG B1 to B10

Description: Path control protocol error: The received Path Information Unit (PIU) was discarded.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Remote CP name.

B9B10 = Internal link ID.

Status Codes

Alert Sent = Permanent.

Possible Cause:

- The PIU that was received contained an FID type that was not valid, or an incomplete TH, RH, or RU.
- Programming error at the sending node.

User Action: Check the CP name and link ID in the log record and request service for the remote node.

For Service Personnel Only: No action is required.

852 01HG B1 to B4

Description: Token-Ring segment number mismatch: An existing RPS on the LAN has a segment number for the LAN that does not match the LAN value customized on the 3174.

B1B2 = Existing RPS Token-Ring segment number.

B3B4 = 3174 Token-Ring segment number.

Alert Sent = Permanent.

Possible Cause: N/A

User Action: Recustomize the 3174 using the Token-Ring segment number given in B1B2 of the extended data.

For Service Personnel Only: No action is required.

852 02HG B1 to B6

Description: The 3174-Peer bridge is congested.

B1B2 = The number of minutes the bridge is congested.

B3B4 = The number of hours and minutes elapsed between detection of the error and the logging of this status code.

B5B6 = The alert threshold (in minutes).

If the LAN manager interface is not supported and the number of minutes the bridge is congested reaches the alert threshold:

Alert Sent = Performance.

If the alert threshold has not been reached:

Alert Sent = None.

Possible Cause: The number of frames discarded within 1 minute exceeds the bridge discard threshold. Either the logging interval has expired or the alert threshold has been reached.

User Action: No action is required unless the operation is impaired. If the problem persists, report the data in the error log to your IBM customer engineer.

For Service Personnel Only: No action is required.

852 03HG B1 to B7

Description: The 3174-Peer bridge frame forwarding parameter was set to No.

B1-B6 = LAN manager individual MAC address (0 if B7 = X'04').

B7 = Resource ID.

If frame forwarding was set to No by Online Test 9, Option 10 and the LAN manager is not customized:

Alert Sent = Permanent.

Otherwise:

Alert Sent = None.

Possible Cause:

- The frame forwarding function was set to No using Online Test 9, option 10.
- The LAN manager issued a Set Bridge Parameter major vector that set the bridge frame forwarding function to No.

User Action: No action is required, unless you want to set the frame forwarding function to Yes. You can do this with an Online Test 9, option 10. Refer to *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

852 04HG B1 to B6

Description: The LAN manager interface failed to get a transmit buffer. The LAN has a segment number for the LAN that does not match the LAN value customized on the 3174.

B1–B6 = LAN manager individual MAC address.

Alert Sent = None.

Possible Cause: The reporting link on which the LAN manager interface was attempting to transmit is congested because the LAN manager is unable to receive buffers or because beaconing has occurred on the LAN experiencing high traffic. The frame for the LAN manager was discarded.

User Action: No action is required unless this condition reoccurs. In that case, check the LAN manager configuration.

For Service Personnel Only: No action is required.

852 05HG B1 to B6

Description: The 3174-bridge station has been removed for the 3174-Peer.

B1–B6 = Controlling LAN manager individual MAC address.

Alert Sent = None.

Possible Cause: The controlling LAN manager has issued a "Remove Ring Station" major vector to the CRS requesting that the 3174-bridge station be removed from the 3174-Peer.

User Action: No action is required unless you want to reopen the LAN Adapter. You can open the adapter using one of the following methods:

- Re-IML.
- If this 3174 is a gateway, contact the host operator to activate any logical link or PU attached through the gateway. Activating the PU of the gateway 3174 itself will not cause a LAN Adapter reset.
- Online Test: You can perform Online Test 9, Option 13.

For Service Personnel Only: No action is required.

852 06HG B1 to B9

Description: There is a reporting link password mismatch from the 3174-Peer.

B1–B6 = LAN manager individual MAC address.

B7B8 = Ring ID.

B9 = The slot number to which the LAN manager was trying to connect.

Alert Sent = None.

Possible Cause: A LAN manager sent a "Set Reporting Point" major vector to the LRM requesting a reporting link to the 3174-bridge. The password contained in the major vector did not match the 3174's value for the selected link.

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

853 01HG B1 to B11

Description: A Bind request received from an adjacent node has been rejected due to an error in protocol, described by the sense code (B1–B4 in the extended data). The link to the adjacent node is deactivated if possible, as the error is not recoverable in this node.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Adjacent CP name.

B9B10 = LFSID of failing session.

B11 = Flag byte, where:

Bit 1 = ODAI bit.

Bit 8 = Link continuing: The link could not be terminated by the microcode.

Alert Sent = Permanent.

Possible Cause: Logic error in the adjacent node

User Action:

1. Wait to see if the link is reestablished automatically.
2. If the link is not reestablished automatically, reconnect it manually.
3. If the flag in B11 in the extended data indicates that the link is continuing, the link must be disconnected manually in order to be reset.
4. If the problem reoccurs, request service for the adjacent node.

Status Codes

For Service Personnel Only: Inspect the error log for multiple occurrences of this status code and note the adjacent CP name reported.

1. If all occurrences specify the same adjacent CP name, refer the customer to the service representative for the failing node.
2. If more than one CP name is found, contact your support structure for aid. Report the status code and sense data found in the log entries.

853 02HG B1 to B12

Description: A session-control or adaptive pacing RU received from an adjacent node has been rejected due to an error in protocol described by the sense code (B1–B4 in the extended data). The link to the adjacent node will be deactivated, as the error is not recoverable in this node.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).
B5–B8 = Adjacent CP name.
B9B10 = LFSID of failing session.
B11 = Flag byte, where:
 Bit 1 = ODAI bit.
 Bit 8 = Link continuing: The link could not be terminated by the microcode.
B12 = RU request code, or IPM RU type:
 31 = Bind RU.
 32 = UnBind RU.
 00 = Solicited Bind pacing IPM.
 00 = Unsolicited Bind pacing IPM.
 80 = Bind pacing IPM acknowledgment.

Alert Sent = Permanent.

Possible Cause: Logic error in the adjacent node

User Action:

1. Wait to see if the link is reestablished automatically.
2. If the link is not reestablished automatically, reconnect it manually.
3. If the flag in B11 in the extended data indicates that the link is continuing, the link must be disconnected manually in order to be reset.
4. If the problem reoccurs, request service for the adjacent node.

For Service Personnel Only: Inspect the error log for multiple occurrences of this status code and note the adjacent CP name reported.

1. If all occurrences specify the same adjacent CP name, refer the customer to the service representative for the failing node.
2. If more than one CP name is found, use your support structure for aid and report the status code and sense data found in the log entries.

853 03HG B1 to B8

Description: A Bind request received from an adjacent node has been rejected.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).
B5–B8 = Adjacent CP name.

Alert Sent = None.

Possible Cause:

- Errors in the Bind request
- Link failure
- Insufficient 3174 buffer space
- 3174 microcode failure

User Action: Analyze the sense-code (B1–B4 in the extended data) for the cause of the failure.

1. If the sense code begins with X'0812', the Bind request was rejected due to insufficient 3174 buffer space.
 - Refer to customization question 610 in the *3174 Planning Guide*.
 - Online Test 17, 1 may be run during a peak usage period to determine the numbers of sessions or the amount of buffer usage. If limits have not been exceeded and the problem persists, request service.
2. Other sense codes indicate an error in the received Bind request. If the problem persists, contact the service representative for the adjacent node.

For Service Personnel Only: Contact your next level of support and report the sense code and any available product data for the adjacent node.

853 04HG

Description: The number of buffers for the APPN function available for use has declined to the critical level.

Alert Sent = Performance.

Possible Cause: N/A

User Action: If excessive 853-04 errors cause system degradation, request service.

For Service Personnel Only: Contact your next level of support.

854 01HG B1 to B10

Description: Error during CP-CP session establishment: The CP-CP session is not activated or is deactivated.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Adjacent CP name.

B9B10 = CGID.

Alert Sent = Permanent.

Possible Cause:

- Expected data on CP capabilities exchange is not received.
- An adjacent node is attempting to activate a session that this node believes is already activated.

User Action:

1. Deactivate and reactivate the link between the two nodes.
2. Re-IML one or both nodes and reactivate the link.
3. Request service.

For Service Personnel Only: Contact your next level of support.

854 02HG B1 to B10

Description: Route Selection Control Vector (RSCV) exceeded maximum length: Too many hops across the network are required in order to connect two session end points.

B1–B4 = Sense code.

B5–B8 = Target CP name.

B9B10 = RSCV length.

SNA Sense Code = X'8014 0005'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: The RSCV that carries the route from primary to secondary LU can only contain 255 bytes of data. Too many nodes along the route cause this limit to be exceeded.

User Action:

1. Ensure at least one short route exists between the desired end points. (The data carried in the RSCV varies depending on the length of the intermediate CP names and the type of connections. More hops fit if the names are short.)
2. Ensure that all links and CP-CP sessions from this node are activated.
3. Ensure that all required links and CP-CP sessions in the network are activated.
4. Request service.

For Service Personnel Only: Contact your next level of support.

854 03HG B1 to B8

Description: Protocol error on Bind or LOCATE procedure.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Adjacent CP name.

Alert Sent = Permanent.

Possible Cause: Error in sending node

User Action: Contact the service personnel for the sending node reporting the sense code.

For Service Personnel Only: No action is required.

Status Codes

854 04HG B1 to B12

Description: Data error during CP-CP session establishment.

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5-B8 = Adjacent CP name.

B9B10 = CGID.

B11B12 = CPCAPS length or GDS key that is not valid.

Alert Sent = Permanent.

Possible Cause: Error in sending node

User Action: Contact the service personnel for the sending node reporting the sense code.

For Service Personnel Only: No action is required.

854 05HG B1 to B10

Description: The Transaction Program that deactivates the CP-CP session cannot be started. The controller is still operational.

B1-B8 = TP Name.

B9B10 = Reserved.

Alert Sent = Permanent.

Possible Cause: 3174 internal code error

User Action: Request service for the sending node.

For Service Personnel Only: No action is required.

854 06HG B1 to B8

Description: The session type or the initiate type with the origin LU is not supported. This does not interrupt processing.

B1-B4 = Sense code.

B5-B8 = Origin CP name.

SNA Sense Code = X'1010 5006'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: Error in sending node

User Action: Request service for the sending node.

For Service Personnel Only: No action is required.

854 07HG B1 to B8

Description: Directory Services (DS) has requested a CP-CP session deactivation for one of the following reasons:

- Unrecoverable error due to a format or protocol violation in the data received on the CP-CP session.
- Lack of resources needed to process LOCATE requests.

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5-B8 = Adjacent CP name.

Alert Sent = Permanent.

Possible Cause:

- Too many LOCATE requests are being handled at one time. The 3174's resources cannot handle any more requests until the current outstanding requests are satisfied.
- Error in sending node.

User Action: If the sense code indicates insufficient resources, ensure that the system size is large enough to handle the network requests. You may need to obtain more storage to support network activity.

If the sense code indicates an unrecoverable error or other protocol error, contact the service personnel for the sending node.

For Service Personnel Only: No action is required.

854 08HG B1 to B8

Description: Topology Routing Services (TRS) has requested a CP-CP session deactivation due to an unrecoverable format or a protocol violation on the CP-CP session.

B1–B4 = Sense code (see “SNA Sense Codes” on page 2-41).

B5–B8 = Adjacent CP name.

Alert Sent = Permanent.

Possible Cause: Microcode error in sending node

User Action: Contact the service personnel for the sending node.

For Service Personnel Only: No action is required.

854 09HG B1 to B8

Description: Topology Routing Services (TRS) cannot calculate a route to the target node.

B1–B4 = Sense code (see “SNA Sense Codes” on page 2-41).

B5–B8 = Destination CP name or Class of Service name.

Alert Sent = None.

Possible Cause:

- Essential links in the network are down or intermediate nodes are congested.
- Customization error in the Class of Service definition.
- The target node is not connected to the network or it is congested.

User Action:

1. Ensure that all expected nodes are available.
2. Ensure that all expected links are active.
3. Ensure that the Class of Service definitions are consistent throughout the network.
4. Request service.

For Service Personnel Only: Contact your next level of support.

854 10HG B1 to B8

Description: Two Type 2.1 links were deactivated.

B1–B4 = Sense code. (see “SNA Sense Codes” on page 2-41).

B5–B8 = CP name.

Alert Sent = None.

Possible Cause: A link to another node with the same Control Point (CP) name is already active.

User Action: Perform the following actions:

- Recustomize one node for a different CP name.
- Reactivate the link to the node with the original CP name.
- Reactivate the link to the node with the new CP name.

For Service Personnel Only: No action is required.

854 11HG B1 to B8

Description: The CP-CP session retry limit was exceeded.

B1–B4 = Sense code. (see “SNA Sense Codes” on page 2-41).

B5–B8 = CP name.

Alert Sent = None.

Possible Cause: A session outage occurred at an adjacent node

User Action:

1. Deactivate the link to the adjacent node.
2. Allow the adjacent node to reestablish the link and CP-CP sessions.

For Service Personnel Only: No action is required.

Status Codes

854 12HG B1 to B10

Description: There was an unrecoverable error during CP-CP establishment.

Possible Cause: Microcode error in the node.

B1-B4 = Sense code. (see "SNA Sense Codes" on page 2-41).

B5-B8 = CP name.

B9B10 = Conversation Group Identifier (CGID).

Alert Sent = None.

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

854 14HG B1 to B4

Description: CPSVRMGR session limit exceeded (DLUR) flag.

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The 3174 has no more resources to support another DLUS-DLUR session.

User Action: Contact the system programmer. Decrease the number of sessions and try to establish the session again.

For Service Personnel Only: Contact your next level of support.

854 15HG B1 to B4

Description: Unknown Resources (DLUR)

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The 3174 has received a GDS X'1500' variable that contained an unidentified resource to the DLUR function.

User Action: Contact the system programmer.

For Service Personnel Only: Contact your next level of support.

854 16HG B1 to B4

Description: Duplicate Fully Qualified PCID (DLUR)

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The 3174 DLUR has detected that the FQPCID in a GDS X'1500' has been used by a different CPSVRMGR session.

User Action: Contact the system programmer.

For Service Personnel Only: No action is required.

854 17HG B1 to B4

Description: Missing control vector (DLUR).

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The DLUR has detected a missing required control vector in the GDS X'1500' variable.

User Action: Contact the system programmer.

For Service Personnel Only: Contact your next level of support.

854 18HG B1 to B4

Description: Invalid request (DLUR).

B1-B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The DLUR has detected that the specified PU has already received an ACTPU and is therefore under the control of another DLUS. This ACTPU has exceeded the share limit (=1).

User Action: Contact the system programmer.

For Service Personnel Only: Contact your next level of support.

854 19HG B1 to B4

Description: An error was encountered while receiving a DLUS capabilities (X'51') control vector.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The session could not be established because the DLUR detected an incompatibility between its capabilities and those of its DLUS.

User Action: Contact the system programmer.

For Service Personnel Only: Contact your next level of support.

854 20HG B1 to B4

Description: A protocol error was encountered or session allocation failed while processing a GDS X'1500' variable.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

Possible Cause: The 3174 DLUR has detected a protocol error or session allocation failure while processing the GDS X'1500'.

User Action: Contact the system programmer.

For Service Personnel Only: Contact your next level of support.

855 01HG B1 to B8

Description: Directory Services storage allocation failure during initialization.

B1–B4 = Sense code.

B5–B8 = Resource name.

SNA Sense Code = X'0812 0010'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Permanent.

Possible Cause: The number of customized resources exceeds the number of available directory entries.

User Action:

1. Ensure that the customized system size is large enough to contain the number of resources definitions required.
2. Recustomize, if necessary, to the next larger system size.
3. Request service.

For Service Personnel Only: Contact your next level of support.

855 02HG B1 to B8

Description: Directory Services storage allocation failure during CP-CP session activation or resources registration.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Resource name.

Alert Sent = Permanent.

Possible Cause: The number of directory resources required to support CP-CP sessions and resource registration with served end nodes is not sufficient.

User Action:

1. Ensure that the customized system size is large enough to contain the number of resources definitions required.
2. Recustomize, if necessary, to the next larger system size.
3. Request service.

For Service Personnel Only: Contact your next level of support.

855 03HG B1 to B8

Description: The following conditions exist:

1. Directory Services storage allocation failure during Locate Cache operations: Storage from the cache cannot be freed.
2. There are no available entries in the NETID table.
3. Pre-allocated DS storage space is not large enough to contain FIND or FOUND information.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Resource name.

Status Codes

Alert Sent = Permanent.

Possible Cause: The number of directory resources required to support caching of network resources is not sufficient.

User Action:

1. Ensure that the customized system size is large enough to contain the number of resources definitions required.
2. Recustomize, if necessary, to the next larger system size.
3. Request service.

For Service Personnel Only: Contact your next level of support.

855 04HG and 05HG B1 to B8

Description: The number of directory resources required to support caching of network resources is not sufficient.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Resource name.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Ensure that the customized system size is large enough to contain the number of resources definitions required.
2. Recustomize, if necessary, to the next larger system size.
3. Request service.

For Service Personnel Only: Contact your next level of support.

855 06HG and 07HG B1 to B8

Description: Format error on input received from a remote node, where:

QA = 06 = The error occurred during a LOCATE procedure.

QA = 07 = The error occurred during a CP-CP session activation or a registration procedure.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Resource name.

Alert Sent = Permanent.

Possible Cause: There is an error in the sending node.

User Action: Request service for the node identified in the log record.

For Service Personnel Only: Contact your next level of support. The sense code identifies the specific format error that was detected.

855 08HG B1 to B10

Description: Incorrect resource definition or resource type received during a LOCATE procedure.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Resource name.

B9B10 = Resource type.

Alert Sent = Permanent.

Possible Cause:

- There is an error in the sending node.
- The end node or network node has resource types defined that are unknown by this node.

User Action: Request service for the node identified in the log record.

For Service Personnel Only: Contact your next level of support. The sense code identifies the specific format error that was detected.

855 09HG B1 to B10

Description: Incorrect resource definition or type received during a registration procedure.

B1–B4 = Sense code (see "SNA Sense Codes" on page 2-41).

B5–B8 = Resource name.

B9B10 = Resource type.

Alert Sent = Permanent.

Possible Cause:

- The LU name is defined in more than one node within the network. More than one end node attempts to register the same LU with this network node.
- There is an error in the sending node.
- An end node or network node has resource types defined that are unknown by this node.

User Action:

1. Ensure that the system definition is correct for all of the nodes in the network. Network Addressable Unit (NAU) names (CP and LU names) should be uniquely defined in the network.
2. Request service for the node identified in the log record.

For Service Personnel Only: Contact your next level of support. The sense code identifies the specific format error that was detected.

855 10HG B1 to B8

Description: During a LOCATE broadcast, more than one positive reply is received for the target LU. Binds for sessions may be incorrectly routed.

B1–B4 = Sense code.

B5–B8 = Resource name.

SNA Sense Code = X'1010 0001'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = Permanent.

Possible Cause:

- The target LU name is defined in more than one node in the network.
- The wild card is configured in more than one Network Node in the network.

User Action:

1. Ensure that the system definition is correct for all of the nodes in the network. Network Addressable Unit (NAU) names (CP and LU names) should be uniquely defined in the network.
2. Request service for the node identified in the log record.

For Service Personnel Only: Contact your next level of support. The sense code identifies the specific format error that was detected.

855 11HG B1 to B8

Description: An LU requested by a LEN end node on a Bind sent to this network node cannot be located in the network.

B1–B4 = Sense code.

B5–B8 = Resource name.

SNA Sense Code = X'0840 0007'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause:

- The target LU is not defined in the network.
- The node containing the LU is not currently connected to the network.
- This network node does not have all required links and CP-CP sessions.

User Action:

1. Ensure that the LU is defined at a node in the APPN network.
2. Use Online Test 17, option 2 in *3174 Customer Problem Determination Guide* to verify that all links and CP-CP sessions expected in this node are active.
3. Activate the required links.
4. Ensure that the customization is correct to allow activation of CP-CP sessions.
5. Ensure that all expected links and CP-CP sessions in the network are active.
6. Request service.

For Service Personnel Only: Contact your next level of support. The sense code identifies the specific format error that was detected.

Status Codes

855 13HG B1 to B8

Description: A destination network node cannot contact the end node specified by the locate Control Vector OE or a directed search cannot be accomplished due to one of the following conditions:

- A route cannot be calculated to the target network node.
- The link from this node to the next node on the search is not active or the CP-CP session from this node to the next node is not enabled.
- A destination network node cannot contact the end node specified by the locate Control Vector OE.

B1–B4 = Sense code.

B5–B8, if present = Adjacent CP name.

SNA Sense Code = X'0890 0010'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Use Online Test 17, option 2 in *3174 Customer Problem Determination Guide* to verify that all links and CP-CP sessions expected in this node are active.
2. Activate the required links.
3. Ensure that the customization is correct to allow activation of CP-CP sessions.
4. Ensure that all expected links and CP-CP sessions in the network are active.
5. Request service.

For Service Personnel Only: Contact your next level of support. The sense code identifies the specific format error that was detected.

856 01HG

Description: The resource in the topology database has reached a maximum Resource Sequence Number (RSN).

Alert Sent = Permanent.

Possible Cause: Excessive change activity on a node or TG is transmitted in the APPN network.

User Action: Rename the resource and redefine it to the owning node.

For Service Personnel Only: No action is required.

856 02HG B1 to B6

Description: The Topology Routing Service (TRS) node database is full.

B1–B4 = CP name that could not be created.

B5B6 = Maximum number of entries the database can support.

Alert Sent = Permanent.

Possible Cause: The node's database is too small to accommodate all of the network nodes in the APPN network.

User Action:

1. Ensure that there is enough storage and the network size is correctly defined. 293 is the maximum number of network nodes in the 3174 APPN network.
2. Request service.

For Service Personnel Only: Contact your next level of support.

856 03HG B1 to B8

Description: Unknown mode name.

B1–B4 = Sense code.

B5–B8 = Failing mode name.

SNA Sense Code = X'0821 0002'.

See "SNA Sense Codes" on page 2-41.

Alert Sent = None.

Possible Cause: Customization error. Mode names generated by origin nodes must be known by all serving network nodes in the network.

User Action:

1. Customize the mode name.
2. Request service.

For Service Personnel Only: Contact your next level of support.

857 01HG B1 to B4

Description: An active ISR session has been cancelled due to a critical shortage of link buffers.

B1–B4 = Sense code (see “SNA Sense Codes” on page 2-41).

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. Refer to the *3174 Planning Guide*. A higher level of APPN session support may be needed. Refer to customization question 610.
2. Online Test 17, option 1 may be run during a peak usage period to determine the numbers of sessions or the amount of buffer usage. If limits have not been exceeded and the problem persists, request service.

For Service Personnel Only: Contact your next level of support. Report the status code, sense code, results of Online Test 17, option 1, and the session support level (question 610).

857 02HG B1 to B12

Description: An active ISR session has been cancelled because it received a data frame that was not valid.

B1–B4 = Sense code (see “SNA Sense Codes” on page 2-41).

B5–B12 = CP name of adjacent node that sent the RU that was not valid.

Alert Sent = Permanent.

Possible Cause: N/A

User Action:

1. Analyze the sense code to determine the cause of the failure. Note the CP name of the adjacent node from which the incorrect data was received.
2. Request service for the adjacent node.
3. If the same status code is reported for multiple adjacent nodes, request service for the 3174.

For Service Personnel Only: Contact your next level of support. Report the status code and sense code logged. Also, report any product data available for the adjacent node named in the extended data (and on the alert).

857 03HG B1 to B8

Description: A Bind request or Bind response from an adjacent node has been rejected.

B1–B4 = Sense code.

B5–B8 = Adjacent CP name.

SNA Sense Code = X'0812 000D'.

See “SNA Sense Codes” on page 2-41.

Alert Sent = None.

Possible Cause: N/A

User Action:

1. Analyze the sense code to see if you can correct the problem at the remote node. If the sense code begins with '0812', the Bind request was rejected due to a depletion of resources in the 3174. Refer to the *3174 Planning Guide*. A higher level of APPN session support may be needed. Refer to customization question 610.
2. Online Test 17, option 1 may be run during a peak usage period to determine the numbers of sessions or the amount of buffer usage. If limits have not been exceeded and the problem persists, request service.
3. Re-try the session. If the problem persists, request service for the adjacent node that is specified in the extended data.
4. If the problem occurs with multiple adjacent nodes, request service for the 3174.

For Service Personnel Only: Contact your next level of support. Report the sense code and any product information available for the adjacent node specified in the extended data.

Status Codes

880 01HG B1B2 B3B4 B5B6 B7B8

Description: A failure occurred during an attempt to open the LAN Adapter. Testing of the local Token-Ring lobe was unsuccessful.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = The Token-Ring ID number.

B7B8 = Open error code.

See status code 580 01HG for a definition of the Open Error code.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause:

- Token-Ring multistation access unit
- LAN Adapter
- Lobe cables

User Action:

1. Contact the host operator to reactivate the link.
2. Go to CPD 0400 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

880 02HG B1B2 B3B4

Description: A failure occurred during an attempt to open the LAN Adapter. The adapter failed to open because of ring protocol errors.

B1B2 = The Token-Ring ID number.

B3B4 = Open error code.

See status code 580 01HG for a definition of the Open Error code.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause: Lobe

User Action: Perform the actions shown in status code 580 01HG.

For Service Personnel Only: No action is required.

880 03HG B1 to B16

Description: A failure occurred during an attempt to open the LAN Adapter. The adapter has detected a beaconing MAC frame from the LAN.

B1B2 = The Token-Ring ID number.

B3B4 = Beacon type.

B5-B10 = Address of beaconing adapter.

B11-B16 = Address of beaconing adapter's Nearest Active Upstream Neighbor (NAUN).

See status code 580 03 for a description of the beacon type.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause:

- Fault Domain
- The LAN Adapter tried to open with a different ring speed than the LAN's current actual speed.

User Action:

1. Verify that customization question 911 (Ring Speed of the Token-Ring gateway) matches the current ring speed.
2. Contact the host operator to try to reopen the adapter.
3. Consult the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

880 04HG B1B2 B3B4

Description: An open failure occurred. The LAN Adapter has received a Remove Station MAC frame.

B1B2 = The Token-Ring ID number.

B3B4 = Open error code.

See status code 580 01HG for a definition of the Open Error code.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause: A Remove command was issued by the Token-Ring network manager.

User Action: Perform the actions shown in status code 580 01HG.

For Service Personnel Only: No action is required.

880 05HG B1B2 B3B4 B5B6 B7B8

Description: Wire fault. An open or a short circuit has been detected in the lobe data path.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = The Token-Ring ID number.

B7B8 = Token-Ring status code.

See "Token-Ring Status Codes" on page 2-36.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause:

- LAN Adapter
- Token-Ring multistation access unit
- Lobe cables

User Action:

1. Contact the host operator to reactivate the link.
2. Go to CPD 0400 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

Status Codes

880 06HG B1B2 B3B4 B5B6 B7B8

Description: The LAN Adapter has been removed from the LAN as a result of the auto-removal process.

B1B2 = TYPE.

B3B4 = LOCA.

B5B6 = The Token-Ring ID number.

B7B8 = Token-Ring status code.

See "Token-Ring Status Codes" on page 2-36.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause:

- LAN Adapter
- Token-Ring multistation access unit
- Lobe cables

User Action:

1. Contact the host operator to reactivate the link.
2. Go to CPD 0400 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

880 07HG B1B2 B3B4

Description: A remove MAC frame was received from the LAN.

B1B2 = The Token-Ring ID number.

B3B4 = Token-Ring status code.

See "Token-Ring Status Codes" on page 2-36.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause: A Remove command was issued by the Token-Ring network manager.

User Action:

1. Contact the Token-Ring network manager for instructions.
2. Contact the host operator to reactivate the link.
3. Go to CPD 0400 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0610 in the maintenance manual.

For Models 51R through 64R and 90R:

Go to MAP 0600 in the maintenance manual.

880 08HG B1 to B16

Description: The Token-Ring Network is inoperative. A hardware error on the LAN was not recovered by the beacon process.

B1B2 = The Token-Ring ID number.

B3B4 = Beacon type.

B5–B10 = Address of beaconing adapter.

B11–B16 = Address of beaconing adapter's nearest active upstream neighbor.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause:

- Fault domain
- Two stations named in the fault domain
- All Token-Ring components between the two stations
- Device plugged into the ring-in or ring-out port of the Token-Ring multistation access unit.

User Action: For further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

880 58HG B1 to B16

Description: A temporary beaconing condition occurred on the LAN.

B1B2 = The Token-Ring ID number.

B3B4 = Beacon type.

B5–B10 = Address of beaconing adapter.

B11–B16 = Address of beaconing adapter's Nearest Active Upstream Neighbor (NAUN).

See status code 580 03HG for a description of the beacon type.

Alert Sent = Temporary for Gateways.

Alert Sent = None for all other controllers.

Possible Cause: Fault domain

User Action: For further problem determination, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

881 01HG B1B2 B3B4

Description: Open failure. The LAN Adapter detected a duplicate adapter address on the LAN.

B1B2 = The Token-Ring ID number.

B3B4 = Open error code.

See status code 580 01 for a description of the open error code.

Note: The extended data does not appear at the operator panel. The data is included in the event log. Use online test 1 to see the extended data. Refer to "Test 1: Display Logs Menu," in the *3174 Customer Problem Determination Guide*.

Alert Sent = Permanent for Gateways.

Alert Sent = None for all other controllers.

Possible Cause: N/A

User Action: A unique address has to be assigned to each adapter on the LAN.

- If the address for the 3174 must be changed, the controller has to be reconfigured.
- If this is the gateway controller, refer to question 900 in the *3174 Planning Guide*; if this is not the gateway controller, refer to question 106.

For Service Personnel Only: No action is required.

883 01HG B1 to B9

Description: Connect failure. An unacceptable Exchange ID (XID) frame was received from a station on the LAN.

Note: The XID command is used to convey the identification and characteristics of the sending node and to cause the remote link station to send the XID response. The microcode return code indicates incorrect parameters in the XID.

Status Codes

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.

Alert Sent = Temporary for Gateways.
Alert Sent = None for all other controllers.

Possible Cause: The remote device is not correctly configured or identified to the host system.

User Action: Contact the system programmer to verify which parameters were used at installation time for the downstream physical unit (PU). The I-frame size or window size is incorrect.

For Service Personnel Only: No action is required.

883 02HG B1 to B15

Description: A Frame Reject (FRMR) was sent. An unacceptable frame was received.

Note: The FRMR response is used by the link station to report that an abnormality has been detected in an incoming Logical Link Control Protocol Data Unit (LPDU).

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.
B10 = Type of logical link control error.
B11-B15 = Frame reject response.

Alert Sent = Permanent for Gateways.

Possible Cause:

- Logical fault in the link station
- Microcode

User Action:

1. Contact the host operator to reactivate the link.
2. Contact the system programmer.

For Service Personnel Only: No action is required.

883 03HG B1 to B9

Description: A Disconnect Mode (DM) or Disconnect (DISC) command was received.

Notes:

1. The DM command is used to report that the link station is in asynchronous disconnected mode and is logically disconnected from the link.
2. The DISC command is used to terminate an asynchronous balanced mode of operation previously set by a Set Asynchronous Balanced Mode Extended (SABME) command.

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.

Alert Sent = Permanent for Gateways.

Possible Cause: N/A

User Action:

1. Contact the host operator to reactivate the link.
2. Contact the system programmer.

For Service Personnel Only: No action is required.

883 04HG B1 to B15

Description: A Frame Reject frame was received.

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.
B10 = Type of logical link control error.
B11-B15 = Frame reject response.

Alert Sent = Permanent for Gateways.

Possible Cause: N/A

User Action:

1. Contact the host operator to reactivate the link.
2. Request service.

For Service Personnel Only: Contact your next level of support.

883 05HG B1 to B9

Description: A link station that is already in the link open state sent a Set Asynchronous Balanced Mode Extended (SABME) command.

Note: A link station uses the SABME command to initiate data transfer in the extended asynchronous balanced mode of operation with a remote link station.

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.

Alert Sent = Permanent for Gateways.

Possible Cause: N/A

User Action:

1. Contact the host operator to reactivate the link.
2. Request service.

For Service Personnel Only: Contact your next level of support.

883 06HG B1 to B9

Description: A supervisory reject was received. The send count does not match the receive count.

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.

Alert Sent = Permanent for Gateways.

Possible Cause: N/A

User Action:

1. Contact the host operator to reactivate the link.
2. Request service.

For Service Personnel Only: Contact your next level of support.

883 07HG B1 to B9

Description: A link timeout occurred (Token-Ring timeout on T1 response timer).

B1B2 = Ring ID.
B3-B8 = Source address.
B9 = Service access point address.

Alert Sent = Permanent for Gateways.

Possible Cause:

- The remote device is no longer attached to the LAN
- Transmission congestion on the LAN
- The data path of the LAN is no longer operational

User Action:

- Contact the host operator to reactivate the link.
- Request service.

For Service Personnel Only: Contact your next level of support.

Status Codes

883 08HG B1 to B9

Description: A link timeout occurred (Token-Ring timeout on T1 response timer).

B1B2 = Ring ID.

B3-B8 = Source address.

B9 = Service access point address.

Alert Sent = Temporary for Gateways.

Possible Cause:

- The remote device is no longer attached to the LAN
- Transmission congestion on the LAN
- The data path of the LAN is no longer operational

User Action:

1. Contact the host operator to reactivate the link.
2. Request service.

For Service Personnel Only: Contact your next level of support.

883 60HG B1 to B15

Description: Temporary logical link control error (controller-recoverable).

B1B2 = Ring ID.

B3-B8 = Link address.

B9 = Service access point address.

B10 = Logical link control error byte where:

4C = Link lost T1 timer expired.

4D = DM or DISC received, or DISC acknowledged.

4E = FRMR received.

4F = FRMR sent.

50 = T1 time expired.

B11-B15 = Frame reject response.

Controller-recoverable.

Alert Sent = None.

Possible Cause:

- Remote device
- Path to the device

User Action: No action is required. The controller has recovered.

For Service Personnel Only: No action is required.

884 01HG B1 to B10

Description: An I-frame counter overflow occurred.

B1B2 = Ring ID.

B3-B8 = Link address.

B9 = Service access point address.

B10 = Logical link control error byte where:

04 = Valid I-frame transmit counter.

05 = I-frame receive error counter.

09 = I-frame transmit error counter.

0A = Valid I-frame receive counter.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless performance is degraded due to an excessive number of 884 errors (B10 = 05 or 09).

If performance is degraded, request service.

For Service Personnel Only: Contact your next level of support.

884 02HG B1B2 B3B4

Description: The receive congestion counter in the LAN Adapter has exceeded its threshold. A frame was addressed to the LAN Adapter, but there is insufficient buffer space available to receive the frame.

B1B2 = Ring ID.

B3B4 = Token-Ring status code.

See "Token-Ring Status Codes" on page 2-36.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless performance is degraded because of an excessive number of 884 errors.

If performance is degraded, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

884 03HG B1B2 B3B4

Description: An error counter overflow occurred for the LAN Adapter other than the receive congestion counter.

B1B2 = Ring ID.

B3B4 = Token-Ring status code.

See "Token-Ring Status Codes" on page 2-36.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless performance is degraded because of an excessive number of 884 errors.

If performance is degraded, refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only: No action is required.

890 01HG B1 to B14

Description: Excessive Token-Ring errors: Too many transmission errors were detected in the fault domain.

B1B2 = Ring ID.

B3-B8 = Adapter 2.

B9-B14 = Adapter 1.

Note: Adapter 2 is the receiving adapter address and Adapter 1 is the transmitting adapter address.

If this error was detected by a Token-Ring host-attached 3174 or if soft errors are not reportable (Question 905 = 0 or 2), then:

Alert Sent = None.

Otherwise:

Alert Sent = Permanent.

Possible Cause: Fault domain, including the two stations named in the fault domain and all intervening Token-Ring components or equipment.

User Action: If this condition reoccurs, consult the *IBM Token-Ring Problem Determination Guide*.

For Service Personnel Only: No action is required.

890 02HG B1 to B14

Description: The reported station has reached half the weight limit threshold.

B1B2 = Ring ID.

B3-B8 = Station 2.

B9-B14 = Station 1.

Note: Station 2 is the receiving station address and station 1 is the transmitting station address.

Alert Sent = None.

Possible Cause: N/A

User Action: If the problem persists, consult the *IBM Token-Ring Problem Determination Guide*.

For Service Personnel Only: No action is required.

Status Codes

890 03HG B1 to B14

Description: The error rate has decreased so that the weight of the station has dropped below the threshold.

B1B2 = Ring ID.
B3-B8 = Station 2.
B9-B14 = Station 1.

Note: Station 2 is the receiving station address and station 1 is the transmitting station address.

Alert Sent = None.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

890 04HG B1 to B10

Description: The total number of non-isolating errors exceeds the threshold value for that particular type.

B1B2 = Ring ID.
B3-B6 = REM Lost Frame Counter.
B7-B10 = REM Receive Congestion.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required unless operation is impaired. If the problem persists, request service.

For Service Personnel Only: Contact your next level of support.

890 05HG B1 to B11

Description: A Ring Error Monitor (REM) error condition exists:

B1B2 = Ring ID.
B3B4 = REM error response:
 0402 = The REM is stopped and a MAC major vector or counter tick command was received (microcode error).
 1301 = An incorrect MAC frame vector or vector length.
 1302 = An incorrect MAC vector ID.
 1390 = An unknown major vector ID.
 2000 = The REM table failed a cursory check and contains an incorrect major vector ID or length, or a bad pointer to the table was passed (microcode error).
B5-B10 = Source Address.
B11 = SAP Address.

Note: The source address and SAP address are included only with REM error codes 1301, 1302, and 1390. For REM codes 0402 and 2000, the addresses contain zeros.

Alert Sent = None.

Possible Cause:

- MAC frame format error
- LAN Adapter microcode error

User Action: No action is required unless the operation is impaired. If the problem persists, request service.

For Service Personnel Only: Contact your next level of support.

890 06HG B1 to B12

Description: Receive Congestion Counter Threshold exceeded.

B1B2 = Ring ID.
B3-B6 = REM Receive Congestion Counter, where:
 B3 = Counter.
 B4 = Counter threshold.
 B5B6 = Counter ID.
B7-B12 = Address of LAN Adapter that is experiencing a problem.

If this error was detected by a Token-Ring host-attached 3174 or if soft errors are not reportable (Question 905 = 0 or 2), then:

Alert Sent = None.

Otherwise:

Alert Sent = Performance.

Possible Cause: The total number of "receive congestion" errors exceeds the threshold value for an isolated ring station.

User Action: No action is required unless the operation is impaired. If the problem persists, request service.

For Service Personnel Only: Contact your next level of support.

890 07HG B1 to B14

Description: The Receive congestion rate notification for the LAN station has dropped below the congestion threshold.

B1B2 = Ring ID.

B3–B8 = Address of the LAN Adapter 1 that is experiencing the problem.

B9–B14 = Address of the LAN Adapter 2 that is experiencing the problem.

Alert Sent = None.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

1001

Description: 3174 IML progress message. If this status code remains displayed longer than 30 seconds, a failure has occurred.

Possible Cause:

- Microcode failure
- Processor failure
- Electromagnetic interference (EMI) (table-top models only).

User Action:

For diskette drives (HG = 01 or 02):

1. Exchange the Control or Utility diskette and retry the operation.
2. Request service.

For fixed disk drives (HG = 03 or 04):

1. Recopy the Control or Utility diskettes onto the fixed disk as required. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Retry the operation.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

1002

Description: 3174 IML microcode failure.

Possible Cause: N/A

User Action:

For diskette drives (HG = 01 or 02):

1. Exchange the Control or Utility diskette and retry the operation.
2. Request service.

Status Codes

For fixed disk drives (HG = 03 or 04):

1. Recopy the Control or Utility diskette onto the fixed disk as required. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Retry the operation.
3. Request service.

For Service Personnel Only: Contact your next level of support.

1003 or 1004 01HG

Description: 3174 IML hardware failure.

Possible Cause:

- Disk media
- Diskette drive
- 2.4-MB diskette in a 1.2-MB drive (for status code 1004 01HG only)
- Fixed disk media
- Fixed disk drive
- File adapter
- Electromagnetic interference (EMI) (table-top models only).

User Action:

For diskette drives (HG = 01 or 02):

1. Exchange the Control or Utility diskette; retry the operation.
2. Request service.

For fixed disk drives (HG = 03 or 04):

1. Record the entire status code.
2. Run the "Fixed Disk Media Tests" on page 2-5.
3. Retry the operation.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive or fixed disk indicated by the HG number.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive or fixed disk indicated by the HG number.
2. Exchange the planar board.

1005 01HG to 05HG

Description: An ALT 1 IML was performed using a diskette that cannot be IMLed.

Possible Cause: The QA number 01 to 05 identifies the diskette that was being used where:

- 01 = Down stream Load (DSL) diskette.
- 02 = RPQ diskette.
- 03 = Patch diskette.
- 04 = Encrypt/Decrypt diskette.
- 05 = Central Site Library diskette.

Note: An ALT 1 IML is performed only with a Control, Utility, or Dump diskette.

User Action: Insert the correct Control, Utility, or Dump diskette, or correct the ALT 1 IML device selection parameter. See ALT 1 IML on page 2-1.

For Service Personnel Only: No action is required.

1008 01HG

Description: 3174 IML failure.

HG = the fixed disk where:

03 = Fixed disk 1.

04 = Fixed disk 2.

Possible Cause:

- Microcode
- Fixed disk media

User Action:

1. Record the entire status code.
2. Run the "Fixed Disk Media Tests" on page 2-5.
3. Re-IML.
4. Request service.

For Service Personnel Only: Exchange the fixed disk.

1009 01HG

Description: 3174 IML failure.

The microcode for the requested IML was not found on the fixed disk. The microcode is not present, is deselected, or the fixed disk is failing.

HG = the fixed disk where:

03 = Fixed disk 1.

04 = Fixed disk 2.

Possible Cause:

- The wrong fixed disk was selected.
- The required subdirectory is not on the fixed disk.
- The selected subdirectory may have been deselected during Media Management.

User Action:

1. Verify that the correct fixed disk was selected for the IML.
2. Refer to "Select IML Source" in the *3174 Utilities Guide* to determine if the requested subdirectory is on the fixed disk.
 - If the subdirectory is **not** on the fixed disk, refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.
 - If the subdirectory is on the fixed disk, determine if it was deselected during Media Management.

If it was deselected, refer to "How to Perform Media Management" in the *3174 Utilities Guide* to change from "Deselect" to "Select".

If it was not deselected, request service.

For Service Personnel Only: Contact your next level of support.

1010 01HG

Description: Diskette incompatible with diskette drive.

Possible Cause: N/A

User Action: Insert the correct density diskette into the drive indicated by the HG number and re-IML.

For Service Personnel Only: No action is required.

1011

Description: 3174 IML progress message. If the status code remains displayed longer than 30 seconds, a failure has occurred.

Possible Cause:

- Microcode
- Processor

User Action:

1. Re-IML.
2. Request service.

Status Codes

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Contact your next level of support.

1048

Description: 3174 IML hardware failure.

Possible Cause:

- Operator panel
- Processor
- FRU ID bus
- Logic board (Models 1L through 14R)

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Go to MAP 0800 in the maintenance manual.
2. Exchange FRU type 950x in location 18.
3. One at a time, exchange all adapter and storage cards.
4. Exchange the operator panel.
5. One at a time, exchange the diskette drives and if present the fixed disk drives.
6. Exchange the logic board.

For Models 21H through 92R:

1. Exchange the planar board.
 2. Exchange any adapter and storage cards.
 3. Exchange the operator panel.
 4. One at a time, exchange the diskette drives and then the fixed disk drive.
-

1050 or 1051

Description: 3174 IML hardware failure (if Check Cond indicator is on).

Possible Cause:

- Processor
- Storage Card (Models 1L through 14R only)
- Insufficient storage

User Action:

1. Re-IML.
2. Using the worksheets 10A through 10D in the *3174 Planning Guide*, confirm that the storage is adequate.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. One at a time, exchange FRU type 905x in locations 17, 19, and 20.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 of the maintenance manual for your model.

1052

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Logic board (Models 1L through 14R)

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. One at a time, exchange adapter and storage cards.
3. Exchange the logic board.

For Models 21H through 92R:

1. Exchange the planar board.
2. One at a time, exchange adapter and storage cards.

Refer to Chapter 3 of the maintenance manual for your model.

1053

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Storage card

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. One at a time, exchange all FRU type 905X or storage cards.

For Models 21H through 24R:

1. Exchange the planar board.
2. Exchange the storage card in location J22.
3. If present, exchange the storage card in location J23.

For Models 51R through 53R:

1. Exchange the planar board.
2. If present, exchange the storage card in location 05.

For Models 61R through 64R:

1. Exchange the planar board.
2. Exchange the storage card in location J22.
3. If present, exchange the storage card in location J23.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the planar board.
2. Exchange the storage card in location J22.

Status Codes

1054 or 1055

Description: 3174 IML hardware failure.

Possible Cause: Processor

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 of the maintenance manual for your model.

1056

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Storage

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. One at a time, exchange all FRU type 905X storage cards.
3. Refer to MAP 0500 in the maintenance manual.

For Models 21H through 24R:

1. Exchange the planar board.
2. Exchange the storage card in location J22.
3. If present, exchange the storage card in location J23.

For Models 51R through 53R:

1. Exchange the planar board.
2. If present, exchange the storage card in location 05.

For Models 61R through 64R:

1. Exchange the planar board.
2. Exchange the storage card in location J22.
3. If present, exchange the storage card in location J23.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the planar board.
2. Exchange the storage card in location J22.

Refer to Chapter 3 of the maintenance manual for your model.

1058

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Operator panel adapter
- Unexpected key was pressed during the IML
- Operator panel

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange the operator panel adapter in location 05.
3. Exchange the operator panel in location 06.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange the operator panel.

Refer to Chapter 3 of the maintenance manual for your model.

1060 or 1070

Description: 3174 IML progress message. If the Check Cond indicator comes on, a failure has occurred.

Possible Cause:

- Processor
- Microcode failure

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Refer to Chapter 3 of the maintenance manual for your model.

1072 or 1074 0100

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Microcode failure
- Storage

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange FRU type 905x in locations 17, 19, and 20.
3. Contact your next level of support.

Status Codes

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange storage cards in locations J22 and J23 if present.
3. Contact your next level of support.

Refer to Chapter 3 of the maintenance manual for your model.

1076 or 1077 0100

Description: 3174 IML progress message. If the Check Cond indicator comes on, a failure has occurred.

Possible Cause:

- Processor
- Microcode failure

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Refer to Chapter 3 of the maintenance manual for your model.

1078

Description: 3174 microcode failure.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Contact your next level of support.

1079 0100

Description: 3174 IML progress message. If the Check Cond indicator comes on, a failure has occurred.

Possible Cause:

- Processor
- Microcode failure

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Refer to Chapter 3 of the maintenance manual for your model.

2001 to 2087

Description: Successful test completion message, where:

20 = Test complete.
 01-52, 81, 82, and 87 = The hardware groups that were tested.

Note: The HG number in the 20HG completion message must equal the HG number that was entered in the test request. If it is not equal, a failure has occurred.

Possible Cause: N/A

User Action:

1. Press **Enter** to obtain the 4001 prompt message and select the next test.
2. To exit test mode:

For diskette drive: Insert the Control disk and press **IML**.

For fixed disk drive: Press **IML**.

For Service Personnel Only: If the HG number is not the same as the HG number entered in the test request, go to MAP 0110 in the maintenance manual for your model.

2101 to 2187

Description: Test-in-progress message, where:

21 = Test in progress.
 01-52 and 87 = The hardware group being tested.

Possible Cause: N/A

User Action: Wait for the test to complete.

If the same 21HG number remains displayed for 20 seconds, an error has occurred.

1. Re-IML and retry the test.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Refer to Chapter 3 of the maintenance manual for your model.

2201 to 2287

Description: Test-in-progress message where:

22 = Test in progress.
 01-52 and 87 = The hardware group being tested.

Possible Cause: N/A

User Action: Wait for the test to complete.

If the same 22HG number remains displayed for 20 seconds, an error has occurred.

1. Re-IML and retry the test.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

Status Codes

Refer to Chapter 3 of the maintenance manual for your model.

23XX

Description: Test-in-progress indicators.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

2587

Description: Hardware group test all 81 or 82, or an ALT 2 IML was completed successfully using the Control disk or the Control microcode on the fixed disk.

Note: Only processor and storage tests run using the Control microcode.

Possible Cause: N/A

User Action: If a full diagnostic run is required, insert a Utility diskette or use the Utility microcode on the fixed disk and retry the operation.

If you wish to make the controller operational, an IML is required.

For Service Personnel Only: No action is required.

2901 to 2952 TYPE LOCA TYPE LOCA

Description: Test failure message, where:

29 = Test has failed.

01-52 = The failing hardware group. See Hardware Group Numbers on page 2-18.

TYPE = FRU to be exchanged.

LOCA = The location of the failing FRU.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only: Exchange the FRU indicated by the TYPE and LOCA fields.

Note: If you were using a MAP, follow the procedure in the MAP.

2987 TYPE LOCA TYPE LOCA

Description: Test failure message, where:

29 = Test has failed.

87 = Processor/storage.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by the TYPE and LOCA fields.

Note: If the storage card being replaced is in location 20 and the failure continues after that card is replaced, exchange the storage card in location 19 and then the storage card in location 17.

2. Exchange FRU type 950x in location 18.

For Models 21H through 24R:

1. Exchange the FRU indicated by the TYPE and LOCA fields.
2. Exchange the planar board.
3. Exchange the storage card in location J22.
4. If present, exchange the storage card in location J23.

For Models 51R through 53R:

1. Exchange the FRU indicated by the TYPE and LOCA fields.
2. Exchange the planar board.
3. If present, exchange the storage card.

For Models 61R through 64R:

1. Exchange the FRU indicated by the TYPE and LOCA fields.
2. Exchange the planar board.
3. Exchange the storage card in location J22.
4. If present, exchange the storage card in location J23.

For Models 81R or 82R:

Exchange the planar board.

For Models 90R through 92R:

1. Exchange the FRU indicated by the TYPE and LOCA fields.
2. Exchange the planar board.
3. Exchange the storage card in location J22.

Refer to Chapter 3 in the maintenance manual for your model.

3001 01HG to 04HG TYPE LOCA TYPE LOCA

Description: 3174 hardware failure during offline tests. PIO adapter test failure.

Possible Cause:

- PIO Adapter
- Processor
- PIO Bus (3001 01HG and 04HG only)

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRUs in locations 21 through 24 one at a time.
2. Exchange FRU type 950x in location 18.
3. For status codes 3001 01HG and 04HG only, exchange the logic board.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3002 01HG to 03HG TYPE LOCA TYPE LOCA

Description: 3174 hardware failure during offline tests. Adapter logic failure.

Possible Cause:

- MMIO Adapter
- Processor
- Logic board (01HG and 02HG only)
- Hardware mismatch between operator panel adapter and model

User Action: Request service.

For Service Personnel Only:

For Models 1L through 24R:

Go to MAP 0600.

For Models 51R through 92R:

Exchange the FRU indicated by the TYPE and LOCA fields.

3003 01HG TYPE LOCA TYPE LOCA

Description: 3174 hardware failure during offline tests.

Possible Cause: N/A

User Action: Request service.

Status Codes

For Service Personnel Only:

1. Exchange the FRU indicated by the first TYPE and LOCA fields.
2. Exchange the FRU indicated by the second TYPE and LOCA fields.

3010 and 3011 0116

Description: 3174 hardware failure during offline tests.

Possible Cause:

- The channel adapter driver/receiver card or tailgate assembly is missing or defective
- Processor

User Action: Request service.

For Service Personnel Only:

For Models 1L and 11L:

1. Exchange the channel driver/receiver card in location 10.

Note: Before exchanging this card, refer "How to Remove the Channel Adapter or Channel Driver/Receiver Card" in the maintenance manual.

2. Exchange FRU type 950x in location 18.

For Models 21H and 21L:

1. Exchange the tailgate assembly.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3011 0216

Description: 3174 hardware failure during offline tests. This failure may not affect normal operations.

Note: The test completed successfully, but it is indicated that the channel driver/receiver card or tailgate assembly is not present in the controller.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L and 11L:

1. Exchange the channel driver/receiver card in location 10.

Note: Before exchanging this card, refer to "How to Remove the Channel Adapter or Channel Driver/Receiver Card" in the maintenance manual.

2. Exchange FRU type 950x in location 18.

For Models 21H and 21L:

1. Exchange the tailgate assembly.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3011 0316 TYPE LOCA XXYY

Description: Channel Driver/Receiver Wrap Test failure. XX and YY are 2-digit codes that identify the first two failing signal lines.

Refer to "Wrap Test Analysis" in Chapter 2 of the maintenance manual for definitions of these values.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L and 11L:

1. Check for bent or broken pins on wrap plugs, terminators, and connectors.
2. Exchange the channel driver/receiver card in location 10.

Note: Before exchanging this card, refer to "How to Remove the Channel Adapter or Channel Driver/Receiver Card" in the maintenance manual.

3. Exchange FRU Type 950x in location 18.

For Models 21H and 21L:

1. Check for bent or broken pins on wrap plugs, terminators, and connectors.
2. Exchange the tailgate assembly.
3. Exchange the planar board.

3012 0116 TYPE LOCA

Description: The Channel Adapter Test has detected that the channel adapter is stuck in the online state.

Possible Cause: N/A

User Action:

1. Perform an **ALT 1 IML**; (see page 2-1), to reset the 3174 and retry the Channel Adapter Test.
2. Request service.

For Service Personnel Only:

For Models 1L and 11L:

Exchange the channel driver/receiver card in location 10.

Note: Before exchanging this card, refer to "How to Remove the Channel Adapter or Channel Driver/Receiver Card" in the maintenance manual.

For Models 21H and 21L:

Exchange the planar board.

3020 01HG TYPE LOCA

Description: Offline test hardware failure.

Possible Cause:

- Diskette media
- Diskette drive

User Action:

1. Exchange the diskette.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

3020 02HG TYPE LOCA

Description: Offline test hardware failure.

Possible Cause: Fixed Disk drive

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Run the "Fixed Disk Media Tests" on page 2-5.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

3021 01HG TYPE LOCA

Description: Offline test failure.

Possible Cause:

- Fixed disk is unformatted
- Fixed disk is formatted incorrectly

User Action:

1. Run the "Fixed Disk Full Format" on page 2-9.
2. Re-IML.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

3023 01HG TYPE LOCA TYPE LOCA

Description: Offline test hardware failure.

Note: This failure occurs if an ALT 2 IML is performed and a blank diskette is installed in diskette drive 2. Ensure that a 3174 diskette is installed in diskette drive 2.

Possible Cause:

- Diskette
- Diskette drive
- Fixed disk drive
- File adapter

User Action:

1. Exchange the diskette in the diskette drive indicated by the hardware group number.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Go to MAP 0430 in the maintenance manual for your model.

3023 02HG TYPE LOCA TYPE LOCA

Description: Disk drive diagnostic failure.

Possible Cause:

- Diskette drive
- Fixed disk drive
- File adapter
- Logic board

User Action:

1. Perform an **ALT 2 IML**; see "Alt 2 IML Procedures for Testing the 3174" on page 2-3.
2. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Go to MAP 0430 in the maintenance manual for your model.

3023 03HG TYPE LOCA TYPE LOCA

Description: Disk drive diagnostic failure.

Possible Cause:

- Diskette drive
- Fixed disk drive
- File adapter
- Logic board

User Action:

1. Re-IML.
2. Request service

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Go to MAP 0430 in the maintenance manual for your model.

3024 01HG TYPE LOCA TYPE LOCA

Description: Unknown error in the diskette drive or file adapter

Possible Cause:

- Defective diskette media
- Diskette drive
- File adapter
- Logic board

User Action:

1. Exchange the diskette.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Go to MAP 0430 in the maintenance manual for your model.

3024 02HG TYPE LOCA TYPE LOCA

Description: Unknown error in the fixed disk or file adapter, while running individual file diagnostics.

Possible Cause:

- Defective fixed disk media
- Fixed disk drive
- File adapter
- Logic board

User Action:

1. Run the "Fixed Disk Media Tests" on page 2-5.
2. Re-IML.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Go to MAP 0430 in the maintenance manual for your model.

3025 01HG TYPE LOCA TYPE LOCA

Description: A failure occurred during diskette drive diagnostics.

Possible Cause:

- Diskette drive
- File adapter

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only: Exchange the FRUs indicated by TYPE and LOCA.

3025 02HG TYPE LOCA

Description: A failure occurred during diskette drive diagnostics.

Possible Cause:

- Diskette drive
- File adapter

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only: Exchange the FRUs indicated by TYPE and LOCA.

3025 03HG TYPE LOCA TYPE LOCA

Description: Unknown error in the fixed disk or file adapter, while running individual file diagnostics.

Possible Cause:

- Fixed disk drive
- File adapter
- For Models 1L through 14R, exchange the logic board

User Action:

1. Retry the test
2. Request service.

For Service Personnel Only:

1. Exchange the FRUs indicated by TYPE and LOCA, one at a time.
2. Exchange the logic board (for Models 1L through 14R).

Status Codes

3026 01HG TYPE LOCA TYPE LOCA

Description: A 2.4-MB diskette drive failed when trying to read a 1.2-MB diskette. When a 2.4-MB drive is being tested with a 2.4-MB diskette installed, it tests its read/write capability at both 2.4-MB and 1.2-MB densities.

Possible Cause:

- Diskette drive
- File adapter
- Hardware mismatch between operator panel adapter and model

User Action: No action is required if 2.4-MB diskettes are used. Verify that the operator panel adapter matches the model number. Otherwise, request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the planar board.

3030 01HG TYPE LOCA

Description: Communication adapter offline test failure (FN 02, modem wrap).

Possible Cause:

- The modem is not wrappable
- Modem
- Communication interface cable or Test/Oper switches set to Test
- Communication Adapter
- Concurrent communication adapter card

User Action: Check the connections at the modem and the 3174.

- For Models 1L through 64R:

Go to CPD 0300 in the *3174 Customer Problem Determination Guide*.

- For Models 81R through 92R:

Go to CPD 0310 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model, or run the interface cable wrap test (FN 01). Refer to "How to Run Communication and Concurrent Communication Adapter Optional Tests" in the maintenance manual for your model.

3030 02HG TYPE LOCA

Description: Communication adapter offline test failure (FN 01, 02, 04, 05, or 07).

Possible Cause:

- Communication interface cable is missing or defective.
- Communication interface cable is not connected correctly.
- The wrong communication interface cable is connected.
- The wrap plug is missing or the wrong wrap plug is connected.

Note: Only a 3174 communication interface cable or wrap plug can be used.

User Action:

1. Verify that the correct cable or wrap plug is connected. See "Communication Adapter Cable Part Numbers" on page 2-35.
2. Check the connections at the modem and 3174.
3. Request service.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model, or perform the following actions.

1. Verify that the correct wrap plug or interface cable is being used and is connected correctly and that the Test/Oper switch on the cable is set to test.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the interface cable or wrap plug.

3030 03HG TYPE LOCA

Description: Type 2 (X.21) Communication adapter offline test failure (FN 01, 02, or 05).

Possible Cause:

- The wrong communication interface cable is being used.
- The wrong wrap plug is connected.
- Communication interface cable is defective.
- Communication interface cable is not connected correctly.

User Action:

1. Verify that the communication interface cable is part number 6423155 or 6423156.
2. Check the connections at the modem and 3174.
3. Verify that the Test/Oper switch is set correctly for the test that is being performed.
4. Request service.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model, or perform the following actions:

1. Verify that the correct wrap plug or interface cable is being used and is connected correctly, and that the Test/Oper switch on the cable is set to Test.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the interface cable or wrap plug.

3030 04HG TYPE LOCA

Description: Communication adapter optional test failure. FN 02, 04, or 07 has been selected, and an EIA/V35 cable is not connected to the Type 1 communication adapter.

Possible Cause:

- The wrong communication interface cable is being used.
- Communication interface cable is defective.
- Communication interface cable is not connected correctly.

User Action:

1. Verify that the correct communication interface cable is attached. See "Communication Adapter Cable Part Numbers" on page 2-35.
2. Check the connections at the modem and 3174.
3. Verify that the Test/Oper switch is set correctly for the test that is being performed.
4. Request service.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model, or perform the following actions:

1. Verify that the correct wrap plug or interface cable is being used and is connected correctly and that the Test/Oper switch on the cable is set to test.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the interface cable or wrap plug.

3030 2xHG TYPE LOCA

Description: Communication adapter optional test failure (FN 01 or 05).

2x = 21–26 where:

- 21 = EIA 232D cable wrap failure (adapter clock).
- 22 = CCITT V.35 cable wrap failure (adapter clock) or X.21 wrap plug installed on an EIA 232D/CCITT V.35 adapter card.
- 23 = X.21 cable wrap failure (adapter clock) or EIA 232D/CCITT V.35 wrap plug installed on an X.21 adapter card.
- 24 = EIA 232D/CCITT V.35 wrap plug failure or X.21 interface cable installed on an EIA 232D/CCITT V.35 adapter card or a Concurrent Communication Adapter (CCA) is installed in an incorrect location.
- 25 = X.21 wrap plug failure or CCITT V.35 interface cable installed on an X.21 adapter card.
- 26 = X.21 cable wrap failure (external clock) or EIA 232D/CCITT V.35 wrap plug installed on an X.21 adapter card.

Possible Cause: N/A

User Action:

1. Verify that the correct communication interface cable is attached. See "Communication Adapter Cable Part Numbers" on page 2-35.
2. Check the connections at the modem and 3174.

Status Codes

3. Verify that the Test/Oper switch is set correctly for the test that is being performed.
4. For status code 3030 24HG (Models 1L, 1R, 2R, or 3R only), make sure that a CCA (Type 9263 or 9267) is installed in location 12, 13, or 14.
5. Request service.

For Service Personnel Only: Go to MAP 0300 in the maintenance manual for your model, or perform the following actions:

1. Verify that the correct wrap plug or interface cable is being used and is connected correctly, and that the Test/Oper switch on the cable is set to test.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the interface cable or wrap plug.

Note: If you are here from MAP 0300, return to the MAP step that sent you here.

3040 01HG PN00 TYPE LOCA

Description: A port wrap test on the terminal adapter has failed (FN 01 or 05).

PN = The port that has failed.

Possible Cause:

- Terminal adapter
- The terminal adapter output cable was not disconnected

User Action:

1. Check to make sure that the cable was disconnected from the port.
2. Retry the test.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

3040 02HG PNMP TYPE LOCA TYPE LOCA

Description: A multiplexer port wrap test has failed (FN 02 or 06).

Note: This test is valid only on a TMA, a 3299 Model 2, 3, or 32, and the IBM 7232 Dual Control Unit Terminal Multiplexer.

PN = Port number of the terminal adapter.

MP = Port number of the 3299 or Terminal Multiplexer Adapter.

Possible Cause:

- Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter
- 3299 Model 2, 3, or 32
- The Terminal Multiplexer Adapter, Fiber Optic Terminal Adapter, or 3299 output signal cable was not disconnected.
- The Terminal Multiplexer Adapter, Fiber Optic Terminal Adapter, or 3299 input signal cable
- Terminal adapter
- IBM 7232 Dual Control Unit Terminal Multiplexer.

User Action:

1. Check to make sure that the cable was disconnected from the port, and then retry the test.
2. Perform one of the following actions:
 - If you are running the port wrap test procedure from another manual, return to that procedure.
 - If you are not running the port wrap test procedure from another manual, go to "Start of Problem Determination" in the *IBM Token-Ring Network Problem Determination Guide*.

Note: For 7232 information and testing, refer to the *7232 Product Description*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3040 03HG PNMP TYPE LOCA TYPE LOCA

Description: A port wrap test on a TMA or an external terminal multiplexer, such as a 3299, has failed. The path between the Terminal Adapter and the TMA/3299 is working.

Note: This test is valid only on a 3299 Model 2, 3, or 32, and the IBM 7232 Dual Control Unit Terminal Multiplexer.

PN = Port number of the terminal adapter.

MP = Port number of the 3299 or Terminal Multiplexer Adapter.

Possible Cause:

- Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter
- 3299 Model 2, 3, or 32
- The Terminal Multiplexer Adapter, Fiber Optic Terminal Adapter, or 3299 output signal cable was not disconnected.

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3041 01HG PN00 TYPE LOCA TYPE LOCA

Description: The path test to a terminal has failed (FN 03, 04, or 07).

PN = Port number.

Possible Cause:

- Defective terminal or the terminal is not switched on
- Terminal signal cable
- Terminal adapter
- 3299
- TMA
- Fiber Optic Terminal Adapter (FTA)

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3041 02HG PNMP TYPE LOCA

Description: The path test to a terminal attached to a Terminal Multiplexer Adapter (TMA) port has failed (FN 03, 04, or 07).

PN = Port number.

MP = TMA port number.

Possible Cause:

- Defective terminal or the terminal is not switched on
- Terminal signal cable
- Terminal Adapter
- TMA
- Fiber Optic Terminal Adapter (FTA)
- The cable between the Terminal Adapter and the TMA

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3041 03HG PNMP TYPE LOCA

Description: The path test to a terminal attached to the IBM 7232 Dual Control Unit Terminal Multiplexer has not been completed (FN 03, 04, or 07). The connection between the Terminal Adapter and the multiplexer is working, but the test was not completed because the logical switch in the multiplexer is set to the other controller.

Status Codes

PN = Port number of the terminal adapter.
MP = Dual control unit terminal multiplexer port number.

Possible Cause:

- The other controller has control of the terminal.
- IBM 7232 Dual Control Unit Terminal Multiplexer.

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

Note: For 7232 information and testing, refer to the *7232 Product Description* and the *3174/7232 Operator's Reference*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3041 04HG PNMP TYPE LOCA

Description: The path test to a terminal attached to a multiplexer has failed (FN 03, 04, or 07). The connection between the Terminal Adapter and the multiplexer is working.

PN = Port number of the terminal Adapter.
MP = Dual control unit terminal multiplexer port number.

Possible Cause: IBM 7232 Dual Control Unit Terminal Multiplexer

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

Note: For 7232 information and testing, refer to the *7232 Product Description* and the *3174/7232 Operator's Reference*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3041 05HG PNMP TYPE LOCA TYPE LOCA

Description: The path test to a terminal attached to a Terminal Multiplexer Adapter (TMA) or 3299 Model 2, 3, or 32 has failed (FN 03, 04, or 07). The connection between the Terminal Adapter and the 3299 or the TMA is working.

PN = Port number of the terminal adapter.
MP = 3299 or TMA port number.

Possible Cause:

- 3299 or Terminal Multiplexer Adapter
- Terminal signal cable
- Terminal

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3042 01HG PN00 TYPE LOCA

Description: The exerciser test to a terminal directly attached to a Terminal Adapter port has failed (FN 04).

PN = The terminal adapter port number.

Possible Cause:

- Defective terminal
- Terminal Adapter
- Loose or noisy terminal signal cable

User Action:

- For Models 1L through 64R:
Go to CPD 0200 in the *3174 Customer Problem Determination Guide*.
- For Models 81R through 92R:
Go to CPD 0240 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3042 02HG PNMP TYPE LOCA TYPE LOCA

Description: The exerciser test to a terminal attached to an external terminal multiplexer, such as a 3299, or a TMA has failed.

PN = Port number of the terminal adapter.

MP = Port number of the external terminal multiplexer, TMA, or FTA.

Possible Cause:

- Defective terminal
- Terminal Multiplexer Adapter (TMA)
- Fiber Optic Terminal Adapter (FTA)
- External multiplexer
- Terminal Adapter (TA)
- Loose or noisy terminal signal cable
- TMA/External multiplexer input signal cable

User Action:

1. Check to make sure that the cable was disconnected from the port, and then retry the test.
2. Perform one of the following actions:
 - If you are running the port wrap test procedure from another manual, return to that procedure.
 - If you are not running the port wrap test procedure from another manual, go to "Start of Problem Determination" in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3043 01HG PNMP TYPE LOCA

Description: A terminal adapter failure has occurred while running offline tests.

PN = Port number of the terminal adapter.

MP = 3299 or TMA port number.

Possible Cause: Terminal adapter

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

3050 01HG or 02HG TYPE LOCA

Description: LAN Adapter wrap test failed (FN 01 or 02).

Possible Cause:

- Interface cable or wrap plug not attached
- Defective cable, or wrap plug
- Defective LAN Adapter
- FN 02 was used and the interface cable was used instead of the wrap plug
- Token-Ring Network problem
- 8228 Multistation Access Unit is defective

User Action: Return to the procedure that directed you to run this test or request service.

For Service Personnel Only: Exchange the LAN Adapter. Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

3060 01HG TYPE LOCA

Description: An asynchronous emulation adapter test has completed successfully but the internal cable from the adapter to the I/O panel is disconnected.

Possible Cause:

- The I/O panel cable is disconnected
- The I/O panel cable is defective
- Asynchronous emulation adapter
- Logic board (Models 1L through 14R)

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Reseat or connect the internal I/O panel cable.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the I/O panel cable.
4. Exchange the logic board.

For Models 21H through 24R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 51R through 64R:

1. Reseat or connect the internal I/O panel cable.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the I/O panel cable.

Refer to Chapter 3 in the maintenance manual for your model.

3061 0xHG PN00 TYPE LOCA

Description: The asynchronous emulation adapter port wrap test (FN 01) has failed. The internal cable from the adapter to I/O panel is defective or is disconnected.

PN = AEA port number.

Possible Cause:

- The I/O panel cable is disconnected (01HG or 02HG)
- The I/O panel cable is defective
- Asynchronous emulation adapter
- Wrap plug is not installed
- Logic board (Models 1L through 14R)

User Action: Request service.

For Service Personnel Only:

For Models 1L through 64R:

1. Reseat or connect the internal I/O panel cable.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the I/O panel cable.
4. For Models 1L through 14R, exchange the logic board.

For Models 21H through 24R:

Exchange the AEA.

Refer to Chapter 3 in the maintenance manual for your model.

3070

Description: The ES Connection Adapter wrap test has failed.

Possible Cause:

- The ES Connection Adapter wrap plug is defective or not installed.
- The ES Connection Adapter is defective.

User Action: Perform the following actions:

- Press **Enter** to terminate the test.
- Check the wrap plug and retry the test.

For Service Personnel Only: Replace the ES Connection Adapter.

3071

Description: The ES Connection Adapter test (FN 02) is in progress. The ES Connection Adapter is generating continuous offline sequence characters to allow you to measure light.

This status code indicates a hardware problem if the Check Cond indicator is lit.

Possible Cause: Processor

User Action: If the Check Cond indicator is:

1. Off, press **Enter** to terminate the test.
2. On, request service.

For Service Personnel Only:

For Model 12L:

Exchange the processor card (type 950x) in location 18.

For Model 22L:

Exchange the planar board.

3080 B1B2 B3B4

Description: The 12-volt overcurrent detection circuit on the Ethernet Adapter is active.

B1B2 = TYPE.

B3B4 = LOCA.

Possible Cause: Defective Ethernet Adapter.

User Action: Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA.

3081 01 B1B2 B3B4

Description: The wrap test for the 10BASE5 connection has failed.

B1B2 = TYPE.

B3B4 = LOCA.

Possible Cause:

- Defective 10BASE5 wrap plug
- Defective Ethernet Adapter

User Action: Request service.

For Service Personnel Only:

For Models 11L through 24R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 61R through 64R:

Go to MAP 0630 in the maintenance manual for your model.

Status Codes

3081 02 B1B2 B3B4

Description: The wrap test for the 10BASE2 connection has failed.

B1B2 = TYPE.

B3B4 = LOCA.

Possible Cause:

- Defective 10BASE2 wrap plug
- Defective Ethernet Adapter

User Action: Request service.

For Service Personnel Only:

For Models 11L through 24R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 61R through 64R:

Go to MAP 0630 in the maintenance manual for your model.

3081 03 B1B2 B3B4

Description: The wrap test for the 10BASE-T connection has failed.

B1B2 = TYPE.

B3B4 = LOCA.

Possible Cause:

- Defective 10BASE-T wrap plug
- Defective Ethernet Adapter

User Action: Request service.

For Service Personnel Only:

For Models 11L through 24R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 61R through 64R:

Go to MAP 0630 in the maintenance manual for your model.

3082 XXXX XXXX XXXX

Description: The Ethernet Adapter test FN 10 was selected to display the Ethernet Adapter universally administered address.

XXXX XXXX XXXX = The universally administered address.

Possible Cause: N/A

User Action: Press **Enter** to display the 4001 prompt.

For Service Personnel Only: No action is required.

3089 01HG TYPE LOCA

Description: The IML microcode started loading from an incorrect address. The microcode corrected the error and reloaded from the correct address.

Possible Cause: Processor

User Action: To complete the IML:

1. For Models 1L through 64R, type in a **1** on the 3174 operator panel and press **Enter**.
2. For Models 81R through 92R, press **Adv**, (1 is displayed), then press **Enter**.

Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3091 TYPE LOCA TYPE LOCA

Description: 3174 offline test hardware failure: storage.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Check for correct installation of all storage cards. Refer to the card plug charts in the maintenance manual.
2. Exchange FRU type 950x in location 18.

For Models 21H through 24R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

For Models 51R through 53R:

1. Exchange the storage card in location 05.
2. Exchange the planar board.

For Models 61R through 64R:

1. Exchange the storage card in location J22.
2. If present, exchange the storage card in location J23.
3. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3170 01HG IL

Description: 3174 offline test hardware failure.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange the adapters that use the interrupt level causing the failure, one at a time. Refer to "Interrupt Levels" in the maintenance manual.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange any installed feature cards one at a time.

Refer to Chapter 3 in the maintenance manual for your model.

3174

Description: A normal IML completed successfully unless the Check Cond indicator is on. This status code is displayed if no operational errors are present.

Possible Cause: N/A

User Action:

1. If the Check Cond indicator is on, perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Status Codes

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3180 01HG MC 02HG MC

Description: 3174 offline test hardware failure, unexpected or unrecoverable machine check occurred.

HG field = The hardware group under test when the failure occurred.

MC field = The specific machine check and cause of failure.

Possible Cause: N/A

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange FRU type 905x in location 19.
3. Replace the adapter indicated by the hardware group number.
4. Hardware mismatch between operator panel adapter and model.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange any installed feature cards one at a time.

Refer to Chapter 3 in the maintenance manual for your model.

3180 0300 MC

Description: An unrecoverable machine check has occurred.

Possible Cause: N/A

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU Type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3180 04HG IL to 05HG IL

Description: An unexpected interrupt has occurred.

HG field = The hardware group under test when the failure occurred.

IL field = The interrupt level causing the failure.

Possible Cause: N/A

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange the adapters that use the interrupt level causing the failure, one at a time. Refer to "Interrupt Levels" in the maintenance manual.

For Models 21H through 92R:

1. Exchange the planar board.

2. Exchange any installed feature cards one at a time.
- Refer to Chapter 3 in the maintenance manual for your model.

3180 06HG

Description: 3174 operator panel failure.

Possible Cause: N/A

User Action:

1. Retry the test.
2. Request service.

For Service Personnel Only:

1. Exchange the operator panel.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3201

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Any adapter or storage card
- Logic board (Models 1L through 14R)

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Perform an **ALT 2 IML**; see page 2-3.
 - If ALT 2 fails with a 1048 status code, go to MAP 0800 in the maintenance manual.
 - If the ALT 2 is successful, exchange FRU Type 950x in location 18.
2. Exchange the logic board.

For Models 21H through 92R:

1. Exchange the planar board.
2. Exchange any installed feature or storage cards one at a time.

Refer to Chapter 3 in the maintenance manual for your model.

3202

Description: 3174 IML hardware failure.

Possible Cause:

- Processor
- Operator panel adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange the operator panel adapter.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

3203 TYPE LOCA

Description: 3174 IML hardware failure.

Possible Cause:

- First storage card
- Processor

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3204 TYPE LOCA TYPE LOCA

Description: Storage cards installed exceed 3174 configuration.

Possible Cause: Hardware mismatch between operator panel adapter and model.

User Action: If a feature installation is in progress, recheck the instructions. Otherwise:

1. Re-IML.
2. Request service.

For Service Personnel Only: Remove the storage cards indicated by TYPE and LOCA.

3205 TYPE LOCA TYPE LOCA

Description: Incorrect Storage configuration.

Possible Cause:

- Storage cards plugged wrong, missing, or defective
- Processor

Note: TYPE and LOCA fields are displayed for each missing or incorrect card.

User Action: If a feature installation is in progress, recheck the instructions. Otherwise:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Install the cards as shown on the plug charts in the maintenance manual for your model.
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange FRU type 950x in location 18.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3206 TYPE LOCA

Description: Hardware level mismatch between the card type and the controller.

Possible Cause:

- The Terminal Adapter Type 9155 is installed in a Model 1L, 1R, 2R, or 3R, and none of these models supports it.
- Hardware mismatch between operator panel adapter and model.

User Action: Request service.

For Service Personnel Only: Perform the following actions:

1. Remove the FRU indicated by TYPE and LOCA.
2. Verify that the controller still contains a valid Terminal Adapter. Refer to "Card Plugging" charts in the maintenance manual for your model.

3220 TYPE LOCA

Description: FRU ID failure where:

TYPE = 9001 = incorrect FRU number.

LOCA = Location of the failing FRU.

Possible Cause: N/A

User Action: If a feature installation is in progress, recheck the instructions. Otherwise:

1. To complete the IML:
 - For Models 1L through 64R, type in a **1** on the 3174 operator panel and press **Enter**.
 - For Models 81R through 92R, press **Adv** (1 is displayed), then press **Enter**.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.
3. Exchange the logic board.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3221 TYPE LOCA

Description: Channel adapter error.

Possible Cause:

- Channel adapter with no Driver/Receiver
- Channel Driver/Receiver with no adapter
- Processor

User Action:

1. If a feature installation is in progress, recheck the instructions.
2. Re-IML.
3. Request service.

For Service Personnel Only:

For Models 1L and 11L:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange FRU type 950x in location 18.

For Models 21H and 21L:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3222 TYPE LOCA TYPE LOCA

Description: Incorrect PIO configuration.

Possible Cause: A card is failing or is installed incorrectly in one or more of the following locations: 22, 23, or 24.

Note: Multiple TYPE and LOCA fields are displayed to indicate the cards that are installed incorrectly or cards that follow a failing card.

User Action: If a feature installation is in progress, recheck the instructions. Otherwise:

1. To complete the IML, type in a **1** on the 3174 operator panel and press **Enter**.
2. Request service.

For Service Personnel Only: Go to MAP 0420: 'PIO Bus Isolation' in the maintenance manual for your model.

3223 TYPE LOCA TYPE LOCA

Description: An incorrect card condition exists in the 3174.

Possible Cause:

- Cards are installed in the wrong locations.

Note: Multiple TYPE LOCA fields are displayed if more than one card is installed incorrectly.

- One or more cards are failing.
- There is a hardware or microcode mismatch.

User Action:

1. Refer to "Microcode Level Support" on page 2-19 to verify that the microcode supports the features in the controller.
2. Re-IML or retry your test.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Verify that the cards are installed as shown in the "Card Plugging" charts, refer to the maintenance manual for your model.
2. Exchange the FRUs indicated by TYPE and LOCA, one at a time.

For Models 21H through 92R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3224 TYPE LOCA

Description: An incorrect ISDN Adapter FRU ID was detected.

Possible Cause: The ISDN Adapter is defective.

User Action: Request service.

For Service Personnel Only: Replace the FRU indicated by TYPE and LOCA.

3228 TYPE LOCA

Description: An incorrect card condition exists in the 3174.

Possible Cause:

- One or more cards are installed in the wrong location.
- One or more cards are missing.
- One or more cards are failing.
- There is a hardware or microcode mismatch.

User Action:

1. If you are installing a feature, recheck the installation steps.
2. Verify that the correct adapter is installed.
3. Request service.

For Service Personnel Only:

For Models 11L, 11R, 12R, 13R and 14R:

1. Verify that the cards in locations 21 through 24 are the correct type and are in the correct locations. Refer to "Card Plugging Charts" in the maintenance manual.
2. Exchange the FRU indicated by TYPE and LOCA.

For Other Models:

1. Verify that the cards are the correct type and are in the correct locations.
 - The Terminal Multiplexer Adapter must be type 9176 (Models 21L through 24R).
 - The ES Connection Adapter (type 9810) must be installed in slot 11 (Model 22L).
 - The LAN Adapter in location 05 must be type 9545 (Model 90R).
2. Exchange the FRU indicated by TYPE and LOCA.
3. Exchange the planar board.

3229

Description: A Terminal Adapter is not present during an IML.

Possible Cause: The Terminal Adapter is:

- Missing (Models 1L through 14R only)
- Defective
- Plugged in incorrectly
- Plugged in after a defective adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 915X in locations 21, 22, or 23.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3230 to 3232 TYPE LOCA

Description: 3174 IML hardware failure: terminal adapter.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the FRU indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3233 TYPE LOCA TYPE LOCA

Description: The connection between the Terminal Adapter and an installed Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter (FTA) is not working.

Possible Cause:

- The coaxial cable that connects the TMA or FTA to the Terminal Adapter is defective or not connected.
- TMA

Status Codes

- FTA
- Terminal Adapter

Note: The TYPE and LOCA fields identify the TMA or FTA card.

User Action: Only the terminals attached to the failing TMA are inoperative. The remainder of the controller is usable.

1. Record the status code and TYPE LOCA information.
2. Verify that the coaxial cable connecting the TMA or FTA to the Terminal Adapter is correctly installed.
 - If the cable is not connected, reconnect it and re-IML.
 - If 3233 appears again, complete the IML (step 3).
 - If 3233 does not appear again, the problem has been corrected.
 - If the cable is connected, complete the IML (step 3).
3. To complete the IML, type a **1** at the 3174 operator panel and press **Enter**.
4. Request service.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3234

Description: 3174 IML hardware or microcode failure. The model of the controller cannot be determined by the microcode.

Possible Cause:

- Operator panel adapter
- The controller hardware is at a higher EC level than the Control microcode
- Wrong Control microcode

User Action:

1. Verify that the correct Control microcode is installed.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the operator panel in location 05.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3235 TYPE LOCA

Description: An Asynchronous Emulation Adapter (AEA) internal I/O panel cable is disconnected.

LOCA = 61 for HG21.

LOCA = 62 for HG22.

LOCA = 63 for HG23.

Possible Cause: N/A

User Action:

1. Type a **1** at the operator panel and press **Enter**.
2. Go to CPD 0500 in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only:

For Models 1L through 64R:

1. Exchange the FRU indicated by TYPE and LOCA.
2. Exchange the AEA for the failing HG.

Refer to Chapter 3 in the maintenance manual for your model.

3236

Description: 3174 hardware mismatch.

Possible Cause: Wrong processor card installed

User Action: Request service.

For Service Personnel Only: Install the correct processor card in location 18 as required for the 3174 model and microcode release level. For Models 1L, 1R, 2R, and 3R at Release A/S 4.0 and below, FRU Type 9500 must be installed.

3237

Description: MMIO addressing error.

Possible Cause: One of the cards on the MMIO bus is responding to an address that is not assigned to that card.

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the adapters in locations 11 through 17 one at a time.
2. If you still have the problem after exchanging all of the cards, or if multiple cards seem to be failing, replace the processor card in location 18.

For Models 21H through 24R:

1. Exchange the adapters in locations 11 through 15 one at a time.
2. Exchange the planar board.

For Models 51R through 64R:

1. Exchange the cards in location 04 and 05 one at a time.
 2. Replace the planar board.
-

3250

Description: 3174 IML hardware failure, unable to generate the FRU ID table.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange FRU type 915x in location 21, 22, 23, or 24.
2. Exchange FRU type 950x in location 18.
3. One at a time, exchange FRU Type 933X in location 14, 13, or 12.

For Models 21H through 24R:

1. If any AEAs are installed, exchange each adapter one at a time.
2. Exchange the planar board.

For Models 51R through 92R:

1. If present, exchange FRU type 933X in location 04 (5X and 6X models only).
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

3290 TYPE LOCA

Description: 3174 hardware failure: Terminal adapter failed to reset during a normal IML.

Possible Cause: Terminal adapter

User Action:

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 915x indicated by TYPE and LOCA.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3291

Description: 3174 hardware failure: Communication adapter failed to reset during a normal IML.

Possible Cause: Communication adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA in the hardware configuration table. Refer to Chapter 3 in the maintenance manual for your model.

3292

Description: 3174 hardware failure: Encrypt/Decrypt adapter failed to reset during a normal IML.

Possible Cause: Encrypt/Decrypt adapter

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 3R:

Exchange FRU Type 9030 in location 24.

Refer to Chapter 3 in the maintenance manual for your model.

3297

Description: 3174 hardware failure: Processor.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3299

Description: 3174 hardware failure.

Possible Cause:

- Channel adapter is installed, but no Driver/Receiver is present
- Asynchronous emulation adapter is installed, but the internal cable is not connected.

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For channel adapter failures: See status code 3221.

For asynchronous emulation adapter failures: See status code 3235.

3301 02XX

Description: A failure occurred on the terminal connected to Hardware Group 26 port zero during offline tests in terminal control mode. Control of the tests has been returned to the operator panel.

02XX = An additional status code.

Possible Cause: N/A

User Action:

1. Use the 2XX status code and perform the actions for that code.
2. Check the signal cable connections at the terminal and at the controller.
3. Request service.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

3302 0xHG

Description: A terminal adapter failure occurred during offline tests in terminal-control mode. Control of the tests has been returned to the operator panel.

Possible Cause: N/A

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the first FRU type 915x you find starting with slot 21 and continuing through slots 22, 23, and 24.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

3801 XXXX XXXX XXXX

Description: Incorrect test request or the microcode is not on the diskette or fixed disk.

XXXX = The data that was entered as the test request.

Possible Cause: N/A

User Action: At the 3174 operator panel, perform the following actions:

1. If you were testing hardware groups 01–52, press **Enter**. Then, retry the test request.
2. If you were testing hardware groups 81, 82, or 87:
 - For Models 1L through 64R, key in 1 and press **Enter**.
 - For Models 81R through 92R, press **Adv** and press **Enter**.Then retry the test request.

For Service Personnel Only: No action is required.

Status Codes

3802 to 3809 0xHG

Description: 3174 offline test microcode failure.

Possible Cause: N/A

User Action: Perform the following actions:

1. Record the entire status code (380x 0xHG).
 2. Switch the 3174 power Off. Wait a few seconds and turn the power back On.
 3. Retry the offline diagnostic test and take the appropriate action as follows:
 - If the status code recorded earlier reoccurs, request service.
 - If a different status code appears, go to the number in this manual and do the recommended action.
- Otherwise, continue testing.

For Service Personnel Only: Contact your next level of support.

4001

Description: Test request prompt.

Possible Cause: N/A

User Action: Enter the desired offline test selection.

For Service Personnel Only: No action is required.

4030 to 4034

Description: This is a normal progression message during loading of the test monitor program. If one of these status codes remains displayed longer than 30 seconds, a failure has occurred.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Retry the operation.
3. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. For status code 4030, exchange the operator panel.

For Models 21H through 92R:

1. Exchange the planar board.
2. For status code 4030, exchange the operator panel.

Refer to Chapter 3 in the maintenance manual for your model.

4050

Description: A test request that was looping failed enough times to fill the test log.

Possible Cause: N/A

User Action:

1. At the 3174 operator panel, press **Enter**. To display the test log, refer to "How to Display the Test Log" in either the *3174 Customer Problem Determination Guide* or the maintenance manual for your model.
2. To reset the test log, select another test.

For Service Personnel Only: No action is required.

4079

Description: The test monitor program is performing initialization of the terminal connected to Hardware Group 26 port zero. If this status code remains displayed longer than 30 seconds, a failure has occurred.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Exchange FRU type 905x in location 19.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4080

Description: Test control is at the display connected to Hardware Group 26 port zero.

Possible Cause: N/A

User Action: Offline tests are in terminal-control mode. To return to operator panel control, perform an **ALT 1 IML** (see page 2-1) and enter an **80** at the 40 prompt message.

For Service Personnel Only: No action is required.

4081 01HG

Description: 3174 offline test failure. The terminal adapter in the 3174 cannot communicate with the terminal on Hardware Group 26 port zero. Test control has been returned to the operator panel.

Possible Cause:

- Terminal power on Port 0 is switched off
- Cable loose or disconnected
- Terminal Multiplexer Adapter, Fiber Optic Terminal Adapter, or 3299 failure
- Terminal adapter

User Action:

1. Verify that the terminal connected to port 0 is switched on.
2. At the 3174, press **Enter**; 4001 is displayed. Type **8094** and press **Enter**.
3. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

4082 01HG

Description: A 3278 or equivalent terminal is not attached to Hardware Group 26 port zero, or an unsupported keyboard is attached to the terminal.

Possible Cause: N/A

User Action:

1. At the 3174 press **Enter**; 4001 is displayed. Type **8094** and press **Enter**.
2. Refer to the *3174 Utilities Guide* for a list of supported terminals and keyboards.
3. If a supported terminal is attached, refer to the terminal documentation for further problem isolation.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

4099

Description: An attempt was made to bypass an error stop by performing the Free function (press **Enter**) or Continue function (key in **1**, press **Enter**). This status code indicates the Free or Continue function is not allowed.

Possible Cause: N/A

User Action: Use the recovery actions from the status code that was bypassed before this status code was obtained.

For Service Personnel Only: No action is required.

4101 XXXX XXXX

Description: An incorrect request was entered in response to the ALT 1 IML 40 prompt. XXXX XXXX is the data that was entered.

Possible Cause: N/A

Status Codes

User Action:

1. See the ALT 1 procedure on page 2-1. Verify that the correct parameters were entered.
 - For Utility microcode, you can use 40, 80, 81, 82 or 87.
 - For Control microcode, you can use 41, 42, 43, 81, 82 or 87.
2. Retry the ALT 1 IML; see page 2-1. Reenter the test request.

For Service Personnel Only: No action is required.

4102

Description: An incorrect data key or function push button was used.

Possible Cause: N/A

User Action:

1. At the 3174, press **Enter**; 4001 is displayed.
2. Retry the test request.

For Service Personnel Only: No action is required.

4103 XXXX XXXX XXXX

Description: An incorrect request was entered in response to the 4001 prompt. The data following 4103 is the data that was entered.

XXXX XXXX XXXX = The test request that was entered.

Possible Cause: N/A

User Action:

1. At the 3174, press **Enter**; 4001 is displayed.
2. Retry the test request.

For Service Personnel Only: No action is required.

4104 XXXX XXXX XXXX

Description: The hardware group selected in the test request does not appear to be present in the controller. Either the hardware group selected is failing or it is not installed.

XXXX XXXX XXXX = The test prompt message that requested manual input.

Possible Cause: N/A

User Action:

1. At the 3174 press **Enter**; 4001 is displayed.
2. Retry the test request.
3. Request service.

For Service Personnel Only: For all models:

1. Verify that the hardware group is valid and installed. Refer to "Locations" in Chapter 3 of the maintenance manual for your model.
 2. If the FRU for the hardware group is present, exchange it and retry the operation.
-

4105

Description: Incorrect input.

Possible Cause: N/A

User Action:

1. At the 3174 press **Enter**; 4001 is displayed.
2. Retry the test request.

For Service Personnel Only: No action is required.

4106 XXXX XXXX

Description: An incorrect response was entered for the test prompt message.

XXXX XXXX = The test prompt message that requested manual input.

Possible Cause: N/A

User Action:

1. At the 3174 press **Enter**; 4001 is displayed.
2. Retry the test request.

For Service Personnel Only: No action is required.

4107 to 4110

Description: An incorrect key was used during offline tests in terminal-control mode.

Possible Cause: N/A

User Action: Retry the operation that was being performed.

For Service Personnel Only: No action is required.

4111

Description: The response entered was not a continue function.

Possible Cause: N/A

User Action: Perform the continue function (key in **1**, press **Enter**).

For Service Personnel Only: No action is required.

4112

Description: A default IML was detected. ROS was unable to determine the type of IML that was requested.

Possible Cause:

- Operator panel defective
- Operator panel adapter defective

User Action:

1. Retry the IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the operator panel adapter in location 05.
2. Exchange the operator panel.

For Models 21H through 92R:

1. Exchange the operator panel.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4201 01HG TYPE LOCA

Description: Offline test failure; the diskette drive indicated by the hardware group number is not ready.

Possible Cause:

- Diskette drive
- Diskette media
- File adapter

User Action:

1. Verify that the diskette is installed correctly in the diskette drive indicated by the HG number and the drive door is closed.
2. Retry the test.
3. Request service.

Status Codes

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4203 01HG

Description: A write-protected diskette is installed.

Possible Cause:

- Diskette media is write protected
- Diskette drive
- File adapter
- RAM disk defective
- WNM defective

User Action:

1. Remove the write protection sticker from the diskette and retry the test.
2. Cancel the test you are running by using the Free function (press **Enter**) or the Continue function (key in **1**, then press **Enter**).
3. If the diskette is not write protected, request service.

For RAM disk (HG = 07):

1. Cancel the test you are running by using the Free function (press **Enter**) or the Continue function (type **1**, then press **Enter**).
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive indicated by the HG number.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM:

1. For diskette drive (HG = 01): Exchange the WNM.
2. For RAM disk (HG = 07): Contact your next level of support.

4204 01HG TYPE LOCA

Description: During testing, the diskette drive door was opened and closed.

Possible Cause:

- Diskette drive
- File adapter

User Action:

1. Press **Enter** to perform the Free function.
2. Retry the test.
3. Request service.

For Service Personnel Only: Exchange the FRU indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

4210 01HG PN00 TYPE LOCA

Description: The printer exerciser test (HG26 or HG27)(FN 07) failed. The printer is directly attached to the controller.

PN = The terminal adapter port number.

Possible Cause:

- Wrong port number entered in the test request
- A printer is attached that is not supported for FN 07

User Action: Perform one of the following actions:

1. Select the correct port number.
2. Use a printer supported by (FN 07). Refer to the "Printer Exerciser Test (FN 07)" under "How to Run Terminal Adapter/TMA 3299 Optional Tests" in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

4210 02HG PNMP TYPE LOCA TYPE LOCA

Description: The printer exerciser test (HG26 or HG27)(FN 07) failed. The printer is attached to the controller through a multiplexer.

PN = The terminal adapter port number.

MP = Port number of the multiplexer.

Possible Cause:

- Wrong port number entered in the test request
- A printer is attached that is not supported for FN 07
- A printer is attached to the wrong port

User Action: Perform one of the following actions:

1. Select the correct port number.
2. Use a printer supported by (FN 07). Refer to the "Printer Exerciser Test (FN 07)" under "How to Run Terminal Adapter/TMA 3299 Optional Tests" in the *3174 Customer Problem Determination Guide* to see a list of supported printers.

For Service Personnel Only: No action is required.

4211 01HG PN00 TYPE LOCA

Description: The printer exerciser test (HG26 or HG27)(FN 07) failed. The printer is directly attached to the controller.

PN = The terminal adapter port number.

Possible Cause:

- Printer is out of paper
- Printer is not ready

User Action:

1. Use the printer documentation.
2. Retry the test.
3. Request service.

For Service Personnel Only: No action is required.

4211 02HG PNMP TYPE LOCA TYPE LOCA

Description: The printer exerciser test (HG26 or HG27)(FN 07) failed. The printer is attached to the controller through a multiplexer.

PN = The terminal adapter port number.

MP = Port number of the TMA/3299/7232

Possible Cause:

- Printer is out of paper
- Printer is not ready

User Action:

1. Use the printer documentation.
2. Retry the test.
3. Request service.

For Service Personnel Only: No action is required.

4212 01HG PN00 TYPE LOCA

Description: The printer exerciser test (HG26 or HG27)(FN 07) failed. The printer is directly attached to the controller.

PN = The terminal adapter port number.

Possible Cause:

- Printer hold switch is active
- Printer is defective

User Action:

1. Use the printer documentation.
2. Retry the test.
3. Request service.

For Service Personnel Only: No action is required.

4212 02HG PNMP TYPE LOCA TYPE LOCA

Description: The printer exerciser test (HG26 or HG27)(FN 07) failed. The printer is attached to the controller through a multiplexer.

PN = The terminal adapter port number.

MP = Port number of the TMA/3299/7232 (if applicable).

Possible Cause:

- Printer hold switch is active
- Printer is defective

User Action:

1. Use the printer documentation.
 2. Retry the test.
 3. Request service.
-

4401 to 4421 01HG

Description: A fixed disk surface analysis function is complete.

These occur as the result of running fixed disk optional tests.

Possible Cause: N/A

User Action: Determine the reason for the status code as follows:

1. If the status code that you recorded from the original error **is** in the following list, return to that status code to determine which diskettes need to be copied onto your fixed disk.
 - 388-00 to 06HG
 - 388-07HG
 - 388-11HG
 - 388-56HG
2. If the status code that you recorded from the original error **is not** in the list above, you must copy all your diskettes onto the fixed disk. See "Restoring Your Data" on page 2-10.
3. If you have selected the fixed disk optional tests while using the *3174 Customer Problem Determination Guide* or the *Maintenance Information* manual, return to the procedure in the appropriate manual.

For Service Personnel Only: No action is required.

4425 to 4426 01HG TYPE LOCA

Description: Fixed disk media error.

Possible Cause: Surface defects developed on the fixed disk media during shipment.

User Action: Request service.

For Service Personnel Only: Replace the fixed disk drive, indicated by TYPE and LOCA. Refer to Chapter 3 in the maintenance manual for your model.

4431 01HG

Description: Fixed disk media error.

Possible Cause:

- Fixed disk is unformatted
- Fixed disk drive

User Action:

1. Run the "Fixed Disk Full Format" on page 2-9, then retry the operation.
2. Request service.

For Service Personnel Only: Replace the fixed disk drive indicated by the hardware group. Refer to Chapter 3 in the maintenance manual for your model.

4432 01HG

Description: The IML source subdirectory is not selected on the fixed disk.

Possible Cause: N/A

User Action: Refer to "How to Perform Media Management" in the *3174 Utilities Guide* and perform the "IML Select Utility" function.

For Service Personnel Only: No action is required.

4505 or 4506

Description: This is a prompt message for the Operator Panel Keypad Test.

Note: If this test was selected in terminal control mode, the remainder of the test must be performed at the 3174 operator panel.

Possible Cause: N/A

User Action: Continue with the operator panel test, or to obtain the 4001 prompt, press **Enter** at the 3174.

For Service Personnel Only: No action is required.

4510

Description: Communication adapter optional test failure (FN 04). 'Data set ready' and 'carrier detect' missing. The status indicators are updated in 2-second intervals to show the condition of these two interface leads.

Possible Cause:

- Teleprocessing link not active
- Modem
- Communication interface cable
- Communication adapter
- Concurrent Communication Adapter.

User Action:

1. Verify that the modem is turned on.
2. Verify that the communication interface cable is attached correctly at the modem and controller, and that the Test/Oper switch is set to Operate.
3. Refer to the modem documentation for further modem checks.
4. Request service.

For Service Personnel Only: Perform the following actions or go to MAP 0300 in the maintenance manual.

For Models 1L through 14R:

1. Exchange the interface cable.
2. Exchange the Communication Adapter in location 22 or 23.
3. Exchange the Concurrent Communication Adapter in location 12, 13, 14, 15, or 16.

For Models 21H through 24R:

1. Exchange the interface cable.
2. Exchange the Concurrent Communication Adapter in location 11–15.
3. Exchange the planar board.

For Models 51R through 64R:

1. Exchange the interface cable.
2. Exchange the Concurrent Communication Adapter in location 04 or 05.

Status Codes

3. Exchange the planar board.

For Models 81R through 92R:

1. Exchange the interface cable.
2. Exchange the planar board

Refer to Chapter 3 in the maintenance manual for your model.

4511

Description: Communication adapter optional test failure (FN 04). 'Data set ready' is active but 'carrier detect' is missing. The status indicators are updated in 2-second intervals to show the condition of these two interface leads.

Possible Cause:

- Telecommunications link
- Modem
- Communication interface cable
- Communication adapter
- Concurrent Communication Adapter

User Action:

1. Verify that the modem is turned on.
2. Verify that the communication interface cable is attached correctly at the modem and controller, and that the Test/Oper switch is set to Operate.
3. Refer to the modem documentation for further modem checks.
4. Request service.

For Service Personnel Only: Perform the following actions or go to MAP 0300 in the maintenance manual.

For Models 1L through 14R:

1. Exchange the interface cable.
2. Exchange the Communication Adapter in location 22 or 23.
3. Exchange the Concurrent Communication Adapter in location 12, 13, 14, 15, or 16.

For Models 21H through 24R:

1. Exchange the interface cable.
2. Exchange the Concurrent Communication Adapter in location 11–15.
3. Exchange the planar board.

For Models 51R through 64R:

1. Exchange the interface cable.
2. Exchange the Concurrent Communication Adapter in location 04 or 05.
3. Exchange the planar board.

For Models 81R through 92R:

1. Exchange the interface cable.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4512

Description: Communication adapter optional test failure (FN 04). 'Data set ready' is inactive but 'carrier detect' is active. The status indicators are updated in 2-second intervals to show the condition of these two interface leads.

Possible Cause:

- Modem
- Communication interface cable
- Communication adapter
- Concurrent Communication Adapter

User Action:

1. Verify that the modem is turned on.
2. Verify that the communication interface cable is attached correctly at the modem and controller, and that the Test/Oper switch is set to Operate.
3. Refer to the modem documentation for further modem checks.
4. Request service.

For Service Personnel Only: Perform the following actions or go to MAP 0300 in the maintenance manual.

For Models 1L through 14R:

1. Exchange the interface cable.
2. Exchange the communication adapter in location 22 or 23.
3. Exchange the Concurrent Communication Adapter in location 12, 13, 14, 15, or 16.

For Models 21H through 24R:

1. Exchange the interface cable.
2. Exchange the Concurrent Communication Adapter in location 11–15.
3. Exchange the planar board.

For Models 51R through 64R:

1. Exchange the interface cable.
2. Exchange the Concurrent Communication Adapter in location 04 or 05.
3. Exchange the planar board.

For Models 81R through 92R:

1. Exchange the interface cable.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4513

Description: This status code indicates that 'data set ready' and 'carrier detect' are active.

Possible Cause: N/A

User Action: Press **Enter** to stop the test and to display the 4001 prompt.

For Service Personnel Only: No action is required.

4514

Description: Communication adapter optional test is in progress. Function number 07 has been selected, which allows measurement of the communication adapter interface leads at the end of the interface cable. If the Check Cond indicator comes on, a failure has occurred.

Possible Cause: N/A

User Action:

1. To halt this function, press **Enter**.
2. If the Check Cond indicator comes on, request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the communication adapter in location 22 or 23.
2. Exchange the Concurrent Communication Adapter in location 12, 13, 14, 15, or 16.

For Models 21H through 24R:

1. Exchange the Concurrent Communication Adapter in location 11–15.
2. Exchange the planar board.

For Models 51R through 64R:

1. Exchange the Concurrent Communication Adapter in location 04 or 05.
2. Exchange the planar board.

For Models 81R through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4530

Description: This status code indicates the Channel Interface switch was moved to the Offline position during the Channel Adapter Switch and Indicator Test (FN 02).

Possible Cause: N/A

User Action: No action is required.

Status Codes

For Service Personnel Only: If the code does not change or the offline indicator remains off after the switch is moved, perform the following actions.

For Models 1L and 11L:

1. Exchange the channel adapter card in location 11.
2. Exchange the operator panel adapter card in location 05.
3. Exchange the operator panel in location 06.

For Models 21H and 21L:

1. Exchange the planar board.
2. Exchange the operator panel.

Refer to Chapter 3 in the maintenance manual for your model.

4531

Description: This status code indicates the Channel Interface switch was moved to the Online position during the Channel Adapter Switch and Indicator Test (FN 02).

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: If the code does not change or the offline indicator remains on after the switch is moved, perform the following actions.

For Models 1L and 11L:

1. Exchange the channel adapter card in location 11.
2. Exchange the operator panel adapter card in location 05.
3. Exchange the operator panel in location 06.

For Models 21H and 21L:

1. Exchange the planar board.
2. Exchange the operator panel.

Refer to Chapter 3 in the maintenance manual for your model.

4535 XXXX XXXX XXXX

Description: Token-Ring Adapter test FN 10 was selected to display the Token-Ring Adapter universally administered address.

XXXX XXXX XXXX = The universally administered address.

Possible Cause: N/A

User Action: Press **Enter** to display the 4001 prompt.

For Service Personnel Only: No action is required.

4542

Description: Set timer prompt message (FN 02).

Possible Cause: N/A

User Action: Continue with the set timer procedure.

For Service Personnel Only: No action is required.

4550 01HG PN00 TYPE LOCA

Description: The path test or exerciser test to a terminal attached directly to a terminal adapter was successful.

PN = Port number.

Possible Cause: N/A

User Action: Normal test completion; press **Enter** to obtain the 4001 prompt.

For Service Personnel Only: No action is required.

4550 02HG PN00 TYPE LOCA

Description: The path test or exerciser test to a terminal attached to a terminal multiplexer adapter (TMA) or external multiplexer, such as a 3299, was successful.

PN = Port number.

Possible Cause: N/A

User Action: Normal test completion; press **Enter** to obtain the 4001 prompt.

For Service Personnel Only: No action is required.

4560, 4561, 4562, and 4563

Description: Diskette drive optional tests—diskette drive ready test (FN 01) is being run. It verifies that the diskette drive ready circuitry and the diskette change function are working correctly.

Possible Cause: N/A

User Action: Refer to the diskette drive ready test (FN 01) in Chapter 3 in *3174 Customer Problem Determination* for the correct status code display sequence.

If the correct status codes do not appear as described in the test, request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive being tested.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive being tested.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4565

Description: Diskette drive optional test (FN 02). This is a prompt message for the diskette media scan.

Possible Cause: N/A

User Action: Insert the diskette to be scanned in the drive selected in the test request. Enter **1** and press **Enter**.

For Service Personnel Only: No action is required.

4566

Description: Diskette drive optional test (FN 02). The diskette media scan completed successfully. No defective tracks were found.

Possible Cause: N/A

User Action: Press **Enter** to obtain the 4001 prompt.

For Service Personnel Only: No action is required.

4567 WWWX XXXX TTHH TTHH

Description: Diskette drive optional test (FN 02). The diskette media scan has completed with one or more tracks identified as defective or requiring retries to read successfully.

WWWX = The number of defective tracks containing at least one unreadable sector.

XXXX = The number of tracks requiring retries before successfully reading a sector.

TTHH = The first track and head found to be defective or requiring retries. The second TTHH is presented only if more than one track is found defective or requires retries.

Possible Cause:

- Diskette
- Diskette drive
- Diskette drive adapter

User Action: Remove the tested diskette. Insert another diskette and rerun the diskette drive optional test.

1. If status code 4566 occurs for the second diskette, the first diskette has defective tracks on it and should be replaced with a new diskette.
 2. If status code 4567 occurs for the second diskette, the diskette drive is defective. Request service.
-

Status Codes

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive being tested.
2. Exchange the file adapter in location 21.

For Models 21H through 92R:

1. Exchange the diskette drive being tested.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4568

Description: A valid 3174 diskette is not installed in diskette drive 1 or a 2.4-MB diskette is installed in a 1.2-MB drive. If the diskette testing is continued, data will be destroyed on the diskette. Either install a valid diskette and continue the testing, or bypass the remainder of the test. A valid 3174 diskette is a Control, Utility, Limited Function Utility, Down stream Load (DSL), Dump, Library, or Encrypt/Decrypt diskette.

Possible Cause: N/A

User Action:

For Models 1L through 64R:

1. To bypass the test, key in **1** and press **Enter**.
2. To continue the test, first install a valid 3174 diskette, then key in **2** and press **Enter**.

For Models 81R through 92R:

1. To bypass the test, press **Advance** until **1** is displayed, then press **Enter**.
2. To continue the test, first install a valid 3174 diskette, then press **Advance** until **02** is displayed, then press **Enter**.

For Service Personnel Only: No action is required.

4569

User Action: A valid 3174 diskette is not installed in diskette drive 2 or a 2.4-MB diskette is installed in a 1.2-MB drive. If the diskette testing is continued, data will be destroyed on the diskette. Either install a valid diskette and continue the testing, or bypass the remainder of the test. A valid 3174 diskette is a Control, Utility, Limited Function Utility, Downstream Load (DSL), Dump, Library, or Encrypt/Decrypt diskette.

Possible Cause: N/A

User Action:

For Models 1L through 64R:

1. To bypass the test, key in **1** and press **Enter**.
2. To continue the test, first install a valid 3174 diskette, then key in **2** and press **Enter**.

For Models 81R through 92R:

1. To bypass the test, press **Advance** until **1** is displayed, then press **Enter**.
2. To continue the test, first install a valid 3174 diskette, then press **Advance** until **02** is displayed, then press **Enter**.

For Service Personnel Only: No action is required.

4570, 4571, 4572, and 4573

Description: Diskette drive optional tests—diskette drive ready test (FN 01) is being run. It verifies that the diskette drive ready circuitry and the diskette change function are working correctly.

User Action: Refer to the diskette drive optional tests in the *8250 Workstation Networking Module Problem Determination and Service Guide*.

If the correct status codes do not appear as described in the test, request service.

For Service Personnel Only: Exchange the failing WNM.

4580 PCNT PCNT 00HH MMSS

Description: Display the test log has been requested using test monitor FN 01, 02, 06, or 07. No error records are present.

PCNT = Count of test passes.

00HH = Elapsed time in hours of the test run.

MMSS = Elapsed time in minutes and seconds of the test run.

Possible Cause: N/A

User Action: Press **Enter** to obtain the 4001 prompt.

For Service Personnel Only: No action is required.

4581 PCNT PCNT 00HH MMSS

Description: Display the test log pass count and elapsed time has been requested using test monitor FN 06 or 07. Error records are present.

PCNT = Count of test passes.

00HH = Elapsed time in hours of the test run.

MMSS = Elapsed time in minutes and seconds of the test run.

Possible Cause: N/A

User Action: Press **Advance** to display the additional fields or press **Enter** to obtain the 4001 prompt.

For Service Personnel Only: No action is required.

4600

Description: A file allocation table error has occurred.

Possible Cause: A permanent media error occurred in the first file allocation table during a read operation. The code had to use the second file allocation table.

User Action: No action is required unless the controller performance is degraded because of an excessive number of errors. If performance is degraded because of excessive errors, perform one of the following actions:

1. For diskette (HG = 01 or 02), replace the diskette.
2. For fixed disk (HG = 03 or 04), reformat the fixed disk.

For Service Personnel Only: No action is required.

4601

Description: A directory error has occurred.

Possible Cause: A permanent media error occurred in the first copy of the root directory during a read operation. The code had to use the second copy of the root directory.

User Action: No action is required unless the controller performance is degraded because of an excessive number of errors. If performance is degraded because of excessive errors, reformat the fixed disk.

For Service Personnel Only: No action is required.

4602

Description: The cable errors counter has been reset.

Possible Cause: Test 4, option 3 was invoked.

User Action: No action is required. This is only an informational message.

For Service Personnel Only: No action is required.

4604

Description: A Canonical Names Display function request cannot be completed.

Possible Cause: An incorrect combination of directory and type of display was entered.

User Action: Retry with a valid combination of A/B inputs from the list below:

- Option A = 1, B = 1, 2, 3, 4, 5 or 6.
- Option A = 2, B = 1, 2, 3, 4 or 5.
- Option A = 3, B = 1, 2, 3, 4 or 5.
- Option A = 4, B = 1.

Status Codes

- Option A = 5, B = 1.
- Option A = 6, B = 1.

For Service Personnel Only: No action is required.

4605

Description: An unused or unassigned host address has been selected.

Possible Cause: N/A

User Action: Select a host address that has been assigned to a port and retry the test.

For Service Personnel Only: No action is required.

4606

Description: New configuration data has been received from the host. This configuration data is not in use until an IML is performed on the controller.

Possible Cause: N/A

User Action: No action is required. If you want to use the new configuration data, you will have to IML the controller.

For Service Personnel Only: No action is required.

4607

Description: An online test has been requested for an adapter that is disabled because there are errors or because it is not configured.

Possible Cause: N/A

User Action:

Warning: An IML disrupts operating terminals.

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3.
 - If the adapter is failing, a status code appears during the ALT 2 IML. Take the action specified for that code.
 - If the adapter is not configured, reconfigure the control disk and retry the online test.
3. Request service.

For Service Personnel Only: Exchange the adapter that was being tested using the online test.

4608

Description: Online tests are being performed by too many users at the same time.

Possible Cause: N/A

User Action: Wait. Retry the online test at a later time.

For Service Personnel Only: No action is required.

4609

Description: Online Test error. A configuration panel was selected in the test request, and a translation error occurred. The panel may have been modified on a personal computer without using the 3174 configuration procedures.

Possible Cause: N/A

User Action: The Control disk must be reconfigured to correct the panels that will not display. Refer to "How to Configure the Control Disk" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

4610

Description: Either the required hardware is not in the controller, or the controller is not configured to support the test request.

Possible Cause: N/A

User Action: Enter a different test request.

For Service Personnel Only: No action is required.

4611

Description: Online test error. A test function was requested that is already in use.

Possible Cause: N/A

User Action: Reenter the test request.

For Service Personnel Only: No action is required.

4612

Description: The port number entered in the test request is not valid with the hardware group number that was entered.

Possible Cause: N/A

User Action: Retry the test request with a valid port number.

For Service Personnel Only: No action is required.

4613

Description: The hardware group number entered in the test request is not present in the 3174.

Possible Cause: N/A

User Action: Verify that you entered a valid hardware group number. See Figure 2-2 on page 2-18 for a list of hardware group numbers.

1. If the hardware group number you entered is valid, verify that the hardware is present in the controller.
2. If the hardware is present in the controller, request service.

For Service Personnel Only: Exchange the FRU indicated by the HG number. Refer to Chapter 3 in the maintenance manual for your model.

4614

Description: Online test error. Data was entered that is incorrect for the test panel being used.

Possible Cause:

- Incorrect input characters entered.
- Tried to use fastpath when requesting a trace option.

User Action: Check the panel for the format that should be used and reenter the test request.

For Service Personnel Only: No action is required.

4615

Description: The parameters entered in the test request are not correct.

Possible Cause: An incorrect parameter was entered.

User Action: Check the panel that lists the desired test parameters and correct the test request.

For Service Personnel Only: No action is required.

4616 00

Description: The parameters entered in the test request are not correct.

Possible Cause: An incorrect parameter was entered.

User Action: Check the panel that lists the valid parameters and correct the test request.

For Service Personnel Only: No action is required.

4616 01

Description: The host ID or host address selected for the online test has either not been customized or is not to be included in the IML.

Possible Cause: N/A

User Action: Select a valid host ID or host address and retry the test.

For Service Personnel Only: No action is required.

Status Codes

4617

Description: Incorrect data was entered in the test request.

Possible Cause: N/A

User Action: Check the menu for the correct test request format and reenter the test request.

For Service Personnel Only: No action is required.

4618

Description: Test request /0,n was entered. This test request is not supported.

Possible Cause: N/A

User Action: To check the terminal status, use test 3 for 3270 terminals, or test 12 for ASCII terminals.

For Service Personnel Only: No action is required.

4619

Description: An incorrect key was pressed while running online tests.

Possible Cause: N/A

User Action: Check the input and retry the operation.

For Service Personnel Only: No action is required.

4620 01HGPN or 02HGPN

Description: Event logging mode has been changed. Intensive mode has been turned on (QA = 01) or off (QA = 02). The HG and PN identify the hardware group and port number from which the request was made.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4620 03

Description: Intensive log mode was changed to normal because the 76-hour timer expired. The 76-hour timer starts when the logging mode is set to intensive /1,7.

Alert Sent = None.

Possible Cause: 76-hour timer expired.

User Action: Restart intensive logging using online test /1,7.

For Service Personnel Only: No action is required.

4621

Description: An incorrect character was entered.

The valid characters are: a-z, A-Z, 0-9, and + < = > % & * " ' () , _ - . / : ; ?

Notes:

1. For the "Device" and "Model Number" fields:
 - Lower case a-z will be converted to upper case A-Z.
 - Leading and trailing blanks are allowed, but imbedded blanks are not allowed.
2. For "Serial Number" and "Plant of Manufacture":
 - a-z, A-Z, and 0-9 are allowed.
 - Lower case a-z will be converted to upper case A-Z.
 - Leading and trailing blanks are allowed, but imbedded blanks are not allowed.

Possible Cause: N/A

User Action: Enter valid characters.

For Service Personnel Only: No action is required.

4622

Description: The test cannot be performed with the central site control.

Possible Cause: N/A

User Action: Retry the test from a locally attached terminal or request another test.

For Service Personnel Only: No action is required.

4623

Description: An incorrect password was entered.

Possible Cause: N/A

User Action: Reselect the test and enter the correct password.

For Service Personnel Only: No action is required.

4624

Description: The vital product data is being updated by another user.

Possible Cause: N/A

User Action: Retry the request when the current update is completed.

For Service Personnel Only: No action is required.

4625

Description: Service personnel started a trace operation that has halted at the targeted SSC. Event logging is halted at this point.

Possible Cause: N/A

User Action: Request Service.

For Service Personnel Only: After the trace data has been reported to your next level of support, a Stop Trace command (Option 3 or 4) must be entered from /11 trace menu to enable event logging.

4626

Description: This function is not valid for the current host adapter number.

The host adapter number can be found in the Operator Information Area (OIA) of the terminal display. For example: 1A1, 2A1, and 3A1 are host ID numbers in which the numbers 1, 2, and 3 indicate the host adapter number.

The Online test has 3 modes: 1TEST, 2TEST, and 3TEST. 1TEST can be run only on host adapter number 1, 2TEST can only be run on host adapter number 2, and 3TEST can be run only on host adapter number 3.

Note: The host adapter can be either a single or multiple host connection adapter.

Possible Cause: N/A

User Action: Use the Change Screen Sequence (example: ALT and Insert keys) until the host adapter number found in the OIA is the same as the online test mode (1TEST, 2TEST, or 3TEST) that appeared in the message with the 4626 status code. Retry the test with matching adapter and test mode numbers.

For Service Personnel Only: No action is required.

4627

Description: The device connected to the port being tested was turned off.

Possible Cause: N/A

User Action: Switch on the power on the device and retry the test.

For Service Personnel Only: No action is required.

Status Codes

4628

Description: The trace is suspended.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4629

Description: Trace setup/configuration mismatch.

Possible Cause: The trace setup contains one or more items that do not match the current controller configuration.

User Action: Select trace options that match the controller configuration and retry the trace.

For Service Personnel Only: No action is required.

4630

Description: A start trace command has been entered, and a trace is already running.

Possible Cause: N/A

User Action: If you want to restart the trace, the stop trace command must be entered first; then, the start trace command can be entered.

For Service Personnel Only: No action is required.

4631

Description: A stop trace command was entered when the trace was already stopped.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4632

Description: The controller is busy and cannot accept the trace request that was entered.

Possible Cause: N/A

User Action: Reenter the trace request.

For Service Personnel Only: No action is required.

4633

Description: Trace initialization was requested after the trace was already started.

Possible Cause: N/A

User Action: Stop the trace and reenter the trace request.

For Service Personnel Only: No action is required.

4634

Description: A disk error occurred during an attempt to stop a trace. A status code is displayed on the operator panel.

Note: Some trace data may be lost.

Possible Cause: N/A

User Action: Use the status code on the operator panel to determine the cause of the disk failure.

For Service Personnel Only: No action is required.

4635

Description: A disk error occurred during an attempt to start a trace. A status code is displayed on the operator panel.

Note: The trace has started and is being written to machine storage.

Possible Cause: N/A

User Action: Use the status code on the operator panel to determine the cause of the disk failure.

For Service Personnel Only: No action is required.

4636

Description: Online trace error. An attempt was made to trace more than two asynchronous emulation adapter ports, which is the limit.

Possible Cause: N/A

User Action: Issue a Stop Trace command, and then start the trace for the new ports.

For Service Personnel Only: No action is required.

4637

Description: The trace entry is too long to fit on one screen.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4638

Description: A disk error occurred during an attempt to suspend a trace. A disk error status code is displayed on the 3174 operator panel and the trace is suspended.

Possible Cause: N/A

User Action: Use the status code on the 3174 operator panel to determine the cause of the disk failure.

For Service Personnel Only: No action is required.

4639

Description: All trace setup commands have been set up as "non-display."

Possible Cause: N/A

User Action: Change the setup options to allow the trace to be displayed and retry the trace.

For Service Personnel Only: No action is required.

4640

Description: A wrap test on the selected port has been completed successfully.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4641

Description: The requested wrap test was not performed, because a terminal is communicating with the port number that was entered in the test request.

Possible Cause: N/A

User Action: Select another test, or exit test mode.

For Service Personnel Only: No action is required.

Status Codes

4642

Description: A port number was entered that is not a valid terminal adapter port number.

Possible Cause: N/A

User Action: Retry the wrap test with a valid port number.

For Service Personnel Only: No action is required.

4643

Description: The selected function cannot be completed because the controller has deconfigured the function or an adapter.

Possible Cause:

- Insufficient storage in the controller
- Attempted to IML the controller without the control extension diskette

User Action: Use a PF key function to continue.

To run this function, upgrade the storage to support the function or adapter you are testing.

For Service Personnel Only: No action is required.

4644

Description: The Canonical Names Display function request cannot be completed.

Possible Cause: The controller is not configured for Central Site Change Management.

User Action: Change your response to configuration question 500 to the correct nonzero option. Retry the Canonical Names Display (/2,5) or Canonical Names Directory Refresh (/2,6) option.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

4645

Description: The save operation was successful.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4646

Description: The highlighted trace setup command is incorrect.

Possible Cause: N/A

User Action: Correct the highlighted command and retry the operation.

For Service Personnel Only: No action is required.

4647

Description: A Canonical Names Directory Refresh has completed successfully.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4648

Description: The trace must be stopped or suspended before the trace data can be displayed.

Possible Cause: N/A

User Action:

1. Type **3** and press **Enter** to stop the trace, or type **4** and press **Enter** to suspend the trace.
2. Enter the "Display Trace" command again.

For Service Personnel Only: No action is required.

4649

Description: The extended vital product data may not be current.

Possible Cause: N/A

User Action: Update the extended vital product data that has an asterisk (*) in front of the data field.

For Service Personnel Only: No action is required.

4650

Description: The Terminal Adapter logic that supports multiplexers (TMA/3299–2, 3, and 32) has failed, but the adapter may work as a direct connection to a terminal.

Possible Cause: N/A

User Action: Determine the type of failure as follows:

1. If this port is being used for a directly attached terminal, this failure will not affect normal operation.
2. If this port is being used to support terminals attached through a TMA/3299 multiplexer, request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the failing FRU Type 915x (Hardware group 26 or 27).

To determine the location of the failing FRU Type 915x, perform Online Test 2, Option 1.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4651

Description: Terminal adapter wrap failure. This can be a false failure if the signal cable is attached to the port being tested.

Possible Cause: N/A

User Action:

1. Disconnect the port signal cable and retry the test.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange the failing FRU Type 915x (Hardware group 26 or 27).

To determine the location of the failing FRU Type 915x, perform Online Test 2, Option 1.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4652

Description: Terminal Multiplexer Adapter or 3299 multiplexer wrap failure. This can be a false failure if the signal cable is attached to the port being tested.

Possible Cause:

- Terminal Adapter
- Terminal Multiplexer Adapter, Fiber Optic Terminal Adapter, or 3299
- Signal cable not removed from the port being tested
- Terminal Multiplexer Adapter, Fiber Optic Terminal Adapter, or External multiplexer signal cable
- Test was run to a 3299–1 (not supported)

User Action:

1. Disconnect the terminal signal cable and retry the test.
2. Request service.

For Service Personnel Only: Perform the following actions or go to MAP 0200.

If the terminal adapter port has not been tested, perform Test 10, option 1.

Status Codes

1. If all port wraps fail, the 3299, Terminal Multiplexer Adapter, or Fiber Optic Terminal Adapter or its input cable is failing.
 2. If any ports pass the wrap test, the 3299, Terminal Multiplexer Adapter, or Fiber Optic Terminal Adapter is defective.
- Refer to Chapter 3 in the maintenance manual for your model.

4653

Description: A multiplexer wrap test was requested on a terminal adapter port that does not have a TMA or an external multiplexer, such as a 3299, attached.

Possible Cause: N/A

User Action: Use the wrap test for the terminal adapter port.

For Service Personnel Only: No action is required.

4654

Description: Your terminal does not support extended vital product data (VPD).

Possible Cause: N/A

User Action: Request another test.

For Service Personnel Only: No action is required.

4655

Description: The Control disk is not customized for extended vital product data (VPD).

Possible Cause: N/A

User Action: The 3174 must be recustomized to support extended VPD. Refer to the *3174 Planning Guide* for details regarding extended VPD and question 802. (Question 802 must be answered with a 1 in order to support extended VPD.)

For Service Personnel Only: No action is required.

4656

Description: The downloading operation for extended vital product data (VPD) failed.

Possible Cause: N/A

User Action:

1. At the terminal, switch power Off, then back On and retry the extended VPD test.
2. Refer to the terminal documentation.
3. Request service for the terminal.

For Service Personnel Only: No action is required.

4657

Description: A Canonical Names Directory Refresh request cannot be completed.

Possible Cause: A Central Site Change Management update is in progress or Test 2, Option 6 has been requested from another terminal attached to this 3174.

User Action: Wait approximately 1 minute and retry the Canonical Names Refresh (/2,6) operation.

For Service Personnel Only: No action is required.

4658

Description: A Canonical Names Display function request cannot be completed.

Possible Cause: The selected diskette or fixed disk directory is not available in this controller.

User Action:

1. Insert the desired diskette into an available diskette drive. Ensure that if the diskette is a Control disk, it is customized for Central Site Change Management. Then, use the Directory Refresh option (/2,6) and retry the Canonical Names Display function.
2. Re-IML.

For Service Personnel Only: No action is required.

4659

Description: A Canonical Names Display function request of an LIB00001 subdirectory cannot be completed.

Possible Cause: The controller is not configured for Central Site Change Management.

User Action: If the controller should have a LIB subdirectory, then configure for Central Site Change Management (question 500 = 2). Retry the requested Canonical Names Display function (/2,5).

For Service Personnel Only: No action is required.

4660

Description: An incorrect line speed was specified as part of a transmit data request from the Asynchronous Emulation Adapter Port Test menu.

Possible Cause: N/A

User Action: Correct the line speed and retry the test.

For Service Personnel Only: No action is required.

4661

Description: An incorrect parity setting was specified as part of a transmit data request from the Asynchronous Emulation Adapter Port Test menu.

Possible Cause: N/A

User Action: Correct the parity setting and retry the test.

For Service Personnel Only: No action is required.

4662

Description: An incorrect flow control setting was specified as part of a transmit data request from the Asynchronous Emulation Adapter Port Test menu.

Possible Cause: N/A

User Action: Correct the flow control setting and retry the test.

For Service Personnel Only: No action is required.

4663

Description: An incorrect number of stop bits was specified as part of a transmit data request from the Asynchronous Emulation Adapter Port Test menu.

Possible Cause: N/A

User Action: Correct the number of stop bits required and retry the test.

For Service Personnel Only: No action is required.

4664

Description: A port wrap test was requested for a port that is in use.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Press **Enter** to start a disconnect sequence.
2. Press an AID generating key to cancel the test request. Use a key such as Clear or a program function (PF) key.

For Service Personnel Only: No action is required.

4665 01HG

Description: A forced disconnect for an asynchronous emulation adapter port is in progress.

Note: Enter was pressed in response to status code 4664. The disconnect process takes approximately 1 minute to complete. Status code 4666 is displayed to indicate the end of the disconnect.

Possible Cause: N/A

User Action: If status code 4666 does not display after 1 minute either the port is still in use or the asynchronous emulation adapter is failing. Retry the wrap test. If the port does not disconnect and it is not being used, request service.

Status Codes

For Service Personnel Only: Exchange the AEA adapter.
Refer to Chapter 3 in the maintenance manual for your model.

4666

Description: A forced disconnect for an asynchronous emulation adapter port wrap has completed.

Possible Cause: N/A

User Action: Press **Enter** to start the wrap test.

For Service Personnel Only: No action is required.

4667

Description: The AEA port wrap failed.

Possible Cause: The adapter did not respond.

User Action: The controller must be IMLed to bring the adapter back on line.

For Service Personnel Only: No action is required.

4668

Description: A disk change has occurred while user was requesting a Canonical Names Display function.

Possible Cause: The disk containing the directory being displayed has been changed.

User Action: Perform Test 2, option 6 (/2,6) and retry the requested function.

For Service Personnel Only: No action is required.

4669

Description: A Canonical Names display function was requested and no directory entries were found.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4670 0699

Description: A dump of a distributed function terminal (DFT) has been selected. The DFT should send a diagnostic power-on reset to the controller.

Possible Cause: N/A

User Action: Status code 4670 should be followed by alternating status codes of 4671 and 4672. If this does not occur, switch power off then back on at the DFT. 4673 appears, which means that the dump has ended before completion. The dump will have to be restarted the next time the DFT fails.

For Service Personnel Only: No action is required.

4671

Description: A dump of a distributed function terminal is in progress. This status code alternates with 4672.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4672

Description: A dump of a distributed function terminal is in progress. This status code alternates with 4671.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4673 0699

Description: A dump of a distributed function terminal has ended before completion.

Possible Cause:

- Terminal sent an incorrect request while dumping.
- Terminal was turned off or disconnected during the dump.
- An error occurred during communication with the terminal.

User Action: Retry the dump. If the problem continues, the dump will have to be performed the next time the DFT fails.

For Service Personnel Only: No action is required.

4674

Description: A trace has been started.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4675 0699

Description: A dump of a distributed function terminal has completed successfully.

Possible Cause: N/A

User Action:

- Remove the Dump diskette.
- If using a diskette drive, install the DSL or Control diskette.
- Switch the power Off then back On, on the DFT.

For Service Personnel Only: No action is required.

4676

Description: A trace has been stopped.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4677

Description: A trace has been set up.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4678

Description: A background trace has been started.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4679

Description: The response time monitor logs have been reset.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

Status Codes

4680

Description: The event log, traces, and cable errors have been reset.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4681

Description: No event logs or trace displays were found that met the specified search criteria.

Possible Cause: N/A

User Action: Enter another test request.

For Service Personnel Only: No action is required.

4682

Description: The LAN Adapter error counters have been reset.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4683

Description: The LAN Adapter link status counters have been reset.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4684

Description: The Asynchronous Emulation Adapter line error counters have been reset.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4685

Description: The requested test cannot be run because there are duplicated host addresses.

Possible Cause: N/A

User Action: Re-enter the test selection using the host id (/9,5,host id).

For Service Personnel Only: No action is required.

4686

Description: Unable to reset counter data.

Possible Cause: N/A

User Action: Retry the command.

For Service Personnel Only: No action is required.

4687

Description: LAN Adapter microcode error. Unable to obtain link statistics.

Possible Cause: N/A

User Action: No action is required unless controller operation is impaired:

1. Re-IML.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3. Contact your next level of support.

4688**Description:** There are no active links at this time.**Possible Cause:** N/A**User Action:** No action is required.**For Service Personnel Only:** No action is required.

4689**Description:** The link address requested for the link status summary test is not active.**Possible Cause:** N/A**User Action:** No action is required.**For Service Personnel Only:** No action is required.

4690**Description:** An incorrect link address was entered in the test request.**Possible Cause:** N/A**User Action:** Retry the test request with a valid link address.**For Service Personnel Only:** No action is required.

4691**Description:** A station has detected a signal loss for more than 250 milliseconds and has entered beaconing. This failure occurred during the LAN status test.**Possible Cause:** N/A**User Action:** Wait for the beaconing process to complete (approximately 2 minutes). Use "Test 1: Display Log" to determine which station is beaconing; then refer to the *IBM Token-Ring Network Problem Determination Guide*.**For Service Personnel Only:** No action is required.

4692**Description:** The LAN Adapter is detecting a beacon signal internally, or a beacon MAC frame is being received. This failure occurred during the LAN status test.**Possible Cause:**

- LAN Adapter
- Multistation access unit
- Lobe cables

User Action: Wait for the beaconing process to complete (approximately 2 minutes). Use "Test 1: Display Log" to determine which station is beaconing; then refer to the *IBM Token-Ring Network Problem Determination Guide*.**For Service Personnel Only:** No action is required.

4693**Description:** A lobe wire fault was detected during the LAN status test.**Possible Cause:**

- LAN Adapter
- Multistation access unit
- Lobe cables

User Action:

1. Contact the host operator to reactivate the links.
2. Refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. Refer to the *IBM Token-Ring Extended Problem Determination Guide*.

For Service Personnel Only:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Exchange the LAN Adapter.

Status Codes

4694

Description: This status code indicates how long the LAN status test has been running.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4695

Description: This status code is displayed after the LAN status test has been active for 10 minutes.

Possible Cause: N/A

User Action: Press **PF9** within the next 5 minutes to continue the test. If PF9 is not pressed, the test ends automatically.

For Service Personnel Only: No action is required.

4696

Description: The LAN status test is being performed at another terminal. This test can be performed only from one terminal at a time.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4697

Description: The LAN status test indicates that the LAN Adapter is closed.

Possible Cause:

- LAN
- LAN Adapter

User Action:

1. Use "Test 1: Display Logs" to determine why the LAN Adapter closed. A different status code should be in the event log for hardware group 31 or hardware group 41.
2. If another status code has not been logged, refer to CPD 0400 in the *3174 Customer Problem Determination Guide*.
3. Refer to the *IBM Token-Ring Network Problem Determination Guide*.

For Service Personnel Only:

1. Perform an **ALT 2 IML**; see page 2-3.
 2. Exchange the LAN Adapter.
-

4698

Description: The LAN status test indicates that the LAN Adapter is open.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4699

Description: There are no other active links to be displayed.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4700

Description: The internal wrap test has detected a failure in the ES Connection Adapter.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

1. Exchange the ES Connection Adapter (type 9810).
 2. If the problem persists, perform a dump operation on the 3174 and contact your next level of support.
-

4701

Description: The internal wrap test has run successfully.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4702

Description: An external wrap test detected a failure in the adapter, cable, or wrap plug.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. If you have been running an adapter/cable wrap test from a problem determination procedure in the *3174 Customer Problem Determination Guide*, return to that procedure.
2. If you have been running an adapter/cable wrap test for informational purposes, refer to the instructions in the *3174 Customer Problem Determination Guide* for running this wrap test.

For Service Personnel Only: Perform one of the following actions:

1. If you have been running an adapter/cable wrap test from a MAP procedure in the maintenance manual, return to that procedure.
 2. If you have been running an adapter/cable wrap test for informational purposes, refer to the instructions in the maintenance manual for running this wrap test.
-

4703

Description: The external wrap test has run successfully.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4704

Description: The ES Connection Adapter error counters have been reset.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

4705

Description: The requested test cannot be run because the controller is still online with at least one host.

Possible Cause: N/A

User Action: Take the controller offline using these steps:

1. Press **Clear**.
2. Key in **1700**.
3. Press **Enter**.

Retry the test.

Refer to online test in *3174 Customer Problem Determination Guide* for details.

For Service Personnel Only: No action is required.

Status Codes

4706

Description: Someone else is currently running the requested adapter test.

Possible Cause: N/A

User Action: Either wait until the other user has finished testing or have that user stop testing, and then retry your test.

For Service Personnel Only: No action is required.

4707

Description: The adapter is currently handling another request.

Possible Cause: N/A

User Action: Retry the test.

For Service Personnel Only: No action is required.

4708

Description: The requested channel is not connected to the network.

Possible Cause: N/A

User Action: Use Online Test 16, Option 1, to determine the possible cause and reconnect the channel if necessary.

For Service Personnel Only: No action is required.

4709

Description: The selected test has timed out before completion.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only:

1. Retry the test.
 2. Ensure that the adapter you are testing is plugged in correctly.
 3. Exchange the adapter.
 4. If the problem persists, perform the 3174 dump operation and contact your next level of support.
-

4710

Description: The requested drive for IML does not contain the requested level of microcode.

Possible Cause: N/A

User Action: Specify either a different IML drive or a different IML type.

For Service Personnel Only: No action is required.

4711

Description: The requested drive for IML is not in the controller. The drive number entered was incorrect.

Possible Cause: N/A

User Action: Request an IML from a drive that is in the controller.

For Service Personnel Only: No action is required.

4712

Description: A password has not been created for the requested operation.

Possible Cause: N/A

User Action: Recustomize the controller and answer question 98 with a valid password.

For Service Personnel Only: No action is required.

4713

Description: The option selected from the 3174 Operator Functions Menu requires a password to be entered.

Possible Cause: N/A

User Action: Enter the online test password to continue.

For Service Personnel Only: No action is required.

4714 HGPN

Description: An IML has been initiated using online test 14, option 1. The HG and PN identify the hardware group and port number from which the request was made.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

For Service Personnel Only: No action is required.

| 4714 01

| **Description:** Copy dump data process has been started.

| **Possible Cause:** Copy dump data process has been started.

| **User Action:** Change dump diskettes when required by the process.

| **For Service Personnel Only:** No action is required.

| 4714 16

| **Description:** Copy dump data process has ended without errors.

| **Possible Cause:** N/A normal operation.

| **User Action:** Remove last dump diskette from the disk drive.

| **For Service Personnel Only:** No action is required.

| 4714 51 to 69

| **Description:** Copy dump data process ended with errors.

| **Possible Cause:** An error was encountered during the copy dump data process.

| **User Action:** Repeat the copy dump data process using a different set of dump diskettes.

| **For Service Personnel Only:** Contact your next level of support.

4715

Description: You have selected online test /15 to view configured host summaries while you are in 2TEST or 3TEST. If you are in 2TEST, you can only see configured host(s) 2A through 2D. If you are in 3TEST, you can only see configured host(s) 3A through 3D.

Possible Cause: N/A

User Action: No action is required. This is an informational message only.

Note: If you want to see all of the configured host(s), you can do so from 1TEST.

For Service Personnel Only: No action is required.

4716

Description: You were attempting to update a 3174-provided address using online test 9 (/9,9,u), while the peer device was being enabled.

Possible Cause: N/A

User Action: Disable the device; refer to the *Peer Communication User's Guide* for details.

For Service Personnel Only: No action is required.

Status Codes

4717

Description: An incorrect password was entered for Online Test 9.

Possible Cause: N/A

User Action: Enter the password configured in question 98 during customization, or press **PF3** or **PF12** to cancel the test.

For Service Personnel Only: No action is required.

4718

Description: Online test 9 (/9,10,u) has detected a difference between the Token-Ring segment number and the bridge's reported segment number.

Possible Cause: N/A

User Action: Change the Token-Ring segment number used in test /9,10,u to match the segment number displayed in parentheses on the test screen.

For Service Personnel Only: No action is required.

4719

Description: This is a prompt to enter the password for online test 9.

Possible Cause: N/A

User Action: Enter the password configured in question 98 during customization, or press **PF3** or **PF12** to cancel the test. The password will NOT be displayed.

For Service Personnel Only: No action is required.

4720 B1B2

Description: There was a request from an Online test to perform a forced disconnect.

B1 = The port number that was disconnected.

B2 = The hardware group that was disconnected.

Possible Cause: N/A

User Action: None. This message is for logging purposes only.

For Service Personnel Only: No action is required.

4721

Description: An ISDN Adapter port has been selected, but the selected port is disabled.

Possible Cause: N/A

User Action:

1. Re-IML and retry the function.
2. Request service.

For Service Personnel Only: Replace the ISDN Adapter.

4722

Description: The 10-minute inactivity timer has expired. An ISDN test was initiated, but no interaction has occurred during a 10-minute interval.

Possible Cause: N/A

User Action: Reselect the test.

For Service Personnel Only: No action is required.

4723

Description: The process of opening the adapter has been started in response to a request to reopen the adapter (Online Test 9, Option 13).

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

4724

Description: The adapter you are trying to open with Online Test 9, Option 13, is currently in use and cannot be reopened.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

4725

Description: Test 9, Option 13 indicates that the LAN Adapter is closed and cannot be reopened.

Possible Cause: LAN Adapter.

User Action:

1. Use "Test 1: Display Logs" to determine why the LAN Adapter closed. A different status code should be in the event log for hardware group 31.
2. If another status code has not been logged, refer to CPD 0400, in the *3174 Customer Problem Determination Guide*.

For Service Personnel Only: No action is required.

4726

Description: A Disk Drive not ready error occurred while trying to save the 3174-Peer bridge status information.

Note: Status code 385-13 (Disk Drive Not Ready with the 3174-Peer qualifier) is logged when this error occurs.

Possible Cause: N/A

User Action:

1. Correct the Drive Not Ready condition (see status code 385-13) and press **PF4** to retry the save operation.
2. If the save is still unsuccessful, a different status code appears. Use this new status code to resolve the problem.

For Service Personnel Only: No action is required.

4727

Description: A Disk error occurred while trying to save the 3174-Peer bridge status information.

Note: Status code 393-13 (Disk Changed with the 3174-Peer qualifier) is logged when this error occurs.

Possible Cause: N/A

User Action:

1. Insert the correct diskette and press **PF4** to retry the save operation.
2. If the save is still unsuccessful, a different status code appears. Use this new status code to resolve the problem.

For Service Personnel Only: No action is required.

4728

Description: A Write Protect error occurred while trying to save the 3174-Peer bridge status information.

Note: Status code 391-13 (Write Protect with the 3174-Peer qualifier) is logged when this error occurs.

Possible Cause: N/A

User Action:

1. Correct the Write Protect condition (see status code 391-13) and press **PF4** to retry the save operation.
2. If the save is still unsuccessful, a different status code appears. Use this new status code to resolve the problem.

For Service Personnel Only: No action is required.

Status Codes

4729

Description: This is a prompt that occurs during Online Test 17, Option 2, for you to enter a LINKID to see specific status information for that link.

Possible Cause: N/A

User Action: Enter the LINKID to continue.

For Service Personnel Only: No action is required.

4730

Description: This is a prompt that occurs during Online Test 17, Option 4, for you to enter a session number to see specific status information for that link.

Possible Cause: N/A

User Action: Enter a session number to continue.

For Service Personnel Only: No action is required.

4731

Description: No route is available for the session number you have chosen during Online Test 17, Option 4.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

4732

Description: The LINKID you have chosen during Online Test 17, Option 4 is associated with a link that does not have valid status information.

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

4733

Description: The value you entered is not valid for the option you selected.

Possible Cause: N/A

User Action: Provide a valid response for the option you selected.

For Service Personnel Only: No action is required.

4734

Description: Some of the selection criteria was lost when preparing to display trace data because the Trace Display could not handle the number of traces that were setup to be displayed.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: To decrease the number of traces that were set up to be displayed, perform the following actions:

1. Disable the display function for some of the traces you had set up.
 2. Change the Enable (2) to Disable (1) under "Display Trace Control" on the Trace Setup Panel for the traces you no longer want to display.
-

4735

Description: For particular hardware groups, traces can not be displayed unless they were written to a disk. An attempt was made to display trace data for one of these hardware groups when the Trace Setup Mode was 1 or 2 at the time traces were to be displayed or the traces were started with Trace Setup Mode 1 or 2.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: If traces were NOT started with setup mode 3 or 4, perform one of the following actions:

1. Perform a dump operation and contact your next level of support.
2. Change the Setup Mode to 3 or 4, restart the traces, and recreate the event to be traced.

If traces were started with Setup Mode 3 or 4, make sure that the Setup Mode is a 3 or 4 and re-display the traces. For particular hardware groups, traces can only be displayed when Setup Mode 3 or 4 is used.

4736 01HG

Description: X.25 Token-Ring gateway local mode was activated.

Alert Sent = None.

Possible Cause: Online test /6,6 request was made to change X.25 Gateway communicate mode to local.

User Action: No action is required.

For Service Personnel Only: No action is required.

4737 01HG

Description: X.25 Token-Ring gateway communicate mode was activated.

Alert Sent = None.

Possible Cause: Online test /6,6 request was made to change X.25 Gateway local mode to communicate.

User Action: No action is required.

For Service Personnel Only: No action is required.

4738

Description: The local LAN adapter is Token-Ring.

Alert Sent = None

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

4739

Description: The local LAN adapter is Ethernet.

Alert Sent = None

Possible Cause: N/A

User Action: None. This is an informational message only.

For Service Personnel Only: No action is required.

4740

Description: Ethernet Adapter check.

Alert Sent = None

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Re-IML.
2. Request service.

For Service Personnel Only: Replace the Ethernet Adapter.

Status Codes

4741

Description: Media error.

Alert Sent = None

Possible Cause:

- Transceiver not working
- Cable fault
- Cable disconnected
- Hub not connected (10BASE-T)

User Action: Perform the following actions:

1. Make sure all the cables are connected.
2. Wait for the 3174 to reopen the adapter periodically. If the problem persists, request service.

For Service Personnel Only: Perform the following actions:

1. Perform an **ALT 2 IML**; see "Alt 2 IML Procedures for Testing the 3174" on page 2-3.
 2. Contact your next level of support.
-

4742

Description: AUI overcurrent error.

Alert Sent = None

Possible Cause: Cable damaged

User Action: Perform the following actions:

1. Make sure that all cables are connected.
2. Wait for the 3174 to reopen the adapter periodically. If the problem persists, request service.

For Service Personnel Only: Go to MAP 0630 in the maintenance manual for your model.

4990

Description: IML progression message. If this status code remains displayed longer than 30 seconds, a failure has occurred.

Possible Cause:

- Microcode
- Processor

User Action:

1. Re-IML.
2. Request service.
3. Verify operator panel adapter matches model number.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4991 to 4992

Description: IML progression message.

Possible Cause: N/A

User Action: No action is required.

For Service Personnel Only: No action is required.

4994 0100

Description: A Terminal Adapter is not present for an ALT 1 IML.

Possible Cause: Terminal adapter is:

- Missing (Models 1L through 14R only)
- Defective
- Plugged in incorrectly
- Plugged in after a defective adapter

User Action:

1. Re-IML.
2. Perform an **ALT 2 IML**; see page 2-3
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 915x in location 21, 22, 23, or 24.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

4995 0100

Description: Insufficient storage is installed to support the level of the Control disk being used.

Possible Cause:

- Defective or missing storage card
- The Control disk being used is not configured correctly for this controller

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. If ALT 2 fails, request service.
3. If ALT 2 is successful, refer to the "Planning for Controller Storage" in the *3174 Planning Guide* to determine how much storage you need to support the configuration on your Control disk.

Refer to "How to Display the Test Monitor Functions" in the *3174 Customer Problem Determination Guide*. Use FN 04 to determine how much storage is installed in the 3174.

For Service Personnel Only: Perform the processor/storage tests (HG87). Refer to "How to Run Hardware Group Test Alls" in the maintenance manual for your model.

For storage card plugging, refer to Chapter 3 in the maintenance manual for your model.

4995 0200

Description: Insufficient storage is installed to support customizing procedures.

Possible Cause: Defective or missing storage card

User Action: Request service.

For Service Personnel Only: Perform the processor/storage tests (HG87). Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

For storage card plugging, refer to Chapter 3 in the maintenance manual for your model.

4995 0300

Description: Insufficient storage is installed to support customizing procedures for configuration support level **S**.

Possible Cause:

- Storage card defective or missing
- The Control microcode being used is not for this controller

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. For Control disks at configuration level **S**, the controller must have the Token-Ring gateway feature. Refer to the *3174 Planning Guide*.

Status Codes

For Service Personnel Only: Perform the processor/storage tests (HG87). Refer to "How to Run Hardware Group Basic Tests" in the maintenance manual for your model.

For storage card plugging, refer to Chapter 3 in the maintenance manual for your model.

4997 0100

Description: An incorrect 4x parameter was entered at the ALT 1 40 prompt. Only 40, 41, 42, or 43 can be entered.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Enter the correct parameters.
3. Request service.

For Service Personnel Only: No action is required.

4997 0200

Description: A 40 was entered at the ALT 1 IML prompt requesting the Master Menu, and Utility microcode was not found.

Possible Cause: N/A

User Action: To display the Master Menu, you need the Utility microcode on a diskette or on the fixed disk.

For diskette drive:

Insert a Utility diskette in diskette drive 1 and perform the ALT 1 IML procedure on page 2-1.

For fixed disk:

To copy the Utility microcode to the fixed disk refer to "How to Copy Files" in the *3174 Utilities Guide*. When the copying is complete, perform the ALT 1 IML procedure on page 2-1 in this book.

For Service Personnel Only: No action is required.

4997 0300

Description: A 41, 42, or 43 was entered at the ALT 1 IML prompt requesting an operational IML, and Control microcode was not found.

Possible Cause: N/A

User Action:

1. Re-IML and reenter the correct parameters.
2. Verify that a Control diskette is installed or that Control microcode is on the fixed disk.

For Service Personnel Only: No action is required.

4998 0100

Description: 3174 microcode failure.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Contact your next level of support.

4999 to 5099

Description: IML progression message. The processor logic is waiting for other adapters in the controller (such as the Concurrent Communication Adapters) to complete their IML. If the Check Cond light comes on, or the status code remains displayed for at least 30 seconds (5090 may appear longer), a failure has occurred.

Possible Cause: Electromagnetic interference (table-top models only).

User Action: No action is necessary. However, if the status code remains displayed or the check condition indicator is lit, perform the following actions:

1. Re-IML.
2. Request service.

For Service Personnel Only: Perform an **ALT 2 IML**; see page 2-3.

For Models 1L through 14R:

1. Exchange FRU type 950x in location 18.
2. Contact your next level of support.

For Models 21H through 92R:

1. Exchange the planar board.
2. Contact your next level of support.

5201 0100

Description: Hardware/customizing mismatch. The Control disk is customized for a 3174 Model 1L, 11L, 12L, 21L, or 22L.

FRU ID either does not show a channel adapter card installed or shows the wrong one installed for your model.

Possible Cause: N/A

User Action:**For the NetView DM operator:**

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

Verify that the 3174 is a Model 1L, 11L, 12L, 21L, or 22L.

- If the 3174 is not a Model 1L, 11L, 12L, 21L, or 22L, the Control disk is not configured correctly. Refer to the *3174 Planning Guide*.
- If the 3174 is a Model 1L, 11L, 12L, 21L, or 22L, request service.

For Service Personnel Only:For Models 1L and 11L:

1. Verify that the channel adapter in location 11 is card type 9210.
2. Exchange the channel adapter.

For Models 21H and 21L:

1. Verify that the planar board is type 9630.
2. Exchange the planar board.

For Model 12L and 22L:

1. Verify that the ES Connection Adapter (card type 9810) is in location 11.
2. Exchange the adapter in location 11.

5202 0100

Description: Hardware/customizing mismatch. The controller is customized for a Type 1 Communication Adapter (EIA/V.35). The Type 1 adapter does not appear to be present in the controller.

Possible Cause:

- The Type 1 adapter is defective, not plugged in correctly, or not present.
- The Control disk is configured incorrectly.

User Action:**For the NetView DM operator:**

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:For Models 1L, 11L, 3R and 13R:

Check for FRU type 9253 in location 22 or 23.

- If FRU type 9253 is installed, request service.
- If FRU type 9253 is not installed, you must recustomize the controller. Refer to the *3174 Planning Guide*.

For Models 1R, 11R, 21R, 22L, 23R, 51R, 61R, 81R, 90R, and 91R:

Request service.

Status Codes

For Models 2R, 12R, 52R, 53R, 62R, 63R, 82R, and 92R:

You must recustomize the Control disk. Refer to the *3174 Planning Guide*.

For Service Personnel Only:

For Models 1L, 1R, 3R, 11L, 11R, and 13R:

Exchange FRU Type 9253 in location 22 or 23.

For Models 21R, 22L, 23R, 51R, 61R, 81R, 90R and 91R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5202 0200

Description: Hardware/customizing mismatch.

Possible Cause:

- Defective Type 1 Communication Adapter.
- An EIA or V.35 communication interface cable does not appear to be connected to the communication adapter.

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

Make sure that a valid interface cable is connected. See "Communication Adapter Cable Part Numbers" on page 2-35.

- If an incorrect cable is installed, contact your IBM representative to obtain the correct cable.
- If the correct cable is connected, request service.

For Service Personnel Only:

For Models 1L, 1R, 3R, 11L, 11R, and 13R:

1. Exchange FRU Type 9253 in location 22 or 23.
2. Exchange the communication cable.

For Models 21R, 22L, 23R, 51R, 61R, 81R, 90R and 91R:

1. Exchange the planar board.
2. Exchange the communication cable.

Refer to Chapter 3 in the maintenance manual for your model.

5203 0100

Description: Hardware/customizing mismatch. The controller is customized for a type 2 communication adapter (X.21). The type 2 adapter does not appear to be present in the controller.

Possible Cause:

- Defective type 2 adapter.
- The Control disk is configured incorrectly.

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the 3174 operator:

For Models 1L, 11L, 3R and 13R:

Check for FRU type 9273 or 9277 in location 22 or 23.

- If FRU type 9273 or 9277 is installed, request service.
- If FRU type 9273 or 9277 is not installed, you must recustomize the controller, refer to the *3174 Planning Guide*.

For Models 1R, 11R, 51R, 53R, 61R, 63R, 81R, and 91R:

You must recustomize the controller; refer to the *3174 Planning Guide*.

For Models 2R, 12R, 52R, 62R, 82R, and 92R:

Request service.

For Service Personnel Only:

For Models 1L, 2R, 3R, 11L, 12R, and 13R:

Exchange FRU Type 9273 or 9277 in location 22 or 23.

For Models 52R, 62R, 82R, and 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5203 0200

Description: Hardware/customizing mismatch. The Control disk is configured for a type 2 communication adapter (X.21). An X.21 communication interface cable does not appear to be connected to the communication adapter.

Possible Cause:

- Cable is not connected
- Wrong cable is connected
- Type 2 adapter is defective

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

Make sure that a valid X.21 interface cable is connected to the communication adapter. See "Communication Adapter Cable Part Numbers" on page 2-35.

- If an incorrect cable is installed, contact your IBM representative to obtain the correct cable.
- If the correct cable is connected, request service.

For Service Personnel Only:

For Models 1L, 2R, 3R, 11L, 12R, and 13R:

1. Exchange FRU Type 9273 or 9277 in location 22 or 23.
2. Exchange the interface cable.

For Models 52R, 62R, 82R, and 92R:

1. Exchange the planar board.
2. Exchange the interface cable.

Refer to Chapter 3 in the maintenance manual for your model.

5204 0100

Description: A Control disk configured for a Model 51R, 52R, 53R, 61R, 62R, 63R, or 64R is being used in another controller.

Possible Cause: N/A

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

1. Reconfigure the Control disk to match the controller model and installed features. Refer to the *3174 Planning Guide*.
2. Re-IML.

For Service Personnel Only: No action is required.

Status Codes

5204 0200

Description: A Control disk configured for a Model 1L, 11L, 1R, 2R, 3R, 11R, 12R, 13R, or 14R is being used in another model controller.

Possible Cause: N/A

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

1. Reconfigure the Control disk to match the controller model and installed features. Refer to the *3174 Planning Guide*.
2. Re-IML.

For Service Personnel Only: No action is required.

5204 0300

Description: A Control disk configured for a Model 81R, 82R, 90R, 91R, or 92R is being used in another model controller.

Possible Cause: N/A

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

1. Reconfigure the Control disk to match the controller model and installed features. Refer to the *3174 Planning Guide*.
2. Re-IML.

For Service Personnel Only: No action is required.

5204 0500

Description: A Control disk configured for a Model 21L, 21R, 22L, 23R, or 24R is being used in another model controller.

Possible Cause: N/A

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

1. Reconfigure the Control disk to match the controller model and installed features. Refer to the *3174 Planning Guide*.
2. Re-IML.

For Service Personnel Only: No action is required.

5204 0600

Description: A Control disk configured for Model 41R or 43R is being used in another model controller.

Possible Cause: N/A

User Action:

For the NetView DM operator:

1. Verify that the customization data sent in the transmission plan is correct for the Network ID and LUNAME specified in the canonical name used in your transmission plan.
2. If the failure continues, contact the network site 3174 operator.

For the network site 3174 operator:

1. Reconfigure the Control disk to match the controller model and installed features. Refer to the *3174 Planning Guide*.

2. Re-IML.

For Service Personnel Only: No action is required.

5206 0100

Description: Hardware/customizing mismatch. The Control disk is configured for a LAN Adapter. The LAN Adapter does not appear to be present in the controller.

Possible Cause:

- Defective or missing LAN Adapter.
- The Control disk is configured incorrectly.

User Action: Refer to "How to Display the Test Monitor Functions" in *3174 Customer Problem Determination Guide*. Use FN 04 to display the hardware configuration panel.

Look for FRU Type 935x on the panel.

- If 935x is present, request service.
- If 935x is not present, verify that the Control disk is configured correctly for your 3174.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU Type 935x, refer to the "Card Plugging Charts" in the maintenance manual for the location.

For Models 21H through 24R:

Exchange FRU type 935x in location 11, 12, 13, 14, or 15.

For Models 51R through 64R:

Exchange FRU type 935x in location 04.

For Model 90R:

Exchange the LAN Adapter FRU type 9545.

Refer to Chapter 3 in the maintenance manual for your model.

5207 0100

Description: Configuration/hardware mismatch.

The Control disk is configured for a 3174 with the IBM Token-Ring 3270 Gateway feature.

The controller does not have enough storage to support this configuration.

Possible Cause: N/A

User Action: Perform an **ALT 2 IML**; see page 2-3.

- If the ALT 2 fails, request service.
- If the ALT 2 is successful, verify that the Control disk is customized correctly for the model and features of your 3174.

For Service Personnel Only: Run Hardware Group 87 Tests. Refer to "How to Run Hardware Group Basic Test" in the maintenance manual for your model. Use HG87.

5208 0100

Description: 3174 MCODE microcode release level is not compatible with the MCUST CFG microcode.

Possible Cause: The MCUST CFG data sent by NetView DM is not compatible with the microcode present at the 3174 where the configuration data is being installed.

User Action: Re-send the configuration data at the correct level or correct the microcode level at the receiving 3174.

For Service Personnel Only: No action is required.

5208 0200

Description: 3174 MCODE microcode release level is not compatible with the MCUST RPQ microcode release level.

Possible Cause: The MCUST RPQ data sent by NetView DM is not compatible with the microcode present at the 3174 where the RPQ data is being installed.

User Action: Re-send the RPQ customization data at the correct level or correct the microcode level at the receiving 3174.

For Service Personnel Only: No action is required.

Status Codes

5208 0300

Description: 3174 Microcode release level is not compatible with the 3174 RPQ microcode release level.

Possible Cause: The 3174 RPQ microcode sent by NetView DM is not compatible with the microcode present at the 3174 where the 3174 RPQ microcode is being installed.

User Action: Re-send the 3174 RPQ microcode at the correct level or re-send the 3174 microcode release level that supports the RPQ.

For Service Personnel Only: No action is required.

5208 0400

Description: RPQ Microcode is not compatible with the RPQ customization data.

Possible Cause: The RPQ being installed is not included in the RPQ merge customization data.

User Action: Re-send the RPQ customization data or send the correct RPQ.

For Service Personnel Only: No action is required.

5208 0500

Description: 3174 MCODE microcode release level is not compatible with the MCUST AEA microcode release level.

Possible Cause: The MCUST AEA data sent by NetView DM is not compatible with the microcode level present in the receiving 3174.

User Action: Re-send the AEA customization data at the correct level or send the correct 3174 microcode release level.

For Service Personnel Only: No action is required.

5208 0600

Description: A patch to be installed On-Trial was sent to a 3174 that does not have an On-Trial version of the 3174 microcode present.

Possible Cause: N/A

User Action: Send and install the correct 3174 microcode On-Trial, or resend the patch and install it in production.

For Service Personnel Only: No action is required.

5208 0700

Description: The 3174 patch or maintenance level EC or RPQ number is not compatible with the microcode level present in the receiving 3174.

Possible Cause: N/A

User Action: Re-send the Patch or maintenance EC or RPQ at the correct level or send the correct 3174 microcode release level.

For Service Personnel Only: No action is required.

5208 0800

Description: 3174 MCODE microcode release level is not compatible with the MCUST PAM data.

Possible Cause: The MCUST PAM data sent by NetView DM is not compatible with the microcode level present in the receiving 3174.

User Action: Re-send the PAM customization data at the correct level or send the correct 3174 microcode release level.

For Service Personnel Only: No action is required.

5208 0900

Description: 3174 MCODE microcode release level is not compatible with the MCUST KDU data.

Possible Cause: The MCUST KDU data level sent by NetView DM is not compatible with the microcode level present in the receiving 3174.

User Action: Re-send the KDU customization data at the correct level or send the correct 3174 microcode release level.

For Service Personnel Only: No action is required.

5208 1000

Description: Insufficient storage is available at the receiving 3174 for this microcode release level.

Possible Cause: N/A

User Action: Additional storage must be installed before this microcode release level can be installed. Refer to "Planning for Controller Storage" in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5209 01HG S1S1 QAHG S2S2 QAHG

Description: Central site change management pretesting has failed.

The extended data contains additional status codes that explain the cause of the failure where:

S1S1 = Status code.

QAHG = Qualifier and hardware group.

S2S2 = Status code.

QAHG = Qualifier and hardware group.

Possible Cause: N/A

User Action: Perform the actions of the status codes contained in the extended data.

For Service Personnel Only: No action is required.

5230 0000 7XXX

Description: Either the Control microcode has not been configured or the Model/Attach Configuration panel is in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

- If the Control disk was not customized, you must perform the customizing procedure.
- If the Control disk is customized, reconfigure the Model/Attach panel to match your 3174 Controller. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5231 0000 7XXX

Description: Host BSC configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5232 0000 7XXX

Description: Host SDLC configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

Status Codes

5233 0000 7XXX

Description: Host X.25 configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5234 0000 7XXX

Description: Host Channel Non-SNA configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5235 0000 7XXX

Description: Host Channel SNA configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5236 0000 7XXX

Description: Port Assignment configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5237 0000 7XXX

Description: Response Time Monitor configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5238 0000 7XXX

Description: X.25 configuration panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the panel error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5239 00HG 7XXX

Description: The Patch data sets are in error. They were modified without using the 3174 Patch procedure.

0000, 0051, or 0052 may or may not appear as an additional field.

7XXX = Status code that explains the error. See status code 7XXX in this chart.

Possible Cause: N/A

User Action:

1. Re-IML.
2. You have a problem that is not recoverable. Use a back-up disk.

For Service Personnel Only: No action is required.

5240 00HG 7XXX

Description: The RPQ data sets are in error. The RPQ data sets were modified without using the 3174 Merge RPQ procedure.

0000, 0051, or 0052 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the RPQ Merge utility to display the panel and refer to the *3174 Utilities Guide* to resolve the error.

For Service Personnel Only: No action is required.

Status Codes

5241 0000 7XXX

Description: The Printer Authorization Matrix (PAM) data sets are in error. The PAM data sets were modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5242 0000 7XXX

Description: X.21 Host panel in error. This panel may have been modified without using the 3174 configuration procedures.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5243 00HG 0400

Description: Modify Keyboard error. Storage is insufficient to contain the keyboard name table.

00HG may or may not appear as an additional field.

Possible Cause: Microcode failure.

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: Contact your next level of support.

5243 0100

Description: Modify Keyboard error. A language specified in configuration question 121 does not match a language number specified in the Modify Keyboard procedure.

Possible Cause: N/A

User Action: Either change your response to question 121 or re-specify the language on the Modify Keyboard Master Panel. Refer to the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

5243 0200

Description: Modify Keyboard error. A keyboard ID specified in configuration question 137 has not been generated by the Modify Keyboard procedures.

Possible Cause: N/A

User Action: Correct customizing question 137, or perform the Modify Keyboard utility and generate or correct the ID, refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5243 0400

Description: Modify Keyboard error. Storage is insufficient to contain the keyboard name table.

Possible Cause: Microcode failure

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: Contact your next level of support.

5244 0000 7XXX

Description: LAN configuration panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5245 0000 7XXX

Description: LAN Address Assignment panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5246 0000 7XXX

Description: LAN Transmission Definition panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5247 0000 7XXX

Description: LAN Host panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

Status Codes

5248 0000 7XXX

Description: AEA and TCP/IP Configure panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5249 0000 7XXX

Description: Port Set panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5250 0000 7XXX

Description: Port to Port Set Map panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5251 0000 7XXX

Description: AEA and TCP/IP Station Set panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5252 0000 7XXX

Description: AEA and TCP/IP Default Destination panel in error.

0000 may or may not appear as an additional field.

7XXX = Status code that explains the error. This panel has been changed without using the 3174 configuration procedures.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5253 0000 7XXX

Description: Device Definition panel is in error.

0000 may or may not appear as an additional field.

7XXX represents the status code causing the failure.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5254 0000 7XXX

Description: Logical Terminal Assignment Panel in error.

0000 may or may not appear as an additional field.

7XXX represents the status code causing the failure.

Possible Cause: This panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5255 0000 7XXX

Description: Extended Vital Product Data panel is in error.

0000 may or may not appear as an additional field.

7XXX represents the status code that explains the panel error.

Possible Cause: This panel has been changed without using the 3174 configuration procedure.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5256 0000 7880

Description: The ISDN Port Definition Panel is in error.

7880 is the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Device Definition Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5257 0000 7XXX

Description: The APPN Node Definition panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the APPN Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

Status Codes

5258 0000 7XXX

Description: The APPN Network Resources panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the APPN Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5259 0000 7XXX

Description: The APPN Associated LUs panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the APPN Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5260 0000 7880

Description: The ISDN Adapter Definition panel is in error.

7880 is the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Device Definition Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5261 0000 7880

Description: The ISDN PUID Assignment panel is in error.

7880 is the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5262 0000 7XXX

Description: The COS Node Definition panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the COS Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5263 0000 7XXX

Description: The COS TG Definition panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the COS Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5264 0000 7XXX

Description: The COS TG Definition Continued panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the COS Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5265 0000 7XXX

Description: The MODE/COS Correlation panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the COS Configuration Utility to display the panel and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5266 0000 7XXX

Description: The TCP/IP Options menu contains an incorrect field.

7XXX represents the status code that explains the panel error.

Possible Cause: A field on the TCP/IP Options menu is incorrect.

User Action: Display the incorrect panel using the Define AEA and TCP/IP Configuration Utility, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5267 0000 7XXX

Description: The TCP/IP Routing Information panel contains an incorrect field.

7XXX represents the status code that explains the panel error.

Possible Cause: A field on the TCP/IP Routing Information panel is incorrect.

User Action: Display the incorrect panel using the Define AEA and TCP/IP Configuration Utility, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5268 0000 7XXX

Description: The TCP/IP Domain Name Services panel contains an incorrect field.

7XXX represents the status code that explains the panel error.

Possible Cause: A field on the TCP/IP Domain Name Services panel is incorrect.

User Action: Display the incorrect panel using the Define AEA and TCP/IP Configuration Utility, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

Status Codes

5269 0000 7XXX

Description: The TCP/IP Defined Nicknames panel contains an incorrect field.

7XXX represents the status code that explains the panel error.

Possible Cause: A field on the TCP/IP Defined Nicknames panel is in error.

User Action: Display the incorrect panel using the Define AEA and TCP/IP Configuration Utility, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5270 0000 7XXX

Description: The APPN Network Resources Qualifiers panel contains an incorrect field.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel file was changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the APPN Configuration Utility to display the panel, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5271 0000 7XXX

Description: The X.25 APPN Nodes panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

- Re-IML.
- Use the APPN Configuration Utility to display the panel, and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5272 0000 7XXX

Description: The X.25 Circuit Profiles panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the WAN Configuration Utility to display the panel, and refer to the *3174 Planning Guide* to resolve the error.

For Service Personnel Only: No action is required.

5273 0000 7XXX

Description: The Frame Relay Host panel is in error

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5274 0000 7XXX

Description: The Frame Relay Description plan is in error

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5275 0000 7XXX

Description: IML Link Edit phase 0 validation error. Frame Relay Index Assignment configuration panel in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without performing the configuration validity checks.

User Action: Re-IML.

For Service Personnel Only: No action is required.

5276 0000 7XXX

Description: The Frame-Relay Optional DLCI Definition panel is in error.

7XXX represents the status code that explains the panel error.

Possible Cause: The panel has been changed without using the 3174 configuration procedures.

User Action:

1. Re-IML.
2. Use the Configuration Utility to display the panel, and resolve the error using the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

5286 00HG

Description: A microcode failure has occurred.

00HG may or may not appear as an additional field.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

5288

Description: A patch processing failure has occurred.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only: Contact your next level of support.

5289

Description: A failure occurred during an IML, while processing a patch or selecting a test from the Master Menu.

Possible Cause: N/A

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: Contact your next level of support.

Status Codes

5290 01HG to 37HG

Description: A microcode failure has occurred.

00HG may or may not appear as an additional field.

Possible Cause: N/A

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: Contact your next level of support.

5290 3800

Description: A microcode failure has occurred. The 3174 Control Extension diskette was not found.

Possible Cause: The 3174 Extensions diskette was not loaded into the controller.

User Action: Load the 3174 Control Extension diskette into the controller and re-IML.

For Service Personnel Only: No action is required.

5800 to 5809

Description: An electronic update from your host of the 3174 microcode or customization data is in progress.

Possible Cause: N/A

User Action: Do not perform any controller activities that would interrupt the communications between the host and your 3174 while these status codes are displayed.

Do not open any diskette drive doors.

Do not perform an IML, ALT 1 IML, or ALT 2 IML.

Do not switch the power Off on the 3174.

This status code is erased from the status indicators when the update process has completed.

For Service Personnel Only: No action is required.

5812 01HG B1B2 B3B4 B5

Description: The customization data for this 3174 has been changed using the local 3174 customization utilities. This 3174 is customized for central site change management.

This is an informational message.

The extended data bytes show which diskette drive or fixed disk was used during the customization utility and what type of customization data was modified.

B1 = 01 – where:
01 = Control diskette.
02 = Utility diskette.
03 = Downstream Load diskette.

B2 = Variable contents
Meaning when bit is on:
Bit 0 = 1 = Configure data.
Bit 1 = 1 = KDU data.
Bit 2 = 1 = PAM data.
Bit 3 = 1 = AEA data.
Bit 4 = 1 = RPQ data.
Bit 5 = 1 = DSL data.
Bit 6 = 1 = Patch data.
Bit 7 = 1 = Microcode.

B3–B5 = Reserved.

For example, if bits 0 and 3 of byte 2 are on, then configure data and AEA data have been changed with the Customization utility.

Possible Cause: N/A

User Action: Notify your central site that a change has been made to the customization data on this 3174.

For Service Personnel Only: No action is required.

5901

Description: A controller offline dump is in progress. This status code should alternate with status code 5902. If 5901 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure occurs, retry the dump procedure.
2. If the failure continues, perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5902

Description: A controller offline dump is in progress. This status code should alternate with status code 5901. If 5902 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure occurs, retry the dump procedure.
2. If the failure continues, perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5903

Description: A controller offline dump is in progress. If 5903 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure has occurred, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

5904

Description: A controller offline dump is in progress. 5904 alternates with 5905. If 5904 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure has occurred, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5905

Description: A controller offline dump is in progress. 5905 alternates with 5904. If 5905 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure has occurred, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5907

Description: Controller dump prompt message.

Possible Cause: N/A

User Action: Remove the Dump diskette and if required, insert the Control diskette. The dump automatically resumes.

Note: If 5907 remains displayed after the Control diskette is inserted, remove the Control disk and reinsert it.

For Service Personnel Only: No action is required.

5908

Description: A controller dump is in progress. 5908 alternates with 5909. If 5908 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure has occurred, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.

2. Exchange the Control diskette before attempting another offline dump.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5909

Description: A controller offline dump is in progress. 5909 alternates with 5908. If 5909 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure has occurred, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.
2. Exchange the Control diskette before attempting another dump.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5910

Description: Controller dump prompt message.

Possible Cause: N/A

User Action: Remove the Control diskette if required, and insert the Dump disk. The dump resumes automatically.

Note: If 5910 remains displayed after the Dump disk is inserted, remove the Dump disk and reinsert it.

For Service Personnel Only: No action is required.

5912

Description: A controller offline dump is in progress. 5912 alternates with 5913. If 5912 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure occurs, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

Status Codes

5913

Description: A controller offline dump is in progress. 5913 alternates with 5912. If 5913 remains displayed, a failure has occurred.

Possible Cause:

- Microcode error
- Processor

User Action:

1. If a failure occurs, the dump has to be performed when another controller failure occurs because controller storage has been overlaid.
2. Perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only:

For Models 1L through 14R:

Exchange FRU type 950x in location 18.

For Models 21H through 92R:

Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

5914

Description: Controller dump prompt message. The Dump diskette is full.

Possible Cause: N/A

User Action: Remove the Dump diskette, and insert another Dump diskette to complete the dump.

Note: If 5914 remains displayed after the new Dump diskette is inserted, remove the new Dump diskette and reinsert it.

For Service Personnel Only: No action is required.

5916

Description: The dump has been completed successfully.

Possible Cause: N/A

User Action: Remove the Dump diskette; perform a normal IML.

For Service Personnel Only: No action is required.

5917 to 5919 WXYZ BNB BNB 99MU 00

Description: The dump is completed, but an error has occurred.

Possible Cause: N/A

User Action:

1. Record this status code and the additional fields.

For Models 1L through 64R:

Refer to "How to Analyze a 3174 Failure During a Dump" in the maintenance manual.

For Models 81R through 92R:

Refer to "How to Analyze a 3174 Dump Failure" in the maintenance manual.

2. Remove the Dump diskette.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Perform a normal IML.
5. Contact your next level of support to find out if your dump was valid.

For Service Personnel Only: No action is required.

5920

Description: An incorrect controller dump request was entered. The dump request parameters entered specified storage initialization. The contents of storage have been initialized.

Possible Cause: N/A

User Action: The dump has to be performed when the next controller failure occurs.

Do not specify storage initialization when requesting a dump.

For Service Personnel Only: No action is required.

5921 WXYZ BNB BNB 99MU 00

Description: The dump is completed, but significant portions of storage were found initialized.

See Status Code 5919 for explanation of additional fields.

Possible Cause: N/A

User Action:

1. Record this status code and the additional fields.

For Models 1L through 64R:

Refer to "How to Analyze a 3174 Failure During a Dump" in the maintenance manual.

For Models 81R through 92R:

Refer to "How to Analyze a 3174 Dump Failure" in the maintenance manual.

2. Remove the Dump diskette.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Perform a normal IML.
5. Contact your next level of support to find out if your dump was valid.

For Service Personnel Only: No action is required.

5922

Description: A recoverable Dump diskette error has occurred. Storage has not been overlaid.

Possible Cause: N/A

User Action:

1. Obtain a new Dump diskette and retry the dump.
2. If the failure continues, perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only: No action is required.

5923

Description: An unrecoverable Dump diskette error has occurred.

Possible Cause: N/A

User Action:

- When this failure occurs, the dump has to be performed again with a new Dump diskette when another controller failure occurs.
- If the failure continues, run diagnostics on the diskette drive being used to take the dump.

For Service Personnel Only: No action is required.

5924

Description: An unexpected machine check occurred while a controller dump was in progress.

Possible Cause:

- Processor
- Storage
- File adapter
- Microcode

User Action: The dump procedure has to be performed again when the next controller failure occurs because the contents of storage have been overlaid.

If the failure continues, perform an **ALT 2 IML**; see page 2-3.

Status Codes

For Service Personnel Only: No action is required.

5925

Description: An unexpected machine check occurred while a controller dump was in progress.

Possible Cause:

- Processor
- Storage
- File adapter
- Microcode

User Action: The dump procedure has to be performed again when the next controller failure occurs.

If the failure continues, perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only: No action is required.

5926

Description: A 3174 dump failed because the dump utility was unable to find the Control disk.

Possible Cause: Microcode

User Action: Perform one of the following actions:

- If the Control disk is in a diskette drive (HG = 01 or 02), press **Enter**.
- If the Control disk is on a fixed disk drive (HG = 03 or 04), enter the number of the drive that contains the Control disk you used for your IML.

After you have taken one of these actions, the dump will resume with status codes 5904 and 5905.

For Service Personnel Only: No action is required.

5927

Description: You entered incorrect data when attempting to recover from status code 5926.

Possible Cause: N/A

User Action: Perform one of the following actions:

- If the Control disk is in a diskette drive (HG = 01 or 02), press **Enter**.
- If the Control disk is on a fixed disk drive (HG = 03 or 04), enter the number of the drive that contains the Control disk you used for your IML.

After you have taken one of these actions, the dump will resume with status codes 5904 and 5905.

For Service Personnel Only: No action is required.

5928

Description: You entered a fixed disk drive number that does not have a control subdirectory, when attempting to recover from status code 5926.

Possible Cause: N/A

User Action: Determine the drive number that contains the Control disk and perform one of the following actions:

- If the Control disk is in a diskette drive (HG = 01 or 02), press **Enter**.
- If the Control disk is on a fixed disk drive (HG = 03 or 04), enter the number of the drive that contains the Control disk you used for your IML.

After you have taken one of these actions, the dump will resume with status codes 5904 and 5905.

For Service Personnel Only: No action is required.

5932 0xHG

Description: The wrong diskette has been inserted.

0X = 01 Insert the Control diskette.

0X = 02 Insert the previous Dump diskette.

0X = 03 Insert a new Dump diskette.

Note: The dump resumes automatically.

Possible Cause: N/A

User Action: If the failure continues, perform an **ALT 2 IML**; see page 2-3.

For Service Personnel Only: No action is required.

5937

Description: Controller dump prompt message.

Possible Cause: N/A normal operation.

User Action: Remove the dump diskette and insert secondary Control diskette. The dump automatically resumes.

For Service Personnel Only: No action is required.

5940

Description: Copy dump data prompt message.

Possible Cause: N/A normal operation.

User Action: Current dump diskette is full. Remove current dump diskette and insert next dump diskette. The copy dump data process automatically resumes.

For Service Personnel Only: No action is required.

5941

Description: Copy dump data prompt message.

Possible Cause: An error is encountered on the current dump diskette.

User Action: Remove the current dump diskette and mark it as BAD. Insert another 3174 dump diskette. Copy dump process will continue repeating the previous data for diskette in error.

For Service Personnel Only: No action is required.

5944

Description: Copy dump data process is in progress. 5944 alternates with 5945.

Possible Cause: N/A

User Action: None.

For Service Personnel Only: No action is required.

5945

Description: Copy dump data process is in progress. 5945 alternates with 5944.

Possible Cause: N/A

User Action: None.

For Service Personnel Only: No action is required.

5946

Description: Copy dump data process has been completed successfully.

Possible Cause: N/A

User Action: Pick up last dump diskette from the disk drive.

For Service Personnel Only: No action is required.

5949

Description: Copy dump data process failed to finish successfully.

Possible Cause: Dump diskette is defective.

User Action: Repeat the copy dump data process using different set of dump diskettes.

For Service Personnel Only: Contact your next level of support. Write down the type of 4714 error code in the LOGS.

Status Codes

7000

Description: 7000 appearing in the status indicators indicates normal progress.

Possible Cause: N/A

User Action: The Master Menu will be displayed on the customizing screen.

For Service Personnel Only: No action is required.

7001

Description: An incorrect character or value was entered.

Possible Cause: N/A

User Action: Choose one of the options available from the panel displayed.

For Service Personnel Only: No action is required.

7003

Description: The host specified in question 613 is incorrect.

Possible Cause: The host specified in question 613 was not specified as a host link in one of the host links, 1A through 1H.

User Action: Modify the value to be within the valid range.

For Service Personnel Only: No action is required.

7004

Description: A generic name definition is incorrect.

Possible Cause: The highlighted generic name definition contains prefix characters that overlap another generic name definition.

User Action: Modify the generic name definition so that it does not overlap another generic name definition.

For Service Personnel Only: No action is required.

7005

Description: Duplicate entries exist for a DLC type.

Possible Cause: A DLC type of 2 or 3 is specified on more than one row. There can be only one CPNAME defined for DLC type 2 (SDLC) or 3 (channel).

User Action: Delete one of the definitions or change the DLC type.

For Service Personnel Only: No action is required.

7006

Description: The highlighted CPNAME must be a previously defined CPNAME.

Possible Cause: The CPNAME was not defined on the Network Resources panel.

User Action: Change the CPNAME to a CPNAME defined on the Network Resources panel or add the CPNAME to the Network Resources panel.

For Service Personnel Only: No action is required.

7007

Description: The APPN wildcard host was not configured.

Possible Cause: A wildcard host was defined in Question 612, but the SNA host specified in Question 613 was not specified as 1B through 1H.

User Action: Define the SNA host in Question 613 on the Multi-Host Definition panel.

For Service Personnel Only: No action is required.

7009

Description: If a LAN gateway is configured, either Token-Ring or Ethernet must be specified for question 102.

Possible Cause: N/A

User Action: Re-specify your response to question 150 or 102.

For Service Personnel Only: No action is required.

7010

Description: The model and type of LAN adapter configured are not compatible.

Possible Cause: N/A

User Action: Using the following guidelines, verify that your responses to questions 100 and 102 are correct.

- If you are customizing a 3174 X3R, then question 102 must be 1.
- If you are customizing a 3174 X4R, then question 102 must be 2.
- If you are customizing a 3174 OXX, then question 102 must be 0 or 1.

If your responses to questions 100 or 102 are incorrect, re-specify your responses to these questions.

For Service Personnel Only: No action is required.

7011

Description: If TCP/IP is configured, Token-Ring or Ethernet must be selected for Q102.

Possible Cause: N/A

User Action: Re-specify the response to Q700 or Q102.

For Service Personnel Only: No action is required.

7012

Description: If an Ethernet Adapter is configured (question 102 = 2), the bridge and LAN Manager are not supported. Questions 651 and 652 must be N.

Possible Cause: N/A

User Action: Re-specify your response to question 102, or change your response to question 651 or 652, or both, to N.

For Service Personnel Only: No action is required.

7013

Description: If a LAN Adapter is configured (question 102 = 1 or 2), TCP/IP, a gateway, or APPN must also be configured.

Possible Cause: N/A

User Action: Perform one of the following actions:

- Configure TCP/IP (question 700 = x y, where y = 1 or 2).
- Configure a gateway (question 150 = 1 x).
- Configure APPN (question 510 = 1).
- Do not configure a LAN adapter (102 = 0).

For Service Personnel Only: No action is required.

7014

Description: The APPN DLUR NETID.CPNAME combinations are the same as the 3174 NETID.CPNAME combination.

Possible Cause: The DLUR NETID.CPNAME combinations in Q621.Q620 or Q623.Q622 are the same as the 3174 NETID.CPNAME combination (Q501.Q511).

User Action: The user needs to define a different DLUR NETID.CPNAME combination in either Q620 – Q621 or Q622 – Q623.

For Service Personnel Only: No action is required.

Status Codes

7015

Description: The Transmit I-Frame size configured (question 382) is not valid for the adapter type selected in question 102.

Possible Cause: N/A

User Action: Using the following guidelines, verify that your response to question 102 or 382 is correct.

- If a 4-Mbps LAN Adapter is installed, your response to question 382 must be a value in the range of 265 to 2042.
- If a 16/4-Mbps LAN Adapter is installed, your response to question 382 must be a value in the range of 265 to 2057.
- If an Ethernet Adapter is installed, your response to question 382 must be a value in the range of 265 to 1493.

For Service Personnel Only: No action is required.

7016

Description: When Q121 is the same on all configured primary hosts (1A–1H) and it is not 01 or 02, or when Q121 is different on configured primary hosts, Q139 on the configured CCAs must be 00.

Possible Cause: N/A

User Action: Change the Q139 response appropriately on configured CCAs.

For Service Personnel Only: No action is required.

7017

Description: When different host languages are configured, they must all be in a compatibility list, and they must all be in the same compatibility list.

Possible Cause: N/A

User Action: Check the responses to Q121 for each configured host and make sure that they are all in the same compatibility list (for example, CECP, Eastern European, Eastern European Cyrillic).

For Service Personnel Only: No action is required.

7018

Description: When different host languages are configured, they must all be in the same compatibility list.

Possible Cause: N/A

User Action: Check the responses to Q121 for each configured host and make sure that they are all in the same compatibility list (for example, CECP, Eastern European, Eastern European Cyrillic).

For Service Personnel Only: No action is required.

7019

Description: When the configured host languages are different, and all of them are in the CECP compatibility list, then Q123 (CECP) must be 1.

Possible Cause: N/A

User Action: Change response to Q123 on the 1A host to 1.

For Service Personnel Only: No action is required.

7020

Description: Your response to Question 060 (TCP/IP Buffer Space) must be a decimal value within the range specified on the TCP/IP Options menu.

Possible Cause: N/A

User Action: Respond to Question 060 with a valid value.

For Service Personnel Only: No action is required.

7021

Description: Token-Ring gateway or Token-Ring host attachment must be configured with TCP/IP support configured.

Possible Cause: N/A

User Action:

1. If TCP/IP support is not needed, turn the TCP/IP option off (second field, Question 700 = 0).
2. Configure either for a Token-Ring gateway (Question 150 = 1) or for Token-Ring host attachment (Question 101 = 7).

For Service Personnel Only: No action is required.

7022

Description: A route type is not defined for this router IP address or destination IP address on the TCP/IP Routing Information panel.

Possible Cause: N/A

User Action: Respond to the highlighted field in the Type column with a value listed at the top of the TCP/IP Routing Information panel.

For Service Personnel Only: No action is required.

7023

Description: A router IP address is required when defining a default router on the TCP/IP Routing Information panel.

Possible Cause: N/A

User Action: Type the IP address for the router defined as the default router on the TCP/IP Routing Information panel.

For Service Personnel Only: No action is required.

7024

Description: A destination IP address cannot be defined for a default router (D) on the TCP/IP Routing Information panel.

Possible Cause: N/A

User Action: Delete or space over the destination IP address defined for a default router on the TCP/IP Routing Information panel.

For Service Personnel Only: No action is required.

7025

Description: A destination IP address and a Router IP address must be defined for routes defined to a specific network (N), subnet (S), or TCP/IP host IP address (H) on the TCP/IP Routing Information panel.

Possible Cause: N/A

User Action: Define a Destination IP address and a Router IP address for every route defined to a specific network (N), subnet (S), or TCP/IP host IP address (H).

For Service Personnel Only: No action is required.

7026

Description: Only one default router may be defined on the TCP/IP Routing Information panel.

Possible Cause: N/A

User Action: Define only one default router on the TCP/IP Routing Information panel.

For Service Personnel Only: No action is required.

7027

Description: The Hostname field is a required field on the TCP/IP Domain Name Services panel.

Possible Cause: N/A

User Action: Define a host name.

For Service Personnel Only: No action is required.

Status Codes

7028

Description: The length of the combination of host name and domain name defined on the TCP/IP Domain Name Services panel exceeds 255 characters.

Possible Cause: N/A

User Action: Redefine the host name or domain name defined on the TCP/IP Domain Name Services panel so that the total of the two combined do not exceed 255 characters.

For Service Personnel Only: No action is required.

7029

Description: A domain name must be defined on the TCP/IP Domain Name Services panel when a name server IP address is defined.

Possible Cause: N/A

User Action: Define a domain name when a name server IP address on the TCP/IP Domain Name Services panel has been defined.

For Service Personnel Only: No action is required.

7031

Description: All fields in a row must be defined for a nickname on the TCP/IP 3174 Defined Nicknames panel.

Possible Cause: N/A

User Action: Define all the fields in a row if you are defining a nickname on the TCP/IP 3174 Defined Nicknames panel. Otherwise, delete any entries in a row.

For Service Personnel Only: No action is required.

7032

Description: A TCP/IP host cannot be a default destination if TCP/IP is not configured.

Possible Cause: N/A

User Action: Either choose a station number of an ASCII or IBM host as the default destination, leave the Session LT column blank, or configure the second field of Question 700 on the AEA and TCP/IP Configure panel for TCP/IP support (700 = X 1) or (700 = X 2).

For Service Personnel Only: No action is required.

7033

Description: An ASCII host cannot be a default destination if AEA (700 = 0 X) is not configured.

Possible Cause: N/A

User Action: Either choose a station number of a TCP/IP or IBM host as the default destination, leave the Session LT column blank, or configure the first field of Question 700 on the AEA and TCP/IP Configure panel for an AEA (Question 700 = 1 X).

For Service Personnel Only: No action is required.

7034

Description: A TCP/IP host cannot be a default destination for a printer.

Possible Cause: N/A

User Action: Choose a station number of an ASCII or IBM host as the default destination.

For Service Personnel Only: No action is required.

7035

Description: The APPN MS Alert CPNAME (Q614) is the same as the 3174 CPNAME (Q511).

Possible Cause: The MS Alert CPNAME in Q614 and the CPNAME in Q511 are the same.

User Action: Define a different MS Alert CPNAME in Q614.

For Service Personnel Only: No action is required.

7036

Description: Host Link specified in Q616 not valid.
Possible Cause: Host Link not specified as 1A through 1H.
User Action: Modify specified value to a correct value.
For Service Personnel Only: No action is required.

7037

Description: The print queue buffer size is not on an even boundary.
Possible Cause: N/A
User Action: Respond to Question 001 with an even number between 0000 and 1024.
For Service Personnel Only: No action is required.

7038

Description: The calculator function is not supported when the response to Question 138 = 2.
Alert Sent = None.
Possible Cause: N/A
User Action: Respond to Question 002 with a 0 or respond to Question 138 with a 0 or a 1.
For Service Personnel Only: No action is required.

7039

Description: Duplicate ISDN values are defined for the ISDN interface.
Alert Sent = None.
Possible Cause: ISDN values for one ISDN port have the same value.
User Action: Change the ISDN values so they are unique for each ISDN port.
For Service Personnel Only: No action is required.

7040

Description: The Token-Ring Network Address for the gateway (question 900) is identical to one of the addresses that has been defined and reserved for the 3174-Peer.
Possible Cause: N/A
User Action: Perform one of the following actions:

- Change the XXXX XX response to question 660.
- Change the response to question 900.

For Service Personnel Only: No action is required.

7041

Description: You have configured for 8 K frames on a Token-Ring Network running at 4 Mbps.
Possible Cause: N/A
User Action: Either change your response to question 386 to 0 to specify 4 K frames or change your response to question 384 to 1 or 2 to increase the speed of the 3174.
For Service Personnel Only: No action is required.

7042

Description: The Network option you have selected does not support Fixed TEI. The Terminal-end Point ID must be automatically assigned.
Possible Cause: N/A
User Action: Configure the Fixed TEI option with an N.
For Service Personnel Only: No action is required.

Status Codes

7043

Description: The Network option you selected supports only the Fixed TEI option. The Terminal-end Point ID must be manually assigned.

Possible Cause: N/A

User Action: Configure the Fixed TEI option with a Y.

For Service Personnel Only: No action is required.

7044

Description: You entered an ISDN number that has fewer than 4 digits.

Possible Cause: N/A

User Action: Enter an ISDN number with 4 digits.

For Service Personnel Only: No action is required.

7045

Description: You configured more ISDN DSPUs than the number of ISDN Adapters configured can support.

Possible Cause: N/A

User Action: Either configure for more ISDN Adapters in the Device Definition Utility or reduce the number of ISDN DSPUs (question 190).

For Service Personnel Only: No action is required.

7046

Description: You have defined more Token-Ring attached resources than the 3174 is configured to support (question 611).

Possible Cause: N/A

User Action: Delete the excessive highlighted resources or recustomize for a higher number of links.

For Service Personnel Only: No action is required.

7047

Description: More than eight adjacent Network Nodes were defined.

Possible Cause: More than eight Network Nodes were defined as being LAN attached or as being X.25 attached with a DTE address or an LCN defined.

User Action: Delete the excessive highlighted resources.

For Service Personnel Only: No action is required.

7048

Description: You have entered a Serving Network Node name on the Associated LUs panel that matches a CPNAME on the Network Resources panel, but the resource has not been defined as a Network Node.

Possible Cause: N/A

User Action: Either enter a different Serving Network Node name or delete the name.

For Service Personnel Only: No action is required.

7049

Description: A Network ID is duplicated in the Network Resources panel.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Recustomize APPN so that the Network ID name (question 501) does not appear in the Network Resources or Associated LUs panels.
2. Press **PF12** and the APPN configuration will be altered to remove the duplicates.

For Service Personnel Only: No action is required.

7050

Description: When you configure for APPN, a CPNAME must only appear in the Associated LUs panel as a Serving Network Node.

Possible Cause: N/A

User Action: Recustomize APPN or press **PF12** and the APPN configuration will be altered to remove duplicates.

For Service Personnel Only: No action is required.

7051

Description: APPN is configured and a Virtual Node Name (question 512) appears in the Network Resources or Associated LUs panel.

Possible Cause: N/A

User Action: Recustomize APPN or press **PF12** and the APPN configuration will be altered to remove duplicates.

For Service Personnel Only: No action is required.

7052

Description: APPN is configured and a LAN address (question 106 or 900) appears in the Network Resources panel.

Possible Cause: N/A

User Action: Recustomize APPN or press **PF12** and the APPN configuration will be altered to remove duplicates.

For Service Personnel Only: No action is required.

7053

Description: On the ISDN Adapter Definition panel, the adapters must be configured in numerical sequence. You have attempted to configure adapters 2, 3, or 4 without configuring the preceding adapter(s).

Possible Cause: N/A

User Action: Configure all ISDN Adapters in sequence.

For Service Personnel Only: No action is required.

7054

Description: You did not select a COS to be defined and you pressed Enter.

Possible Cause: N/A

User Action: Press **PF8** to advance to the MODE/COS Correlation panel or select a COS definition number and press Enter.

For Service Personnel Only: No action is required.

7055

Description: You have requested more LAN links in the Configure and/or APPN utility than this configuration can support.

Possible Cause: N/A

User Action: Reconfigure for fewer LAN links in the Configure or APPN utility.

For Service Personnel Only: No action is required.

7056

Description: You have specified APPN (question 510 = 1) and questions 501 (Network ID), 511 (APPN CPNAME), and 512 (APPN Virtual Node Name) do not have unique names.

Possible Cause: N/A

User Action: Provide unique names for questions 501, 511, and 512.

For Service Personnel Only: No action is required.

Status Codes

7057

Description: You specified 2.1 traffic (question 242 = 1) for a model that does not support APPN.

Possible Cause: N/A

User Action: Change your response to question 242 to 0.

For Service Personnel Only: No action is required.

7058

Description: You did not specify APPN after requesting 2.1 traffic.

Possible Cause: N/A

User Action: Either change your response to question 242 to 0 so that you are not requesting 2.1 traffic or change your response to question 510 to 1 to specify APPN.

For Service Personnel Only: No action is required.

7059

Description: Customization error in 3174-Peer.

Possible Cause: N/A

User Action: Reconfigure 3174-Peer.

For Service Personnel Only: No action is required.

7060

Description: 3174-Peer reconfigure errors. Not able to upgrade 3174-Peer.

Possible Cause: N/A

User Action: Reconfigure 3174-Peer.

For Service Personnel Only: No action is required.

7061

Description: You entered a MODE Name, but not a COS Name or you entered a COS Name, but not a MODE Name. Both fields must be specified.

Possible Cause: N/A

User Action: Enter a name in the highlighted field.

For Service Personnel Only: No action is required.

7062

Description: You entered a COS or COS Model number and pressed a key other than Enter.

Possible Cause: N/A

User Action: Press **Enter** to process the COS definition number or clear the fields and press **PF8** to advance to the MODE/COS Correlation panel.

For Service Personnel Only: No action is required.

7063

Description: You did not select a COS to be defined and you pressed the Enter key.

Possible Cause: N/A

User Action: Press **PF8** to advance to the MODE/COS Correlation panel or select COS and Model definition numbers and press **Enter**.

For Service Personnel Only: No action is required.

7064

Description: You selected a COS that was not defined to be used as a model or to be correlated to a MODE.

Possible Cause: N/A

User Action: Select a COS that has been defined or define the COS using the COS Definition panel.

For Service Personnel Only: No action is required.

7065

Description: You specified a model number without selecting a COS definition number and a COS definition number is required if a model is specified.

Possible Cause: N/A

User Action: Select a COS definition number.

For Service Personnel Only: No action is required.

7066

Description: You did not enter a valid MODE or COS name.

Possible Cause: N/A

User Action: Enter a name that has valid characters and is not an IBM Reserved name.

For Service Personnel Only: No action is required.

7067

Description: You entered a response with one or more characters that were not valid.

Possible Cause: N/A

User Action: Enter a response with valid characters.

For Service Personnel Only: No action is required.

7068

Description: You entered a response value that was outside the accepted range.

Possible Cause: N/A

User Action: Enter a response within the accepted range.

For Service Personnel Only: No action is required.

7069

Description: You defined a COS Name without entering a Transmission Priority and a Transmission Priority is required when a COS Name is defined.

Possible Cause: N/A

User Action: Enter a response for Transmission Priority.

For Service Personnel Only: No action is required.

7070

Description: You defined a COS Name but did not provide any definitions on the panel.

Possible Cause: N/A

User Action: Enter responses for at least one column on the panel or erase the COS name to delete the definition.

For Service Personnel Only: No action is required.

7071

Description: You did not define a COS Name and you tried to enter responses on the panel.

Possible Cause: N/A

User Action: Either define a COS Name on the Node Definition Panel or clear the fields to continue.

For Service Personnel Only: No action is required.

Status Codes

7072

Description: You did not respond to all of the fields in a column on the panel.

Possible Cause: N/A

User Action: Either enter a response for all fields in a column or leave the column entirely blank.

For Service Personnel Only: No action is required.

7073

Description: You entered a minimum value greater than its paired maximum value.

Possible Cause: N/A

User Action: Enter a minimum-maximum pair in which the minimum value is less than or equal to the maximum value.

For Service Personnel Only: No action is required.

7074

Description: You performed one of the following actions:

- You specified a defined COS Name that is already in use on the COS Node Definition panel.
- You specified a defined MODE Name that is already in use on the MODE/COS Correlation panel.

Possible Cause: N/A

User Action: Specify a unique COS or MODE Name.

For Service Personnel Only: No action is required.

7075

Description: You performed one of the following actions:

- You entered data in a column on the COS TG Definition Continued panel that is not defined on the TG Definition panel.
- You did not enter data in a column on the COS TG Definition Continued Panel that is defined on the TG Definition panel.

Possible Cause: N/A

User Action: Enter data only in columns that were defined on the TG Definition panel.

For Service Personnel Only: No action is required.

7076

Description: You entered a response in the # column that is out of range or is not a valid character.

Possible Cause: N/A

User Action: Enter a valid COS number.

For Service Personnel Only: No action is required.

7077

Description: You entered a response in the # column and specified a COS Name. A COS Name is not allowed when the # column is specified.

Possible Cause: N/A

User Action: Enter a response in the # column or the COS Name, but not both.

For Service Personnel Only: No action is required.

7078

Description: Customization error in COS.

Possible Cause: N/A

User Action: Reconfigure COS.

For Service Personnel Only: No action is required.

7079

Description: COS Reconfigure errors. Not able to upgrade COS.

Possible Cause: N/A

User Action: Reconfigure COS.

For Service Personnel Only: No action is required.

7080

Description: The terminal connected to port 0 is not communicating with the controller.

Possible Cause:

- Terminal is turned off or is defective.
- Terminal signal cable is disconnected or is defective.
- Terminal adapter
- Terminal Multiplexer Adapter or Fiber Optic Terminal Adapter
- 3299 Model 1, 2, 3, or 32
- 3299, Terminal Multiplexer Adapter, or Fiber Optic Terminal Adapter input cable
- The terminal is switched to another controller through an IBM 7232 dual control unit terminal multiplexer.

User Action:

1. The customizing terminal must be turned on.
2. Verify that the terminal signal cable is correctly connected.
If the terminal is connected through a 7232, use the change screen sequence to switch the terminal to the controller you are customizing.
3. Request service.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

7081 01HG

Description: An incorrect terminal is connected to port 0.

Possible Cause: N/A

User Action: Attach a correct device to port 0. For a list of valid terminals used for customizing, refer to Appendix A in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7082 01HG

Description: The terminal connected to port 0 has been turned off.

Possible Cause:

- Terminal
- Terminal signal cable disconnected or is defective.

User Action:

1. Turn on the terminal.
2. Verify that the terminal signal cable is correctly connected.

For Service Personnel Only: No action is required.

7082 02XX

Description: The terminal connected to port 0 has been disabled because of signal cable errors.

02XX = An additional status code

Possible Cause:

- Terminal
- Terminal signal cable disconnected or defective.

User Action:

1. Turn on the terminal connected to port 0.
2. Verify that the terminal signal cable is correctly connected.
3. See status code 2XX.
4. Request service.

For Service Personnel Only: Go to MAP 0200 in the maintenance manual for your model.

Status Codes

7083 01HG

Description: An incorrect request was received from the terminal connected to port 0.

Possible Cause: N/A

User Action: Verify that the display and keyboard are valid for customizing. Refer to the *3174 Utilities Guide* for a list of valid terminals used for customizing.

For Service Personnel Only: No action is required.

7084

Description: You responded to both fields of Question 110 with values greater than 0.

Possible Cause: N/A

User Action: Perform one of the following actions:

- If you are selecting an MLT storage level, set the second field of Question 110 to zero.
- If you are defining the exact amount of MLT storage, set the first field of Question 110 to zero.

For Service Personnel Only: No action is required.

7085

Description: For Question 110, you have entered an MLT size too large for the host being configured.

Possible Cause: N/A

User Action: Perform one of the following actions:

- If you are configuring for a Model 90R, change your response to the second field of Question 110 to 0000.
- If you are configuring for a 1A host for a Model 91R or 92R, change your response to the second field of Question 110 so that the MLT storage size is no greater than 128 K.
- If you are configuring for a 1A host for any other model, change your response to the second field of Question 110 so that the MLT storage size is no greater than 2784 K.
- If you are configuring for a 2A or 3A host, change your response to the second field of Question 110 so that the MLT storage size is no greater than 128 K.

For Service Personnel Only: No action is required.

7086

Description: For Question 800 (PAM), you cannot enter a combination of a 1 in the first response field and a 0 in the second response field if you have specified printer ports for hardware group 27 in the PAM.

Possible Cause: N/A

User Action: Either enter a 1 in the second response field of Question 800, or remove the hardware group 27 ports from the printer port field in the PAM.

For Service Personnel Only: No action is required.

7087

Description: You have defined more than 32 Coax Port Sets and 32 is the maximum number of Coax Port Sets allowed.

Possible Cause: N/A

User Action: Recustomize the Port Set panel so that you have 32 or fewer Coax Port Sets defined.

For Service Personnel Only: No action is required.

7088

Description: You have defined more than 24 AEA Port Sets and 24 is the maximum number of AEA Port Sets allowed.

Possible Cause: N/A

User Action: Recustomize the Port Set panel so that you have 24 or fewer AEA Port Sets defined.

For Service Personnel Only: No action is required.

7089

Description: Your response to Question 432 (Negotiated Window Size or PVC Window Size) on an X.25 single link host cannot be greater than 7 if your response to Question 431 (Packet Sequence Numbering) on the xA (primary) host for that link is 0.

Possible Cause: N/A

User Action: Either change your response to Question 432 to 7 or less, or change your response to Question 431 on the xA (primary) host to a value other than 0.

For Service Personnel Only: No action is required.

7090

Description: For Question 800 (PAM), you cannot enter a combination of a 0 in the first response field and a 1 in the second response field.

The 0 in the first response field indicates that the controller is not being customized for local copy capability.

The 1 in the second response field indicates that you want the printers attached to the Hardware Group 27 TA to have local copy capability.

Possible Cause: N/A

User Action: Perform one of the following actions:

- If you want to define the PAM, enter a 1 in the first response field.
- If you do not want to define the PAM, enter a 0 in the second response field.

For more information, refer to *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7091

Description: If 3174-Peer is configured (question 650 = Y), the model number (question 100) cannot be 8xR or 9xR.

Possible Cause: N/A

User Action: Either change the model number in question 100 or if you really have a Model 8xR or 9xR, change your response to Question 650 to N.

For Service Personnel Only: No action is required.

7092

Description: If 3174-Peer Bridge support is configured, then Token-Ring gateway, Token-Ring host-attached 3174 or APPN must be defined.

Possible Cause: N/A

User Action: Either deconfigure Bridge Support (question 651 = N) or configure one of the following questions:

- Token-Ring gateway (question 150 = 1)
- Token-Ring DSPU (question 101 = 7)
- APPN (question 510 = 1).

For Service Personnel Only: No action is required.

7093

Description: Token-Ring gateway is configured and the Token-Ring Network Address for the Gateway (question 900) or a DSPU address on the 940 panel is equal to the 3174-Peer Bridge Adapter Address (4000 xxxx xxzz where xxxx xx is the response to question 660).

Possible Cause: N/A

User Action: Perform one of the following actions:

- Change the xxxx xx response to question 660.
- Change the Token-Ring Network Address for the Gateway or the Token-Ring gateway DSPU address, whichever is identical to the 3174-Peer Bridge Adapter Address.

For Service Personnel Only: No action is required.

Status Codes

7094

Description: 3174-Peer Online Test Update was defined, but the online test password was not.

Possible Cause: N/A

User Action: Either do not define 3174-Peer Online Test Update or define an online test password.

For Service Personnel Only: No action is required.

7095

Description: You defined more DSPUs/Links in the Configure and/or APPN utilities than the Bridge configured in the 3174-Peer utility (question 651) can support.

Possible Cause: N/A

User Action: Either do not define Bridge support or configure fewer DSPUs (question 105 minus question 104) and/or APPN links.

For Service Personnel Only: No action is required.

7096

Description: You defined LAN Manager support (question 652 = Y) but did not define 3174-Peer Bridge support (question 651 = N).

Possible Cause: N/A

User Action: Either change your response to question 651 to Y or change your response to question 652 to N.

For Service Personnel Only: No action is required.

7097

Description: The 3174 Segment number (question 671) cannot equal the LAN Segment number (question 672).

Possible Cause: N/A

User Action: Change the response to question 671 or 672.

For Service Personnel Only: No action is required.

7098

Description: The 3174-Peer Bridge Adapter Address is identical to the Token-Ring Network Address of the 3174 (question 106) or the Token-Ring Network Address of the Gateway (question 107).

Possible Cause: N/A

User Action: Either change the response to question 660 or change the responses to question 106 or 107, whichever is the duplicate.

For Service Personnel Only: No action is required.

7099

Description: The 3174-Peer Bridge Adapter Address (question 660) is identical to an APPN link address.

Possible Cause: N/A

User Action: Either change the response to question 660 or change the APPN link address that is identical to the 3174-Peer Bridge Adapter Address.

For Service Personnel Only: No action is required.

7100

Description: The response to question 661 is not valid.

Possible Cause: N/A

User Action: Change the response to question 661 to 2052 or 4472.

For Service Personnel Only: No action is required.

7101

Description: Model and type of host attachment you selected are not compatible.

Possible Cause: N/A

User Action: Verify that your response to questions 100 and 101 is correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7102

Description: Your response is incorrect. Question 744 must be answered with 1 when the response to question 722 is AH and the response to question 765 is 1.

Possible Cause: N/A

User Action: Re-specify your response to question 744 to 1 or change the response to question 765 to 0.

For Service Personnel Only: No action is required.

7103

Description: The range specified between questions 104 and 105 is greater than what the model specified in question 100 supports.

Possible Cause: N/A

User Action: Determine the valid range for the model specified in question 100, and then change your response to question 104 and/or 105 accordingly.

For Service Personnel Only: No action is required.

7104

Description: Your response to question 105 is incorrect. You have exceeded the controller addresses limit.

Possible Cause: N/A

User Action: Compare questions 104 and 105, and re-specify your response to one of these questions.

For Service Personnel Only: No action is required.

7105

Description: Controller address must be a hexadecimal multiple of 16.

Possible Cause: N/A

User Action: Verify your response to question 104 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7106

Description: Answer to question 105 is incompatible with the Host type.

Possible Cause: N/A

User Action: Answer must be 00 unless the Token-Ring gateway feature is installed.

For Service Personnel Only: No action is required.

7107

Description: The controller address for more than 16 devices is incorrect.

Possible Cause: N/A

User Action: The leftmost digit of the controller address must be an even number if more than 16 devices are attached. Verify that your response to question 104 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

Status Codes

7108

Description: Type of host attachment and language are not compatible.

Possible Cause: N/A

User Action: Verify that your responses to questions 101 and 121 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7109

Description: The controller upper-limit address must be a zero if your response to question 116 is not zero.

Possible Cause: N/A

User Action: Verify that your responses to questions 105 and 116 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7110

Description: Duplicate addresses were entered for questions 106 (Network address of the 3174) and 107 (Network address of the Network 3270 Gateway).

Possible Cause: N/A

User Action: Verify that your responses to questions 106 and 107 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7111

Description: You have specified a controller address with the leftmost digit being odd and a terminal address with a value greater than 15.

Possible Cause: N/A

User Action: Either define terminal addresses with a value of 15 or less, or re-specify your response to question 104 so that the leftmost digit of the controller address is even.

For Service Personnel Only: No action is required.

7112

Description: Both response fields must be either a zero or a nonzero.

Possible Cause: N/A

User Action: Verify that your response to question 127 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7113

Description: Your response is incorrect. You cannot have a 3, 4, or 5 as the first digit, or 3 as the second digit, of your response to question 127 with the type of host attachment that was specified in question 101.

Possible Cause: N/A

User Action: Re-specify your response to question 127.

For Service Personnel Only: No action is required.

7114

Description: Your response is incorrect. Question 116 must be answered with a 1 or 2 when question 110 has a non-zero response.

Possible Cause: N/A

User Action: Re-specify your response to question 116, or change your response to question 110 to a 0.

For Service Personnel Only: No action is required.

7115

Description: The language selected is not compatible with the response specified for question 123.

Possible Cause: N/A

User Action:

1. Change 123's response to a 0, or
2. Change 121's response.

For Service Personnel Only: No action is required.

7116

Description: The response to question 116 must be non-zero if the response to question 110 on the Primary Host panel is non-zero.

Possible Cause: N/A

User Action: Change your response to question 116 to a non-zero response.

For Service Personnel Only: No action is required.

7117

Description: Your responses are incompatible.

Possible Cause: N/A

User Action: Verify that your response to question 132 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7118

Description: This language is incompatible with the alternate keyboard you selected.

Possible Cause: N/A

User Action: Verify that your responses to questions 132 and 121 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7119

Description: This language is incompatible with the (unmodified) modifiable keyboard you selected.

Possible Cause: N/A

User Action: Verify that your responses to questions 136 and 121 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7120

Description: This language is incompatible with the (modified) modifiable keyboard you selected.

Possible Cause: N/A

User Action: Verify that your responses to questions 137 and 121 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7121

Description: The total number of keyboards allowable is four.

Possible Cause: N/A

User Action: Verify that your responses to questions 136 and 137 are correct, and re-specify your responses to these questions.

For Service Personnel Only: No action is required.

Status Codes

7122

Description: Your response is incorrect. If you respond to question 138, you must have at least one response to question 136.

Possible Cause: N/A

User Action: Verify that your responses to questions 136 and 138 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7123

Description: This language is incorrect when decompression is configured.

Possible Cause: N/A

User Action: Verify that your response to questions 165 and 121 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7124

Description: This language is incorrect with the attribute select keyboard you selected.

Possible Cause: N/A

User Action: Verify that your responses to questions 166 and 121 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7125

Description: This language is incorrect with the response to question 141.

Possible Cause: N/A

User Action: Either change your response to question 141 to an A, or change your response to question 121.

For Service Personnel Only: No action is required.

7126

Description: Decompression is incorrect with the language configured for the primary host.

Possible Cause: N/A

User Action: Change your response to question 165 to 0.

For Service Personnel Only: No action is required.

7127

Description: The response to question 116 is valid on a SNA system only.

Possible Cause: N/A

User Action: Either change your response to question 116 to a 0, 1, or 2, or change the "Host Attach" entry on the Multi-Host Definition panel for the host ID in error.

For Service Personnel Only: No action is required.

7128

Description: The response to question 110 cannot be zero when the response to question 101 is M.

Possible Cause: N/A

User Action: Either change the response to question 110 to non-zero, or change the response to 101 to a value of 1-7.

For Service Personnel Only: No action is required.

7129

Description: You must provide a logical channel identifier for a PVC host.

Possible Cause: N/A

User Action: Either provide an LCID in question 402, or change the circuit type in question 401.

For Service Personnel Only: No action is required.

7130

Description: You responded to question 462, but did not respond to question 461. To define a range of logical channel identifiers for incoming calls, both questions must be answered.

Possible Cause: N/A

User Action: Change your responses to questions 461 and 462 so that either both are blank, or neither are blank and your response to question 461 is less than or equal to your response to question 462.

For Service Personnel Only: No action is required.

7131

Description: The response to question 139 must be 01 when using X.21 Switched line protocol on the Concurrent Communication Adapter and the response to question 121 is 02 for the primary host on this link.

Possible Cause: N/A

User Action: Change your response to question 139 to 01 of the Concurrent Communication Adapter in error.

For Service Personnel Only: No action is required.

7132

Description: The response to question 139 cannot be 02 when using X.21 Switched line protocol on the Concurrent Communication Adapter, and the response to question 121 is 01 for the primary host on this link.

Possible Cause: N/A

User Action: Change your 02 response to question 139 of the Concurrent Communication Adapter in error.

For Service Personnel Only: No action is required.

7133

Description: The response to question 139 must be 00 when the response to question 121 for the primary host on the primary link is not 01 or 02.

Possible Cause: N/A

User Action: Change your response to question 139 to 00 on the primary host.

For Service Personnel Only: No action is required.

7134

Description: The response to question 179 must end with 00 if the first digit of the response is 0.

Possible Cause: N/A

User Action: Change the last 2 digits of the response to 00.

Refer to question 179 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7135

Description: The last digit in the response to question 179 must not be 0 when the first digit is 1 or 3.

Possible Cause: N/A

User Action: Change the last digit in your response to a value greater than 0. Refer to question 179 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

Status Codes

7136

Description: The last digit in the response to question 179 must be 0 when the first digit is 2.

Possible Cause: N/A

User Action: Change the last digit in your response to 0. Refer to question 179 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7137

Description: Customization mismatch between the responses for local format storage on your secondary host and the primary host.

Possible Cause: N/A

User Action: Change either the configuration for the primary host or for your secondary host. Refer to question 179 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7138

Description: The amount of 3174 storage allocated for local format storage exceeds the amount allowed for your configuration. The total amount of storage allocated for all configured hosts cannot exceed 1.5 MB.

Possible Cause: N/A

User Action: Refer to question 179 in the *3174 Planning Guide*. You must decrease the amount of storage allocated for local format storage. Refer to "Planning for Controller Storage" in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7139

Description: Your response is incorrect. The feature selected is not compatible with the model selected.

Possible Cause: N/A

User Action: Verify that your response to question 100 and questions 110, 310, 317, and 365 are correct.

For Service Personnel Only: No action is required.

7140

Description: Your response is incorrect. Your response to question 101 should be 1 when question 340 is equal to 2.

Possible Cause: N/A

User Action: Verify that your responses to questions 340 and 101 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7141

Description: The 253 port address limit has been exceeded.

Possible Cause: N/A

User Action: Assign fewer addresses to the ports. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7142

Description: Your response is incorrect. Your response to question 340 must be equal to 0 or 2 if your response to question 317 is equal to 1.

Possible Cause: N/A

User Action: Verify that your responses to questions 340 and 317 are correct, and re-specify your response to these questions. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7143

Description: The adapter type is not compatible with the feature selected.

Possible Cause: User entered conflicting responses to the "Adapter Type" field on the Multi-Host Definition Panel and one or more of the following questions: 310, 317, and 365.

User Action: Verify that your responses to the questions are correct and re-specify the responses.

For Service Personnel Only: No action is required.

7144

Description: The response to question 150 must be 1 when the response to question 100 is 90R.

Possible Cause: N/A

User Action: Respond to question 150 with 1.

For Service Personnel Only: No action is required.

7145

Description: Your response is incorrect. You must select the retry feature in question 360 in order to configure the retry timing feature in question 361.

Possible Cause: N/A

User Action: Verify that your responses to questions 360 and 361 are correct, and re-specify your response to these questions. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7146

Description: The UDX number on the UDX Selection Panel was not specified.

Possible Cause: N/A

User Action: Enter a valid UDX number on the UDX Selection Panel.

For Service Personnel Only: No action is required.

7148

Description: Your response is incorrect. Your response to question 100 must specify Model 1R, 11R, 51R, 61R, 81R, or 91R, when question 365 is equal to 0.

Possible Cause: N/A

User Action: Enter the correct model number for question 100 or change your response to question 365. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7149

Description: The dial number must be given as the response to question 368 if the response to question 367 is equal to 1.

Possible Cause: N/A

User Action: Verify that your responses to questions 367 and 368 are correct, and re-specify your response to these questions. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

Status Codes

7150

Description: If a response is given to question 368, then the response to question 367 must be equal to 1.

Possible Cause: N/A

User Action: Verify that your responses to questions 367 and 368 are correct, and re-specify your response to these questions. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7151

Description: The response to question 317 is not compatible with the host attachment specified. The host attachment is specified in question 101 or on the Multi-Host Definition panel if question 101=M.

Possible Cause: N/A

User Action: Change your response to question 317, or change the response to the host attachment. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7152

Description: A request for a Graphics Query Reply requires a Graphics Input length to be specified.

Possible Cause: N/A

User Action: Specify a Graphics Input length. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7153

Description: Your response is incorrect. The Last Line and Status Line fields are incompatible.

Possible Cause: N/A

User Action: Enter compatible responses. If Last Line Reserved field option is Y, then:

- Status Character Set must be 0-2.
- Status Line Clear option must be 0-3.
- Use Cursor Sequence on Status Line must be Y or N.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7154

Description: Your response is incorrect. The Cursor Class and the Cursor Sequence are incompatible or the hex data is incorrect.

Possible Cause: N/A

User Action: Ensure that the hex data is valid and that the correct responses have been entered as follows:

- If you specified 0 for the Cursor Class, you must specify the Cursor Sequence to be 10 characters.
- If you specified 1 for the Cursor Class, you must specify the Cursor Sequence to be 8 characters.
- If you specified 2 or 5 for the Cursor Class, you must specify the Cursor Sequence to be 4 characters.
- If you specified 3 or 4 for the Cursor Class, you must specify the Cursor Sequence to be 2 or 4 characters.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7155

Description: Duplicate ASCII Sequences were defined on the User Defined Inbound Sequences panel.

Possible Cause: N/A

User Action: Change duplicate ASCII sequences to non-duplicate sequences. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7156

Description: Your response is incorrect. You must enter a valid hex response when defining the Line Entry.

Possible Cause: N/A

User Action: Enter a valid Hex Data Response. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7157

Description: Your response is incorrect. You must assign addresses to 3270 ports before you can assign addresses to ASCII ports.

Possible Cause: N/A

User Action: Check your response to configuration question 116. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7158

Description: Your response is incorrect. Models 51R and 52R do not support ASCII hosts while configured for the Token-Ring Network 3270 Gateway feature; therefore, port addresses cannot be assigned.

Possible Cause: N/A

User Action: Check your responses to configuration questions 100 and 116. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7159

Description: Your response is incorrect. Models 53R, 81R, 82R, 91R, and 92R do not support ASCII hosts; therefore, port addresses cannot be assigned.

Possible Cause: N/A

User Action: Check your responses to configuration questions 100 and 116. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7160

Description: Your response is incorrect. The first character entered was not an alphabetic character.

Possible Cause: N/A

User Action: Change the first character to an alphabetic character.

For Service Personnel Only: No action is required.

7161

Description: If you answered question 500 with a non-zero response, you must answer question 502.

Possible Cause: N/A

User Action: Respond to question 502.

For Service Personnel Only: No action is required.

7162

Description: The answer to question 500 is incompatible with the Token-Ring Gateway feature.

Possible Cause: N/A

User Action: Change the answer to question 500 to a 0 or 1.

For Service Personnel Only: No action is required.

Status Codes

7163

Description: Your response is not valid. The logical channel addresses (question 240) for the host IDs listed are duplicated. The logical channel address must be unique for each host ID.

Possible Cause: N/A

User Action: Reconfigure the host IDs listed with unique logical channel addresses.

For Service Personnel Only: No action is required.

7164

Description: You have defined too many logical channels for this link. The number of channels is determined by your responses to questions 461 through 466 and by the number of hosts that are PVCs (question 401 = 1).

Possible Cause: N/A

User Action: Change your responses to question 401 and questions 461 through 466 so that the total does not exceed 255.

For Service Personnel Only: No action is required.

7165

Description: Your response to question 241 is incompatible with the Gateway device type (T) specified on the Ring Address Assignment panel (question 940).

Possible Cause: N/A

User Action: Either change your response to question 241 to 1, or change the device type to 2.

For Service Personnel Only: No action is required.

7166

Description: Your response to question 241 is incompatible with the I-frame size (F) specified on the Ring Transmission Definition panel (question 941).

Possible Cause: N/A

User Action: Either change your response to question 241 to 1, or change the I-frame size to a value other than 5 (8201).

For Service Personnel Only: No action is required.

7167

Description:

Your response to question 241 is incompatible with the total number of DSPUs specified.

Possible Cause: N/A

User Action: Either change your response to question 241 to 1 or reconfigure to have 100 or fewer DSPUs.

For Service Personnel Only: No action is required.

7168

Description:

The number of DSPUs on all the hosts on all the links exceeds 250, which is the maximum number of DSPUs allowed.

Possible Cause: N/A

User Action: Reconfigure to have fewer than 250 DSPUs.

For Service Personnel Only: No action is required.

7169

Description: Host 2A or 3A is configured for Gateway, but host 1A is configured for neither Gateway nor SNA.

Possible Cause: N/A

User Action: Either reconfigure host 1A as an SNA host, or reconfigure host 2A or 3A as a non-Gateway host.

For Service Personnel Only: No action is required.

7170

Description: Your response is incorrect. You entered addresses or IS values for ports that do not exist on the 3174 model you defined in question 100.

Possible Cause: N/A

User Action: Verify that your responses to questions 117 and 100 are correct, and re-specify your responses to these questions.

For Service Personnel Only: No action is required.

7171

Description: Two or more hosts on this X.25 link are customized for incoming calls (question 401 = 2 or 4). For all such hosts, the first digit of question 420 must be 1 (validate Host DTE address on incoming calls).

Possible Cause: N/A

User Action: Either change your response to question 420 to 1, or change your response to question 401 so that it is not 2 or 4.

For Service Personnel Only: No action is required.

7172

Description: Your response is incorrect. The total number of assigned addresses is out of range. The maximum for non-SNA is 32; the maximum for SNA is 184 in the range of 2 to 254.

Possible Cause: N/A

User Action: Re-specify your response.

For Service Personnel Only: No action is required.

7173

Description: Your response is incorrect. The total number of logical addresses and the controller address specified in question 104 cannot equal more than 255. The maximum number of logical terminals is 32 for non-SNA and 184 for SNA.

Possible Cause: N/A

User Action: Re-specify the number of logical addresses or your response to question 104.

For Service Personnel Only: No action is required.

7174

Description: Your response is incorrect.

Possible Cause: N/A

User Action: You must assign an address to port 26-00.

For Service Personnel Only: No action is required.

7175

Description: You have assigned the same Connection Identifier (CID) to more than one host on an X.25 link.

Possible Cause: N/A

User Action: Change your response to question 452 so that you have unique CID values for the hosts listed.

For Service Personnel Only: No action is required.

7176

Description: Blanks cannot be left between addresses.

Possible Cause: N/A

User Action: Fill in the missing address, or shift the addresses on that port to the left.

For Service Personnel Only: No action is required.

Status Codes

7177

Description: An assigned address is out of range for the system defined. With SNA protocol (SNA Local, SDLC, X.25, X.21 Switched, Token-Ring Network, Ethernet, and Frame Relay), up to 184 addresses may be defined in the range from 2 to 254. With non-SNA protocol (non-SNA Local or BSC), the addresses range from 0 to 31.

Possible Cause: N/A

User Action: Change the highlighted address to a correct value.

For Service Personnel Only: No action is required.

7178

Description: A duplicate address was defined.

Possible Cause: N/A

User Action: Re-specify the highlighted address to a unique value.

For Service Personnel Only: No action is required.

7179

Description: Your response is incorrect. The total number of logical addresses and the controller address specified in question 104 cannot equal more than 255. The maximum number of logical terminals is 32 for non-SNA and 184 for SNA.

Possible Cause: N/A

User Action: Re-specify your response to question 104.

For Service Personnel Only: No action is required.

7180

Description: Your response is incorrect. U.S. English is needed to configure an AEA for ASCII control functions.

Possible Cause: N/A

User Action: Change your response to question 121 to 1 if your response to question 702 is 0. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7181

Description: Your response is incorrect. You must select a valid language for the ASCII Host data stream and the ASCII Host character set.

Possible Cause: N/A

User Action: If your response to question 722 is AH, then your response to question 751 must be 2. You must select one of the following combinations for questions 776 and 121:

- If your response to question 776 is 1, then your response to question 121 must not be 47.
- If your response to question 776 is 2, then your response to question 121 must be 01, 03, 15, 22, or 30.
- If your response to question 776 is 3, then your response to question 121 must be 01, 03, 15, 19, 21, 22, 29, or 30.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7182

Description: Your response is incorrect. You must select a valid language for the ASCII Host data stream.

Possible Cause: N/A

User Action: If your response to question 722 is AH, then you must select one of the following combinations for questions 751 and 121:

- If your response to question 751 is 1, 4, or 5, then your response to question 121 must not be 28.
- If your response to question 751 is 3, then your response to question 121 must be 1.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7183

Description: Your response is incorrect. You must select a valid language for the ASCII display character set and translate option.

Possible Cause: N/A

User Action: If your response to question 746 is 0, then you must select one of the following combinations for questions 745 and 121:

- If your response to question 745 is 0, then your response to question 121 must be 1.
- If your response to question 745 is 2, then your response to question 121 must be 01, 03, 15, 19, 21, 22, 29, or 30.
- If your response to question 745 is 3, then your response to question 121 must not be 47.
- If your response to question 745 is 4 or 5, then your response to question 121 must not be 28.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7184

Description: Your response is incorrect. You must select a valid language for the device type.

Possible Cause: N/A

User Action: Select one of the following combinations for questions 722 and 121:

- If your response to question 722 is I1, then your response to question 121 must be 01, 03, 15, 19, 21, 22, or 30.
- If your response to question 722 is M1, then your response to question 121 must be 20.
- If your response to question 722 is X4, then your response to question 121 must be 01, 03, 07, 22, 23, 24, or 30.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7185

Description: Your response is incorrect. Response time values are out of range. The maximum time allowed is 27:18.3. The seconds field must not exceed 59.

Possible Cause: N/A

User Action: Verify that your response to question 128 is correct, and re-specify your response.

For Service Personnel Only: No action is required.

7186

Description: Your response is incorrect. Field B1 must be greater than 00:00.0.

Possible Cause: N/A

User Action: Verify that your response to question 128 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7187

Description: Your response is incorrect. Entries in B fields must be in ascending order.

Possible Cause: N/A

User Action: Verify that your response to question 128 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7188

Description: Your response is incorrect. B fields after a 00:00.0 or 27:18.3 must be 00.00.0.

Possible Cause: N/A

User Action: Verify that your response to question 128 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

Status Codes

7189

Description: Your response is incorrect. Your response cannot contain nonbinary characters. This field cannot contain blanks. Specify zeros or ones.

Possible Cause: N/A

User Action: Verify that your response to question 128 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7190

Description: Your response is incorrect. B field must be less than 27:18.4.

Possible Cause: N/A

User Action: Verify that your response to question 128 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7191

Description: Two or more hosts on this X.25 link are customized for incoming calls (question 401 = 2 or 4) and have the same host DTE address (question 423). All such hosts must be customized to validate CID (digit 6 of question 420).

Possible Cause: N/A

User Action: Perform one of the following actions:

- Change your response to digit 6 of question 420 to 1 for the hosts listed and answer question 452 for the hosts listed.
- Make host DTE addresses (question 423) unique across all hosts.

For Service Personnel Only: No action is required.

7192

Description: On each X.25 link, all hosts with circuit type PVC (question 401 = 1) must have unique logical channel identifiers (question 402).

Note: If the error is detected on more than one link, a list of hosts having duplicate LCIDs will appear for each link.

Possible Cause: N/A

User Action: Either change your response to question 402 for the hosts listed, or change your response to question 401.

For Service Personnel Only: No action is required.

7193

Description: Question 900 must have the same response for all hosts that you customize for gateway. Similarly, the responses to questions 905, 908, and 911 must be the same for all gateway hosts.

Note: The exception is the Service Access Point (SAP) field of question 900, which must be a unique value.

Possible Cause: N/A

User Action: Change your responses to one or more of the four questions listed so that they are all the same for all gateway hosts.

For Service Personnel Only: No action is required.

7194

Description: The Service Access Point (SAP) fields of question 900 are identical for the hosts listed.

Possible Cause: N/A

User Action: Change your response to question 900 so that the SAPs are not identical.

For Service Personnel Only: No action is required.

7195

Description: The response to question 220 must be non-zero when the response to question 221 is non-zero.

Possible Cause: N/A

User Action: Change your response to question 220 to non-zero or your response to question 221 to zero.

For Service Personnel Only: No action is required.

7196

Description: The response to question 221 indicates that more than one host has been defined as the alert focal point.

Possible Cause: N/A

User Action: Reconfigure the defined hosts so that only one has the response to question 221=1.

For Service Personnel Only: No action is required.

7197

Description: No alert focal point has been defined. The response to question 221 is zero for all the configured hosts.

Possible Cause: N/A

User Action: Either change the response to question 220 on the 1A host to non-zero, or change the response to question 221 on one of the other configured hosts on the primary link to 1.

For Service Personnel Only: No action is required.

7198

Description: The addresses defined in question 107 are identical for more than one host and the addresses defined in question 106 are identical for those same hosts. If the question 107 addresses are identical, then the question 106 addresses must be unique for those same hosts.

Possible Cause: N/A

User Action: Change the responses to question 106 or 107 to a unique address for the configured hosts in error.

For Service Personnel Only: No action is required.

7199

Description: An incorrect response to question 121 (Keyboard Language) was entered for RPO 8Q0688.

Possible Cause: N/A

User Action: Respond to question 121 with a supported keyboard language value. Valid responses are:

- | | |
|----------------|---------------------|
| 29 Canadian | 41 New Swiss French |
| (bilingual) | 42 New Swiss German |
| 07 Danish | 23 Norwegian |
| 09 Finnish | 28 Portuguese |
| 30 French | 19 Spanish |
| 03 German | 21 Spanish-speaking |
| 15 Italian | 24 Swedish |
| 47 Netherlands | 22 U.K. English |
| 43 Belgian | 01 U.S. English |

For Service Personnel Only: No action is required.

7200

Description: An incorrect response was given to question 744 for a DEC** VT220 display.

Alert Sent = None.

Possible Cause: A response of 7-bit character length (744 = 0) was given for a DEC VT220 display.

User Action: Change your response to question 744 to 1.

For Service Personnel Only: No action is required.

Status Codes

7202

Description: Your response is incorrect. The value for the channel identifier must be less than 4096.

Possible Cause: N/A

User Action: Verify that your response to question 402 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7203

Description: Your response is incorrect. When the response to question 702 is equal to 0 and the response to question 751 is equal to 2, then the response to question 776 must be equal to 2.

Note: U.S.A. English is not valid with the International Standards Organization (ISO) ASCII host character set.

Possible Cause: N/A

User Action: Verify that your responses to questions 702, 751, and 776 are correct, and re-specify your responses to these questions.

For Service Personnel Only: No action is required.

7204

Description: Your response is incorrect. When the response to question 401 is equal to 1, questions 423 and 424 should not be configured.

Possible Cause: N/A

User Action: Verify that your response to question 401 is correct, and re-specify your response.

For Service Personnel Only: No action is required.

7205

Description: Your response is incorrect. When the response to question 401 is equal to 3 or 4, questions 423 and 424 must be configured.

Possible Cause: N/A

User Action: Verify that your responses to questions 401, 423, and 424 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7206

Description: You responded to question 464, but did not respond to question 463. To define a range of logical channel identifiers for two-way calling, both questions must be answered.

Possible Cause: N/A

User Action: Change your responses to questions 463 and 464 so that either both are blank, or neither are blank and your response to question 463 is less than or equal to your response to question 464.

For Service Personnel Only: No action is required.

7207

Description: You responded to question 466, but did not respond to question 465. To define a range of logical channel identifiers for outgoing calls, both questions must be answered.

Possible Cause: N/A

User Action: Change your responses to questions 465 and 466 so that either both are blank, or neither are blank and your response to question 465 is less than or equal to your response to question 466.

For Service Personnel Only: No action is required.

7208

Description: Your response is incorrect. When the response to question 401 is equal to a 1 or 3, then question 420 should not be configured.

Possible Cause: N/A

User Action: Verify that your responses to questions 401 and 420 are correct, and re-specify your responses to these questions.

For Service Personnel Only: No action is required.

7209

Description: By setting the first digit of question 420 to 1, you have requested that the 3174 verify that the host DTE address in incoming calls is correct, but you have not customized the host DTE address.

Possible Cause: N/A

User Action: Either provide the host DTE address in question 423, or change the first digit of question 420 to 0.

For Service Personnel Only: No action is required.

7210

Description: Your response is incorrect. The second and third digits cannot both be ones.

Possible Cause: N/A

User Action: Verify that your response to question 421 is correct, and re-specify your response.

For Service Personnel Only: No action is required.

7211

Description: Your response is incorrect. When question 401 is equal to 1 or 2, then question 421 cannot be configured.

Possible Cause: N/A

User Action: Verify that your responses to questions 401 and 421 must all be zeros.

For Service Personnel Only: No action is required.

7212

Description: Your response is incorrect. When question 401 is equal to 3 or 4, and question 421 is equal to 1xxxxxxx, then question 424 must be configured.

Possible Cause: N/A

User Action: Verify that your responses to questions 401, 421, and 424 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7213

Description: The logical channel identifier for a PVC must be less than the identifiers for any logical channels reserved for incoming calls.

Possible Cause: N/A

User Action: Either change your response to question 401 so that it is another circuit type, or change your response to question 402 so that it is less than your response to question 461.

For Service Personnel Only: No action is required.

7214

Description: The logical channel identifier for a PVC must be less than the identifiers for any logical channels reserved for two-way calling.

Possible Cause: N/A

User Action: Either change your response to question 401 so that it is another circuit type, or change your response to question 402 so that it is less than your response to question 463.

For Service Personnel Only: No action is required.

Status Codes

7215

Description: Your response is incorrect. Window size indicates modulo 128, but question 431 was configured for modulo 8.

Possible Cause: N/A

User Action: Verify that your responses to questions 435, 432, and 431 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7216

Description: The logical channel identifier for a PVC must be less than the logical channel identifiers for any logical channels reserved for outgoing calls.

Possible Cause: N/A

User Action: Either change your response to question 401 so that it is another circuit type, or change your response to question 402 so that it is less than your response to question 465.

For Service Personnel Only: No action is required.

7217

Description: The maximum RU size is 8 KB (question 241 = 1), and question 941 must be 1 or 2 (16 Mbps with either normal or early token release).

Possible Cause: N/A

User Action: Either change your response to question 241 to 0, or change your response to question 911 to 1 or 2.

For Service Personnel Only: No action is required.

7218

Description: You cannot customize the Closed User Group facility for a PVC.

Possible Cause: N/A

User Action: Verify that your responses to questions 401 and 441 are correct, and re-specify your responses to these questions.

For Service Personnel Only: No action is required.

7219

Description: Your response cannot contain blanks.

Alert Sent = Temporary.

Possible Cause: N/A

User Action: If your response is less than four digits, use leading zeros.

For Service Personnel Only: No action is required.

7220

Description: Your response is incorrect. An incorrect X.25 keyboard support was selected in question 409.

Possible Cause: N/A

User Action: Verify that your response to question 409 is correct, and re-specify your response to this question.

For Service Personnel Only: No action is required.

7221

Description: Your response is incorrect. No connection identifier (CID) password was initialized, but a CID is required. A response is required because of the responses specified in questions 420 and 421.

Possible Cause: N/A

User Action: Verify that your responses to questions 420 and 421 are correct, and re-specify your response to these questions.

For Service Personnel Only: No action is required.

7222

Description: Question 500 was answered with a non-zero value without responding to question 501.

Possible Cause: N/A

User Action: Respond to question 501.

For Service Personnel Only: No action is required.

7223

Description: Your response is incorrect. If your response to question 722 is 14, then your response to question 776 must not be 1.

Possible Cause: N/A

User Action: Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7224

Description: Your response is incorrect. If your response to question 745 is 4, then your response to question 744 must be 1.

Possible Cause: N/A

User Action: Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7225

Description: Your response is incorrect. Your response to question 703 must be 1 or reduce Session Limit to 1.

Possible Cause: N/A

User Action: Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7226

Description: Your response is incorrect. You entered an incorrect combination of stations.

Possible Cause: N/A

User Action: If your response to question 731 is 1, then your response to question 751 must not be 3. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7227

Description: Your response is incorrect. You must define the ASCII host data stream as VT100 or 3101.

Possible Cause: N/A

User Action: If your response to question 702 is 0, then your response to question 751 must be 1 or 2. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7228

Description: If the Printer character set is DEC MCS or CODE PG. 850 (784 = 2, 3, or 4), then the associated character length must be 8 bits per character (744 = 1).

Possible Cause: Incompatible responses for Q784 and Q744 were entered on the AEA Station panel.

User Action: When 784 = 3 or 4 (Printer character set equals DEC MCS or CODE PG. 850), then 744 must = 1 (character length must equal 8 bits per character).

For Service Personnel Only: No action is required.

Status Codes

7229

Description: Your response is incorrect. You must select 7-bit code for the device type.

Possible Cause: N/A

User Action: If your response to question 722 is M1, then your response to question 744 must be 0. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7230

Description: A response is missing. If question 721 has been answered, then a port set name (question 723) response is required for Station Sets other than the 3270 Host.

Possible Cause: N/A

User Action: Configure question 723 with a port set name.

For Service Personnel Only: No action is required.

7231

Description: Your response is incorrect. The port set name defined in question 723 was not found on the port set panel.

Possible Cause: N/A

User Action: Reconfigure question 723 with a port set name that was configured on the port set panel, or reconfigure the port set panel with the name configured in question 723.

For Service Personnel Only: No action is required.

7232

Description: Your response is incorrect. The station set type (defined in question 722) must match the port type of the port set to which the station set has been assigned. If the port type is 2, 3, or 4, the station set type must be ASCII; if the port type is Coax (1), then the station set type must be 3270.

Possible Cause: N/A

User Action: Reconfigure the port type on the port set panel or assign the station set to a valid port set. For ASCII station sets, the port type on the associated port set must be a value between 2 and 4; for 3270 station sets, the port type on the associated port set must be a 1.

For Service Personnel Only: No action is required.

7233

Description: The default destination was not defined for a Station Set made up of printers.

Possible Cause: N/A

User Action: On the AEA Default Destination panel, enter the Station Set number of a host in the LT1 column for all Station Sets made up of printers.

For Service Personnel Only: No action is required.

7234

Description: Your response is incorrect. A Station Set made up of display stations (3270 or ASCII) was not given permission to access the 3174 Connection Menu, and no default destination was defined for it on the AEA Default Destination panel.

Possible Cause: N/A

User Action: Respond to question 725 with a 1 or define a default destination for this Station Set.

For Service Personnel Only: No action is required.

7235

Description: Your response is incorrect. A station type defined as an ASCII host or printer does not allow a response of autobaud for the Lower Line Speed (question 733 = 0).

Possible Cause: N/A

User Action: Enter a response of 1 through 7 for question 733.

For Service Personnel Only: No action is required.

7236

Description: Your response is incorrect. The Upper Line Speed must not be defined for a station set other than an ASCII host Station Set.

Possible Cause: N/A

User Action: Delete the response to question 734.

For Service Personnel Only: No action is required.

7237

Description: Your response is incorrect. The Upper Line Speed cannot be less than or equal to the Lower Line Speed.

Possible Cause: N/A

User Action: Either change the response to question 734 to be greater than the response to question 733, or change the response to question 733 to be less than the response to question 734.

For Service Personnel Only: No action is required.

7238

Description: Your response is incorrect. If the line speed is defined as autobaud, then the parity must be defined as autoparity.

Possible Cause: N/A

User Action: Either change both responses to questions 733 and 735 to 0, or change both responses to non-zero responses.

For Service Personnel Only: No action is required.

7239

Description: Your response is incorrect. The terminal type must be defined if the station type is an ASCII host.

Possible Cause: N/A

User Action: Change your response to question 751 for the stations in error.

For Service Personnel Only: No action is required.

7240

Description: Your response is incorrect. A station name cannot be duplicated.

Possible Cause: N/A

User Action: Assign unique station names (question 721) to the stations in error.

For Service Personnel Only: No action is required.

7241

Description: Your response is incorrect. You cannot specify more than one Station Set as type "3H" (3270 Host).

Possible Cause: N/A

User Action: Reconfigure question 722 so that only one Station Set has a response of "3H" (3270 Host).

For Service Personnel Only: No action is required.

Status Codes

7242

Description: Your response is incorrect. Display stations and printers cannot be in the same Port Set (question 723); printer Station Sets must each be assigned to unique Port Sets. Station Sets made up of display stations and assigned to the same Port Set must have the same line speeds (question 733).

Possible Cause: N/A

User Action: If the Station Sets made up of display stations and printer Station Sets are assigned to the same Port Set, reconfigure question 723 so that the printer Station Sets are not assigned to this Port Set. Reconfigure question 733 so that all Station Sets made up of display stations in the same Port Set have the same line speed. Each printer station set must be assigned to a unique Port Set.

For Service Personnel Only: No action is required.

7243

Description: Your response is incorrect. Station Sets made up of display stations and host Station Sets can be assigned to the same Port Set only if the port type for the Port Set is switched.

Possible Cause: N/A

User Action:

1. Assign the Station Sets to individual Ports Sets, or
2. Change the port type to "switched." (This may involve changing site planning; contact the site planner for additional information.)

For Service Personnel Only: No action is required.

7244

Description: Your response is incorrect. ASCII Station Sets made up of display stations and printer Station Sets cannot be assigned to the same Port Set.

Possible Cause: N/A

User Action: Reconfigure question 723 so that Station Sets made up of display stations and printer Station Sets are not assigned to the same Port Set.

For Service Personnel Only: No action is required.

7245

Description: Your response is incorrect. Station Sets made up of ASCII printers cannot be assigned to the same Port Set as Station Sets made up of 3270 printers.

Possible Cause: N/A

User Action: Assign the Station Sets in error to different Port Sets (question 723).

For Service Personnel Only: No action is required.

7246

Description: Your response is incorrect. Default destinations must be previously defined host Station Sets. The Station Sets that have been defined are listed on the right side of the AEA Default Destination panel.

Possible Cause: N/A

User Action: Type a valid Station Set number in the LT columns for the highlighted Station Sets; only Host Station Sets may be used as default destinations.

For Service Personnel Only: No action is required.

7247

Description: A response is missing. If an ASCII host Station Set has been defined as the default destination of a printer, the host phone number is required.

Possible Cause: N/A

User Action: Provide the host phone number (respond to question 752) for the printer Station Sets in error.

For Service Personnel Only: No action is required.

7248

Description: More than 28 Host Station Sets have been defined.

Possible Cause: N/A

User Action: Reconfigure question 722 where necessary. A maximum of 28 hosts can be defined.

For Service Personnel Only: No action is required.

7249

Description: Your response is incorrect. Display stations and printers cannot be in the same Port Set (question 723); printer Station Sets must each be assigned to unique Port Sets. Station Sets made up of display stations assigned to the same Port Set must have the same parity (question 735).

Possible Cause: N/A

User Action: If Station Sets made up of display stations and printer Station Sets are assigned to the same Port Set, reconfigure question 723 so that printer Station Sets are not assigned to this Port Set. Reconfigure question 735 so that all Station Sets made up of display stations in the same Port Set have the same parity.

For Service Personnel Only: No action is required.

7250

Description: An incorrect response to question 745 (ASCII Display Character Set) was entered for RPQ 8Q0688 in regards to question 722.

Possible Cause: N/A

User Action: Respond to question 745 with the correct ASCII display character set value in regards to question 722. Valid responses are:

| Station Type | Q745 | Q722 |
|--------------|--------|------|
| IBM 3101 | 1 | I1 |
| IBM 3161 | 2 or 3 | I2 |
| IBM 3163 | 2 or 3 | I3 |
| IBM 3164 | 2 or 3 | I4 |
| FTTERM Mono | 3 | FM |
| FTTERM Color | 3 | FC |
| DEC VT220 | 4 or 5 | V6 |
| DEC VT100 | 5 | V1 |
| Minitel 1B | 5 | M1 |

For Service Personnel Only: No action is required.

7252

Description: A Port Set name was defined more than once.

Possible Cause: N/A

User Action: Assign unique Port Set names to each Port Set that is to be defined.

For Service Personnel Only: No action is required.

7253

Description: Your response is incorrect. A port has been assigned to a Port Set on the AEA Port to Port Set Map panel, but the Port Set has not been defined on the AEA Port Set panel.

Possible Cause: N/A

User Action: Define a Port Set on the AEA Port Set panel to correspond with the Port Set number on the AEA Port to Port Set Map panel, or respond to the AEA Port To Port Set Map panel only with Port Set numbers of Port Sets that have already been defined.

For Service Personnel Only: No action is required.

Status Codes

7254

Description: Your response is incorrect. 3270 Terminal Adapter (TA) ports must be associated with Port Sets with a Coax Port Type.

Possible Cause: N/A

User Action: Assign the 3270 Terminal Adapter Port in error to a Port Set with a Coax port type.

For Service Personnel Only: No action is required.

7255

Description: Your response is incorrect. ASCII (AEA) ports must be associated with Port Sets whose Port Type is not Coax.

Possible Cause: N/A

User Action: Assign the AEA Port in error to a Port Set whose port type is not Coax.

For Service Personnel Only: No action is required.

7256

Description: All defined Port Sets must be assigned to a port.

Possible Cause: N/A

User Action: Assign the unassociated Port Set to a port, or delete the Port Set in error.

For Service Personnel Only: No action is required.

7257

Description: Your response is incorrect. You defined more default destinations on the AEA Default Destination panel than are permitted. The total number of default destinations must equal the session limit (from the AEA Port Set panel).

Possible Cause: N/A

User Action: You can either delete one or more default destinations from the AEA Default Destination panel, or increase the session limit on the AEA Port Set panel; the session limit can be increased only if the port type listed is 1.

For Service Personnel Only: No action is required.

7258

Description: Your response is incorrect. You cannot define a session limit greater than 1 for port types of 2, 3, or 4.

Possible Cause: N/A

User Action: You can either redefine the port type as "1" on the AEA Port Set panel or delete the session limit response for this Port Set.

For Service Personnel Only: No action is required.

7259

Description: Your response is incorrect. You cannot specify an ASCII host phone number for a Station Set assigned to a Port Set that has a modem type of "other (4)" defined; autodial is not supported for these modems.

Possible Cause: N/A

User Action: You can either reassign the Station Set to a Port Set that has a modem type of Hayes (1), Micom (2), or IBM (3), or you can redefine the Port Set modem type.

For Service Personnel Only: No action is required.

7260

Description: Your response is incorrect. You cannot have a Station Set made up of printers assigned to a Port Set that has a modem type of "Other (4)" if the default destination of that Station Set is an ASCII host connected through switched lines.

Possible Cause: N/A

User Action: You can either reassign the Station Set to a Port Set (question 723) that has a modem type of Hayes (1), Micom (2), or IBM (3), or you can change the modem type on the AEA Port Set panel to Hayes (1), Micom (2), or IBM (3).

For Service Personnel Only: No action is required.

7261

Description: Two or more Station Sets made up of display stations with the same Station Type were assigned to the same Port Set.

Possible Cause: N/A

User Action: Assign the Station Sets in error to different Port Sets, or reconfigure question 722.

For Service Personnel Only: No action is required.

7262

Description: Your response is incorrect. DTR flow control is permitted only for Station Sets assigned to Port Sets that communicate through leased lines. CTS (RTS) flow control is permitted only for Station Sets assigned to Port Sets that communicate through direct lines.

Possible Cause: N/A

User Action: Change the response to question 731 for the Station Set in error, or reconfigure the Port Set.

For Service Personnel Only: No action is required.

7263

Description: Two or more Station Sets assigned to the same Port Set have different stop bit definitions.

Possible Cause: N/A

User Action: Assign the Station Sets in error to different Port Sets, or reconfigure question 736.

For Service Personnel Only: No action is required.

7264

Description: A response of autoparity (question 735 = 0) was given for an ASCII host or printer Station Set.

Possible Cause: N/A

User Action: Enter a response between 1 and 5 for question 735 for the Station Set in error.

For Service Personnel Only: No action is required.

7265

Description: If your response to question 733 is autobaud, then the maximum line speed must be defined.

Possible Cause: N/A

User Action: Respond to question 737 for the maximum modem line speed, or specify an exact line speed for question 733.

For Service Personnel Only: No action is required.

7266

Description: A response of 8-bit character length (question 744 = 1) was given for an IBM 3101 display.

Possible Cause: N/A

User Action: Respond to question 744 with 0.

For Service Personnel Only: No action is required.

7267

Description: A response of 7-bit character length (question 744 = 0) was given for an ASCII host using VT200 data stream (question 751 = 4 or 5).

Possible Cause: N/A

User Action: Respond to question 744 with 1 or change the host data stream to VT100 (question 751 = 1).

For Service Personnel Only: No action is required.

Status Codes

7268

Description: A response of SPACE or MARK as parity (question 735 = 4 or 5) is permitted only for a 7-bit character length station (question 744 = 0).

Possible Cause: N/A

User Action: Enter a response between 0 and 3 for question 735 or respond to question 744 with 0.

For Service Personnel Only: No action is required.

7269

Description: A response of DEC MCS character set (question 765 = 1) was given for an ASCII host using VT100 data stream (question 751 = 1).

Possible Cause: N/A

User Action: Respond to question 765 with 0 or change the host data stream to VT200 (question 751 = 4 or 5).

For Service Personnel Only: No action is required.

7270

Description: An AEA printer port defined in the PAM has not been defined as a Station Set or assigned to a Port Set.

Possible Cause: N/A

User Action:

1. Define the printer as a Station Set and assign it to a Port Set, or
2. Do not define the printer port in the PAM.

For Service Personnel Only: No action is required.

7271

Description: Port Sets have been assigned to incorrect ports for the 3174 model number specified in question 101.

Possible Cause: N/A

User Action: Do not assign Port Sets to the incorrect ports.

For Service Personnel Only: No action is required.

7272

Description: A printer defined in the PAM or Device Definition procedure has a default destination defined in the AEA Configure procedure as an ASCII host. Local copy is not allowed on this printer.

Possible Cause: N/A

User Action:

1. Do not define the printer in the PAM or Device Definition procedure, or
2. Change the default destination of the printer to an IBM host.

For Service Personnel Only: No action is required.

7273

Description: AEA ports defined on the Port Assignment panel were not assigned to a Port Set in the AEA Configure procedure. Power cannot be turned on at a terminal or printer connected to an unassigned port.

Possible Cause: N/A

User Action:

1. Do not define the AEA ports on the Port Assignment panel, or
2. Assign the AEA ports to a Port Set in the AEA Configure procedure.

For Service Personnel Only: No action is required.

7274

Description: MLT was not configured, but more than one session was defined on the AEA Port Set and Default Destination panels of the AEA Configure procedure. The user has only one session per port when MLT is not configured.

Possible Cause: N/A

User Action:

1. Configure for MLT (respond to question 110 with a nonzero response), or
2. Do not define more than one session on the Port Set and Default Destination panels of the AEA Configure procedure.

For Service Personnel Only: No action is required.

7275

Description: Your response is incorrect. You must select a language that is valid for Asynchronous Emulation Adapter (AEA) configuration.

Possible Cause: N/A

User Action:

1. Select a language that is valid for AEA configuration for question 121, or
2. Do not configure the AEA by responding to question 700 with a 0.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7276

Description: AEA ports were defined on the Port Assignment panel, but the AEA Configure procedure was not performed. The AEA ports will not be functional.

Possible Cause: N/A

User Action:

1. Do not define AEA ports on the Port Assignment panel, or
2. Configure for the AEA in the AEA Configure procedure (respond to question 700 with a 1).

For Service Personnel Only: No action is required.

7277

Description: AEA ports were defined in the PAM procedure, but the AEA Configure procedure was not performed.

Possible Cause: N/A

User Action:

1. Do not define AEA ports in the PAM procedure, or
2. Configure for the AEA in the AEA Configure procedure (respond to question 700 with a 1).

For Service Personnel Only: No action is required.

7278

Description: A modified keyboard layout was configured, but was not defined in the Modify Keyboards procedure. The keyboards will not be modified.

Possible Cause: N/A

User Action:

1. Define the modified keyboard layout selected in question 137 in the Modify Keyboard procedure, or
2. Do not select the modified keyboard layout in question 137 in the Configure procedure.

For Service Personnel Only: No action is required.

Status Codes

7279

Description: The language specified by question 121 in the configure procedure is not the same language specified in the Modify Keyboards procedure. The keyboards will not be modified.

Possible Cause: N/A

User Action: Perform one of the following actions:

- Change the language in the configure procedure (question 121) to match the language in the Modify Keyboards procedure.
- Change the language in the Modify Keyboards procedure to match the language specified in question 121 of the Configure procedure.

For Service Personnel Only: No action is required.

7280

Description: One or more panels in the configure procedure are in error.

Possible Cause: N/A

User Action: Redo the Configure procedure and correct the errors on the configure panels that contain incorrect responses.

For Service Personnel Only: No action is required.

7281

Description: One or more panels in the PAM procedure are in error.

Possible Cause: N/A

User Action: Redo the PAM procedure and correct the errors on the PAM panels that contain incorrect responses.

For Service Personnel Only: No action is required.

7282

Description: One or more panels in the AEA Configure procedure are in error.

Possible Cause: N/A

User Action: Redo the AEA Configure procedure and correct the errors on the AEA panels that contain incorrect responses.

For Service Personnel Only: No action is required.

7283 or 7284

Description: In the AEA Configure procedure a shared printer has been defined and at least one port in that station's port set has less than two sessions defined on the Port Assignment Table.

Possible Cause: N/A

User Action: In the AEA Configure procedure for the station in error, define no shared printer (question 781=0) or define at least two sessions for each port in that station's port set on the Port Assignment Table panel.

For Service Personnel Only: No action is required.

7285

Description: A device type was entered for question 722 that does not support ASCII Host Addressable Printers.

Possible Cause: N/A

User Action: If the answer to question 781 is "1", respond to question 722 with a device type that supports ASCII Host Addressable Printers.

For Service Personnel Only: No action is required.

7286

Description: Multiple LTs have been configured on an AEA port, but the response to question 110 does not define MLT support.

Possible Cause: N/A

User Action: Specify a non-zero response to question 110 if defining multiple LTs for an AEA port.

For Service Personnel Only: No action is required.

7287

Description: The response to question 910 was not compatible with the host type specified.

Possible Cause: N/A

User Action: If the host type specified is correct, then the response to question 910 must be 0.

For Service Personnel Only: No action is required.

7288

Description: Your response is incorrect. You must not define multiple logical terminals (MLTs) when you have defined the MLT level to be 0.

Possible Cause: N/A

User Action: Select one of the following combinations for questions 110 and 703:

- If your response to question 703 is 0, then your response to question 110 must be 0.
- If your response to question 703 is other than 0, then your response to question 110 must be other than 0.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7289

Description: The address defined in question 900 is incorrect.

Possible Cause: N/A

User Action: Respond to question 900 with a valid local address.

For Service Personnel Only: No action is required.

7290

Description: Your response is incorrect. An incorrect ring address was entered. The address cannot be all zeros, nor can it start with a one bit.

Possible Cause: N/A

User Action: Enter a ring address that is in the correct format.

For Service Personnel Only: No action is required.

7291

Description: Your response is incorrect. You entered a ring address that was previously assigned to the Gateway.

Possible Cause: N/A

User Action: Verify that your response to question 940 is correct. Enter a unique address.

For Service Personnel Only: No action is required.

7292

Description: You have entered more subchannel addresses than ring addresses. The unused subchannel addresses are highlighted on the panel.

Possible Cause: N/A

User Action: Enter more ring addresses as needed. (This is just a warning. You may proceed if you do not need to specify more ring addresses.)

For Service Personnel Only: No action is required.

Status Codes

7294

Description: Your response is incorrect. A Service Access Point (SAP) was entered that is not a multiple of 4, or is out of the valid range.

Possible Cause: N/A

User Action: Enter a SAP address that is a multiple of 4 and is within the range of X'04' through X'EC'.

For Service Personnel Only: No action is required.

7295

Description: Your response is incorrect. A window size was entered that is too large for the associated I-frame. (This code refers to the Token-Ring Network 3270 Gateway feature.)

Possible Cause: N/A

User Action: Either enter a window size that is valid for the associated I-frame size, or change the associated I-frame so that it is valid for the window size entered.

For Service Personnel Only: No action is required.

7296

Description: Your response is incorrect. A window size was entered that is too large for the associated I-frame. (This code refers to the Token-Ring Network.)

Possible Cause: N/A

User Action: Either enter a window size that is valid for the associated I-frame size, or change the associated I-frame so that it is valid for the window size entered. Refer to configuration questions 382 and 383 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7297

Description: Your response is incorrect. A duplicate address was entered on the Ring Address Assignment panel. The ring address and the SAP address together are not unique.

Possible Cause: N/A

User Action: Verify that your response to question 940 is correct and re-specify your response to this question. Enter a unique combination of ring address and SAP address.

For Service Personnel Only: No action is required.

7298

Description: Token-Ring gateway and AEA are mutually exclusive. Customizing for both is not supported.

Possible Cause: N/A

User Action: Customize for either the Token-Ring gateway or the AEA.

For Service Personnel Only: No action is required.

7299

Description: Incorrect character sequence.

Possible Cause: An incorrect ring address was entered.

User Action: Enter a ring address that is in the correct format. It cannot be all zeros nor can it start with a one bit.

For Service Personnel Only: No action is required.

7300

Description: An incorrect response was entered for a Logical Terminal (LT) on the Logical Terminal Assignment (LTA) panel.

Possible Cause: N/A

User Action: Change your response on the LTA panel. A valid LT value is 3 characters long: The first character can be 1, 2, or 3; the second character must be an A–H; and the third character can be 1, 2, 3, 4, 5, or blank.

For Service Personnel Only: No action is required.

7301

Description: Blank entries are not allowed between LT entries on the Logical Terminal Assignment (LTA) panel.

Possible Cause: N/A

User Action: Either fill in the blank LT entries or move the existing entries to the left to fill the blanks.

For Service Personnel Only: No action is required.

7302

Description: Duplicate Logical Terminal (LT) entries are assigned for the same port on the Logical Terminal Assignment (LTA) panel.

Possible Cause: N/A

User Action: Change the duplicate LTs to a unique entry on the LTA panel.

For Service Personnel Only: No action is required.

7303

Description: Incorrect response error during customizing.

Possible Cause: You entered incorrect characters on the Ring Definition panel or on the Ring Address Assignment panel.

User Action: Re-enter the correct characters that the panels call for.

For Service Personnel Only: No action is required.

7304

Description: Incorrect address error during customizing.

Possible Cause: You entered a Service Access Point (SAP) address that is not a multiple of 4 or is out of the allowable range.

User Action: Re-enter a valid Service Access Point address. This must be a multiple of 4 and within the range X'04' and X'EC'.

For Service Personnel Only: No action is required.

7305

Description: An incorrect adapter type was specified on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change the response to a valid adapter type.

For Service Personnel Only: No action is required.

7306

Description: An incorrect host attach was specified on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change the response to a valid host attach value.

For Service Personnel Only: No action is required.

7307

Description: An incorrect hardware group was specified on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change the response to a valid hardware group.

For Service Personnel Only: No action is required.

Status Codes

7308

Description: An incorrect response was specified in the "Include in IML" field on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change the response to a valid number.

For Service Personnel Only: No action is required.

7309

Description: One or more required fields were left blank on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Complete the fields that are highlighted.

For Service Personnel Only: No action is required.

7310

Description: The values specified for the adapter type and host attach on the Multi-Host Definition panel are not compatible.

Possible Cause: N/A

User Action: Change one of the responses to make them compatible.

For Service Personnel Only: No action is required.

7311

Description: Host ID 1A on the Multi-Host Definition panel has not been defined.

Possible Cause: N/A

User Action: Complete the fields for Host ID 1A.

For Service Personnel Only: No action is required.

7312

Description: Duplicate hardware group numbers were defined on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change the responses so that the hardware group numbers are different.

For Service Personnel Only: No action is required.

7313

Description: Host ID 1A must be the first host configured on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Configure Host ID 1A on the Multi-Host Definition panel before configuring any other host.

For Service Personnel Only: No action is required.

7314

Description: The response to the Host ID 1A host attach field on the Multi-Host Definition panel is not compatible with the keyboard language response to question 121.

Possible Cause: N/A

User Action: Change one of the responses to make it compatible with the other.

For Service Personnel Only: No action is required.

7315

Description: An entry on the Multi-Host Definition panel was changed without reconfiguring.

Possible Cause: N/A

User Action: Reconfigure the host that is highlighted on the Multi-Host Definition panel.

For Service Personnel Only: No action is required.

7316

Description: A hardware group number was specified on the Multi-Host Definition panel that is not compatible with the model defined in question 100.

Possible Cause: N/A

User Action: Change the hardware group to a valid number.

For Service Personnel Only: No action is required.

7317

Description: An entry in the host attach field of the Multi-Host Definition panel is not compatible with the model defined in question 100.

Possible Cause: N/A

User Action: Change the host attach entry to a valid number.

For Service Personnel Only: No action is required.

7318

Description: The Host ID was designated on the Logical Terminal Assignment (LTA) panel but the Host ID was not defined on the Multi-Host Definition panel or that Host ID was not to be used for IML.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. On the Multi-Host Definition panel, define the Host ID and enter a 1 in the "Include in IML" column, or
2. Delete the entry on the LTA panel to the undefined or unused Host ID.

For Service Personnel Only: No action is required.

7319

Description: An LT assignment was defined on the Logical Terminal Assignment (LTA) panel that was not provided for in either the IS field of the Port Assignment Panel or the session limit AEA Configure field of the AEA Port Set panel.

Note: This error does not apply to the Concurrent Communication Adapter hosts or when the AEA is not configured.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. On the LTA panel, move the LT assignment response to a lower session position on the port.
2. On the AEA Port Set panel, increase the session limit for this port.
3. On the LTA panel, decrease the number of LT entries for this port.
4. On the PAST panel for the host defined in this LTA entry, increase the IS entry for this port.

For Service Personnel Only: No action is required.

7320

Description: An RPQ was selected for a hardware group that was not defined on the Multi-Host Definition panel or was not to be used for IML.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Define the hardware group on the Multi-Host Definition panel, or
2. Change the hardware group for the RPQ selection in the RPQ Merge procedure.

For Service Personnel Only: No action is required.

7321

Description: An incorrect Host ID was specified on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change your response to a valid host ID.

For Service Personnel Only: No action is required.

Status Codes

7322

Description: On the Multi-Host Definition panel, single link multi-host support can be defined only if the primary link attachment is to a Token-Ring Network.

Possible Cause: N/A

User Action: Either change the response to the primary link attachment to a 7 (Token-Ring Network), or change the responses to the primary and secondary host IDs to 1A, 2A, and 3A, respectively.

For Service Personnel Only: No action is required.

7323

Description: Duplicate Host IDs were specified on the Multi-Host Definition panel.

Possible Cause: N/A

User Action: Change the Host IDs so they are not the same.

For Service Personnel Only: No action is required.

7324

Description: The Token-Ring Network address is not a multiple of 4 or it is out of range.

Possible Cause: N/A

User Action: Reconfigure question 106 or 107 with a valid Token-Ring Network address.

For Service Personnel Only: No action is required.

7325

Description: An incorrect Host ID was specified on the select line of the Multi-Host Definition panel.

Possible Cause:

- No data exists for the host selected.
- The "Include in IML" entry is 0 for the host selected.

User Action: Either configure for the host selected, or change the "Include in IML" entry to a 1.

For Service Personnel Only: No action is required.

7326

Description: When a Concurrent Communication Adapter is defined, or when the AEA is not configured, the LT entries on the Logical Terminal Assignment panel (LTA) must be less than or equal to the IS number on the port assignment panel for the same port and host.

Possible Cause: N/A

User Action: Either change the LT entries on the LTA panel, or change the IS number on the port assignment panel.

For Service Personnel Only: No action is required.

7327

Description: An incorrect Group Polling Address was specified in question 912.

Possible Cause: N/A

User Action: Change the Group Polling Address to a value less than the Controller Address (question 104) or greater than the Upper Limit Address (question 105).

For Service Personnel Only: No action is required.

7328

Description: The "Include in IML" field is set to 1 for a secondary host, but not for the primary host on that link.

Possible Cause: N/A

User Action: Change your response to 1 for the links that have their "Include in IML" fields highlighted.

For Service Personnel Only: No action is required.

7329

Description: The host ID of a secondary host was entered on the Multi-Host Definition panel's select line before its primary host was configured.

Possible Cause: N/A

User Action: Configure the primary host (host ID = xA) on this link.

For Service Personnel Only: No action is required.

7330

Description: The response to question 744 (Character Length) is not compatible between stations. All stations using the same port must have the same Character Length.

Possible Cause: N/A

User Action: Respond to question 744 with 0 = 7-bit character length or 1 = 8-bit character length.

For Service Personnel Only: No action is required.

7331

Description: A password has been specified for a port that is defined for a coax port type.

Possible Cause: N/A

User Action: Change the port type to a type 2, 3, or 4, or do not specify a password.

Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7332

Description: Your response is incorrect. Your response to question 224 must be 0 or 2 when the host is non-SNA.

Possible Cause: N/A

User Action: Change your response to 0 or 2 to question 224 if the host is configured for non-SNA or configure the host for local SNA. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7333

Description: Your response is incorrect. Your response to question 222 must be 1 when your response to question 224 is 1 or 3.

Possible Cause: N/A

User Action: Change your response to question 222 to 1. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7334

Description: A secondary host was selected on the Multi-Host Definition panel, but its associated physical link host attachment does not support secondaries.

Possible Cause: N/A

User Action: Either change the host attachment of the primary host, or do not configure for secondary hosts for that link.

For Service Personnel Only: No action is required.

7335

Description: Session LT1 definitions are not the same for all stations assigned to the same port set.

Possible Cause: N/A

User Action: Either reconfigure the session LT1 definitions of the stations that are highlighted on the display, or assign a unique port set name to those stations that are highlighted.

For Service Personnel Only: No action is required.

Status Codes

7336

Description: The maximum modem line speed cannot be less than or equal to the upper limit line speed. The response to question 737 is less than or equal to your response to question 734.

Possible Cause: N/A

User Action: Either change customizing question 737 to be greater than question 734 or change question 734 to be less than question 737.

For Service Personnel Only: No action is required.

7337

Description: By setting digit 1 of question 421 to 1, you have requested that the 3174 provide its DTE address in outgoing calls, but you have not customized that DTE address.

Possible Cause: N/A

User Action: Either provide the 3174 DTE address in question 424, on 1A, 2A, and 3A hosts only, or change digit 1 of question 421 to 0.

For Service Personnel Only: No action is required.

7338

Description: You have defined too many logical channels for this link. The number of channels is determined by your responses to questions 461 through 466, and by the number of hosts that are PVCs (question 401 = 1).

Possible Cause: N/A

User Action: Reconfigure the hosts and channels on the link to achieve a total less than 256.

For Service Personnel Only: No action is required.

7339

Description: Your response to question 241 is 1, and the total number of DSPUs exceeds 100.

Possible Cause: N/A

User Action: Change your response to question 241, or reconfigure to have fewer than 100 DSPUs (questions 104 and 105).

For Service Personnel Only: No action is required.

7340

Description: You cannot specify autodisconnect for a PVC.

Possible Cause: N/A

User Action: Either change your response to question 372, or change your response to question 401.

For Service Personnel Only: No action is required.

7341

Description: You have specified both a 3270 host (question 722) and an associated port set name (question 723). You cannot specify an associated port set name when you have a 3270 host.

Possible Cause: N/A

User Action: Either change your response to question 722 so that you do not specify a 3270 host or change your response to question 723 so that you do not specify an associated port set name.

For Service Personnel Only: No action is required.

7342

Description: The logical channel identifier for a PVC must be less than the logical channel identifiers for any logical channels reserved for incoming calls.

Possible Cause: N/A

User Action: Either change your response to question 401 so that it is another circuit type, or change your response to question 402 so that it is less than the response you gave to question 461 when you customized the primary host on this link.

For Service Personnel Only: No action is required.

7343

Description: The logical channel identifier for a PVC must be less than the logical channel identifiers for any logical channels reserved for two-way calling.

Possible Cause: N/A

User Action: Either change your response to question 401 so that it is another circuit type, or change your response to question 402 so that it is less than the response you gave to question 463 when you customized the primary host on this link.

For Service Personnel Only: No action is required.

7344

Description: The logical channel identifier for a PVC must be less than the logical channel identifiers for any logical channels reserved for outgoing calls.

Possible Cause: N/A

User Action: Either change your response to question 401 so that it is another circuit type, or change your response to question 402 so that it is less than the response you gave to question 465 when you customized the primary host on this link.

For Service Personnel Only: No action is required.

7345

Description: You have configured the host to be used with outgoing calls, but there are no logical channels on this link defined for outgoing calls.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 401 so that this is not an outgoing call host.
2. Provide some logical channels for two-way calling by answering questions 463 and 464.
3. Provide some logical channels for outgoing calls by answering questions 465 and 466.

For Service Personnel Only: No action is required.

7346

Description: You have configured the host to be used with outgoing calls, but there are no logical channels on this link defined for outgoing calls.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 401 so that this is not an outgoing call host.
2. Provide some logical channels for two-way calling by answering questions 463 and 464 for the primary host on this link.
3. Provide some logical channels for outgoing calls by answering questions 465 and 466 for the primary host on this link.

For Service Personnel Only: No action is required.

7347

Description: You have configured the host to be used with incoming calls, but there are no logical channels on this link defined for incoming calls.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 401 so that this is not an incoming call host.
2. Provide some logical channels for incoming calls by answering questions 461 and 462.
3. Provide some logical channels for two-way calling by answering questions 463 and 464.

For Service Personnel Only: No action is required.

Status Codes

7348

Description: You have configured the host to be used with incoming calls, but there are no logical channels on this link defined for incoming calls.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 401 so that this is not an incoming call host.
2. Provide some logical channels for incoming calls by answering questions 461 and 462 for the primary host on this link.
3. Provide some logical channels for two-way calling by answering questions 463 and 464 for the primary host on this link.

For Service Personnel Only: No action is required.

7349

Description: You have configured the host to be used with two-way calling, but there are no available logical channels on this link.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 401 so that this host does not use two-way calling.
2. Provide some logical channels by answering one of these pairs of questions:
 - 461 and 462
 - 463 and 464
 - 465 and 466.

For Service Personnel Only: No action is required.

7350

Description: You have configured the host to be used with two-way calling, but there are no available logical channels on this link.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 401 so that this host does not use two-way calling.
2. Provide some logical channels by answering one of these pairs of questions for the primary host on this link:
 - 461 and 462
 - 463 and 464
 - 465 and 466.

For Service Personnel Only: No action is required.

7351

Description: You have specified a logical channel value larger than 4095.

Possible Cause: N/A

User Action: Change your response to question 461 so that it is less than 4096.

For Service Personnel Only: No action is required.

7352

Description: You have specified a logical channel value larger than 4095.

Possible Cause: N/A

User Action: Change your response to question 462 so that it is less than 4096.

For Service Personnel Only: No action is required.

7353

Description: You have specified a logical channel value larger than 4095.

Possible Cause: N/A

User Action: Change your response to question 463 so that it is less than 4096.

For Service Personnel Only: No action is required.

7354

Description: You have specified a logical channel value larger than 4095.

Possible Cause: N/A

User Action: Change your response to question 464 so that it is less than 4096.

For Service Personnel Only: No action is required.

7355

Description: You have specified a logical channel value larger than 4095.

Possible Cause: N/A

User Action: Change your response to question 465 so that it is less than 4096.

For Service Personnel Only: No action is required.

7356

Description: You have specified a logical channel value larger than 4095.

Possible Cause: N/A

User Action: Change your response to question 466 so that it is less than 4096.

For Service Personnel Only: No action is required.

7357

Description: You responded to question 461, but did not respond to question 462. To define a range of logical channel identifiers for incoming calls, both questions must be answered.

Possible Cause: N/A

User Action: Change your responses to questions 461 and 462 so that both are blank or neither are blank and your response to question 461 is less than or equal to your response to question 462.

For Service Personnel Only: No action is required.

7358

Description: You responded to question 463, but did not respond to question 464. To define a range of logical channel identifiers for two-way calling, both questions must be answered.

Possible Cause: N/A

User Action: Change your responses to questions 463 and 464 so that both are blank, or neither are blank and your response to question 463 is less than or equal to your response to question 464.

For Service Personnel Only: No action is required.

7359

Description: You responded to question 465, but did not respond to question 466. To define a range of logical channel identifiers for outgoing calls, both questions must be answered.

Possible Cause: N/A

User Action: Change your responses to questions 465 and 466 so that both are blank, or neither are blank and your response to question 465 is less than or equal to your response to question 466.

For Service Personnel Only: No action is required.

7360

Description: Your response to question 461 is greater than your response to question 462.

Possible Cause: N/A

User Action: Change your responses to questions 461 and 462 so that both are blank, or neither are blank and your response to question 461 is less than or equal to your response to question 462.

For Service Personnel Only: No action is required.

Status Codes

7361

Description: Your response to question 463 is greater than your response to question 464.

Possible Cause: N/A

User Action: Change your responses to questions 463 and 464 so that both are blank, or neither are blank and your response to question 463 is less than or equal to your response to question 464.

For Service Personnel Only: No action is required.

7362

Description: Your response to question 465 is greater than your response to question 466.

Possible Cause: N/A

User Action: Change your responses to questions 465 and 466 so that both are blank, or neither are blank and your response to question 465 is less than or equal to your response to question 466.

For Service Personnel Only: No action is required.

7363

Description: The logical channel identifiers reserved for incoming calls (questions 461 and 462) must be less than those reserved for two-way calling (questions 463 and 464).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your responses to questions 461 and 462 to defaults.
2. Change your responses to questions 463 and 464 to defaults.
3. Change your response to question 462 so that it is less than your response to question 463.
4. Change your response to question 463 so that it is greater than your response to question 462.

For Service Personnel Only: No action is required.

7364

Description: The logical channel identifiers reserved for incoming calls (questions 461 and 462) must be less than those reserved for outgoing calls (questions 465 and 466).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your responses to questions 461 and 462 to defaults.
2. Change your responses to questions 465 and 466 to defaults.
3. Change your response to question 462 so that it is less than your response to question 465.
4. Change your response to question 465 so that it is greater than your response to question 462.

For Service Personnel Only: No action is required.

7365

Description: The logical channel identifiers reserved for two-way calling (questions 463 and 464) must be less than those reserved for outgoing calls (questions 465 and 466).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your responses to question 463 and 464 to defaults.
2. Change your responses to question 465 and 466 to defaults.
3. Change your response to question 464 so that it is less than your response to question 465.
4. Change your response to question 465 so that it is greater than your response to question 464.

For Service Personnel Only: No action is required.

7366

Description: Your response to question 372 is 1x (Autocall-Dial) and your response to question 101 is 6 (X.21 Host Attach), but you did not answer question 371 to provide the X.21 dial digits.

Possible Cause: N/A

User Action: Either change the first digit of your response to question 372 to a number other than 1, or answer question 371.

For Service Personnel Only: No action is required.

7367

Description: The device type you entered on the Ring Address Assignment panel (question 940) is incompatible with your responses to questions 100, 101, and 241.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 101 to Local SNA.
2. Change your response to question 100 to Model 12L or 22L.
3. Change your response to question 241 to 1.
4. Change the device type so that it is not 2.

For Service Personnel Only: No action is required.

7368

Description: The I-frame size you entered on the Ring Address Assignment panel (question 940) is incompatible with your responses to questions 100, 101, and 241.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 100 to Model 12L or 22L.
2. Change your response to question 101 to Local SNA.
3. Change your response to question 241 to 1.
4. Change the I-frame size so that it is not 5.

For Service Personnel Only: No action is required.

7369

Description: Your response to question 372 is 2x (Autocall-Direct), which can only be selected for X.21 switched operation.

Possible Cause: N/A

User Action: Either change your response to question 101 to 6, or change your response to question 372 so that it is not 2x (Direct).

For Service Personnel Only: No action is required.

7370

Description: Your response to question 372 is 1x (Autocall-Dial), but this is not allowed for a host with a circuit type of PVC or incoming call.

Possible Cause: N/A

User Action: Either change your response to question 401 to 3 or 4, or change your response to question 372 so that it is not 1x (Dial).

For Service Personnel Only: No action is required.

7371

Description: You entered incompatible responses for questions 101 and 510 on the Common SNA panel. Your host is X.21 switched (question 101 = 6) and you selected APPN (question 510 = 1).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 101 to a value other than 6.
2. Change your response to question 510 to 0.

Status Codes

For Service Personnel Only: No action is required.

7372

Description: On the Common SNA panel, you requested APPN (question 510 = 1), but did not enter a valid Virtual Node Name (question 512).

Possible Cause: N/A

User Action: Either enter a valid Virtual Node Name for question 512, or if you do not want APPN, change your response to question 510 to 0.

For Service Personnel Only: No action is required.

7373

Description: On the Common SNA panel, you have requested APPN, but you have not specified a CPNAME or a NETID.

Possible Cause: N/A

User Action: Perform one of the following actions:

- If you want APPN (question 510 = 1), define a CPNAME (question 511) and a NETID (question 501).
- If you do not want APPN, change your response to question 510 to 0.

For Service Personnel Only: No action is required.

7374

Description: On the Common SNA panel, you requested APPN (question 510 = 1) for a 3174 model that does not support it.

Possible Cause: N/A

User Action: Change your response to question 510 to 0.

For Service Personnel Only: No action is required.

7375

Description: On the Common SNA panel, you performed one of the following actions:

1. You specified a CPNAME (question 511), but did not specify LUs and/or DLC.
2. You specified either DLCTYPE or ADDRESS, but not both.

Possible Cause: N/A

User Action:

1. If you specified a CPNAME, either specify LUs and/or DLC, or delete the CPNAME and the checker will blank out the rest of the line.
2. If you specified DLCTYPE or ADDRESS, specify the one that is still defaulted or erase the one you have specified.

For Service Personnel Only: No action is required.

7376

Description: One or more of the following conditions occurred:

1. You specified duplicate CPNAMES, PUNAMES, or LUs.
2. You were not defining a Network Node and you specified LUs that were not unique to all Serving Network Nodes in the Associated LUs panel.

Possible Cause: N/A

User Action: Change or remove all duplicate fields unless the LUNAME matches the owning CPNAME and you are defining a Network Node.

For Service Personnel Only: No action is required.

7377

Description: You entered the same ADDRESS-DLC TYPE combination more than once and all addresses within a specific DLC TYPE must be unique.

Possible Cause: N/A

User Action: Remove or change the duplicate ADDRESS-DLC TYPE combinations.

For Service Personnel Only: No action is required.

7378

Description: You have specified LUs = x for more than 120 entries and 120 is the maximum number of entries you can specify this way.

Possible Cause: N/A

User Action: Reconfigure so that no more than 120 entries are specified with LUs = x.

For Service Personnel Only: No action is required.

7379

Description: Your entry for one or more of the following fields is not valid:

- CPNAME type
- LU entry
- Serving Network Node type
- Ring address
- Service Access Point (SAP)
- DLCI address
- DLCI address SAP

Possible Cause: N/A

User Action: Enter a valid response for one of the highlighted fields listed in the description.

For Service Personnel Only: No action is required.

7380

Description: Entry not valid.

Possible Cause:

- The NODETYPE must be 1, 2, 3, or 4 when the CPNAME is present.
- Add LUs must be X or default.
- DLC type must be 1, 2, 3, 4, 5, or default.

User Action: Re-type entry so that it is valid.

For Service Personnel Only: No action is required.

7381

Description: If you are defining LUs for a Network Node, the Serving Network Node field must be blank or match the CPNAME of that entry. (The Network Node is always considered to be its own server.)

Possible Cause: N/A

User Action: Either delete the Serving Network Node or enter the correct CPNAME.

For Service Personnel Only: No action is required.

7382

Description: If you are defining LUs for a resource other than a Network Node, the Serving Network Node field must be blank or different than the CPNAME of the entry.

Possible Cause: N/A

User Action: Either delete the Serving Network Node or enter a different Serving Network Node name.

For Service Personnel Only: No action is required.

Status Codes

7383

Description: Customization error in APPN.

Possible Cause: N/A

User Action: Reconfigure APPN.

For Service Personnel Only: No action is required.

7384

Description: APPN reconfigure errors. Not able to upgrade APPN.

Possible Cause: N/A

User Action: Reconfigure APPN.

For Service Personnel Only: No action is required.

7385

Description: You entered a LAN address that is not valid. The address cannot be all zeros (null address) nor can it start with one bit (designating a group address).

Possible Cause: N/A

User Action: Enter a valid LAN address.

For Service Personnel Only: No action is required.

7386

Description: You have configured ISDN PUIDs, but you have not specified ISDN gateway.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Configure for ISDN gateway by entering a 1 in the second field of question 150.
2. Change your response to question 190 to 0, so that you are not specifying any ISDN PUIDs.

For Service Personnel Only: No action is required.

7387

Description: Your response to question 190 (number of ISDN DSPUs) is greater than the number of DSPUs this 3174 model supports.

Possible Cause: N/A

User Action: Change your response to question 190 to the allowed number of DSPUs for your model. Refer to the *3174 Planning Guide*.

If only ISDN Gateway is configured, it may be necessary to adjust the range between questions 104 and 105.

For Service Personnel Only: No action is required.

7388

Description: You have selected ISDN Gateway (question 150 = x 1), but you have not specified any ISDN DSPUs (question 190).

Possible Cause: N/A

User Action: Either enter a number greater than 0 for question 190 (to specify ISDN DSPUs) or change your response to question 150 so that you do not specify ISDN Gateway.

For Service Personnel Only: No action is required.

7389

Description: You have selected only ISDN Gateway (question 150 = 0 1) and the total number of DSPU sub-channel addresses (the response to question 105 minus the response to question 104) does not equal the number of ISDN Gateway DSPUs (question 190).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 150 so that you are not selecting ISDN Gateway only.
2. Change your response to question 190 so that it is equal to the total number of DSPU sub-channel addresses.
3. Adjust the range between questions 104 and 105 so that the difference between the two is equal to the response to question 190.

For Service Personnel Only: No action is required.

7390

Description: Two or more PUIDs for a particular host are identical. The PUID for question 215 may be the same as one or more ISDN PUIDs or two or more ISDN PUIDs may be identical.

Possible Cause: N/A

User Action: Review all the PUIDs. Question 215 PUID response is listed in the header at the top of the ISDN PUID Assignment panel. If you find any identical PUIDs on this panel, change them so that they are unique.

For Service Personnel Only: No action is required.

7391

Description: You have selected ISDN gateway and LAN gateway (question 150 = 1 1) and the total number of DSPU sub-channel addresses (the response to question 105 minus the response to question 104) is not greater than the number of ISDN Gateway DSPUs (question 190).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Change your response to question 150 so that you are not selecting both ISDN gateway and Token-Ring gateway.
2. Change your response to question 190 so that it is less than the total number of DSPU sub-channel addresses.
3. Adjust the range between questions 104 and 105 so that the difference between the two is greater than the response to question 190.

For Service Personnel Only: No action is required.

7392

Description: In question 190, you configured the controller for more ISDN DSPUs across the hosts than it can support.

Possible Cause: N/A

User Action: For the host IDs listed in the error message, change your response to question 190 to the allowed number of DSPUs for your model. Refer to the *3174 Planning Guide*. If only ISDN Gateway is configured, this may require adjusting the range between questions 104 and 105.

For Service Personnel Only: No action is required.

7393

Description: Two or more PUIDs for a particular host are identical. The PUID for question 215 may be the same as one or more ISDN PUIDs or two or more ISDN PUIDs may be identical.

Possible Cause: N/A

User Action: Review all the PUIDs. Question 215 PUID response is listed in the header at the top of the ISDN PUID Assignment panel. If you find any identical PUIDs on this panel, change them so that they are unique.

For Service Personnel Only: No action is required.

Status Codes

7394

Description: Each host configured must have the same ISDN link sub-system name (question 920).

Possible Cause: N/A

User Action: Review question 920 for all of the host ids listed in the message and ensure that all of the responses to question 920 are identical.

For Service Personnel Only: No action is required.

7395

Description: The first ISDN Adapter must be configured.

Possible Cause: N/A

User Action: Configure the first ISDN Adapter.

For Service Personnel Only: No action is required.

7396

Description: You have selected ISDN Gateway in the Configuration Utility (question 150), but you have not configured for ISDN Gateway in the Device Definition utility (question 803).

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Respond to question 803 in the Device Definition utility to configure ISDN Adapters and ports.
2. Deselect ISDN Gateway in question 150 in the Configuration utility.

For Service Personnel Only: No action is required.

7397

Description: The number of ISDN Adapters configured on the ISDN Adapter Definition panel (Device Definition utility) exceeds the number of ISDN Adapters supported on the 3174 model configured in the Configuration Utility (question 101).

Possible Cause: N/A

User Action: Reduce the number of ISDN Adapters specified on the ISDN Adapter Definition panel (Device Definition utility) to the correct number of adapters for your model. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7398

Description: You have entered a Service Access Point (SAP) address that is not a multiple of four or is out of the allowable range.

Possible Cause: N/A

User Action: Enter a SAP address that is a multiple of four and within the range X'04' and X'EC'.

For Service Personnel Only: No action is required.

7399

Description: You entered a LUNAME on the Associated LUs panel that duplicates a CPNAME on the Network Resources panel or the Associated LUs panel. The only time a CPNAME-LUNAME duplication is allowed is when the LUNAME duplicates its own CPNAME.

Possible Cause: N/A

User Action: Enter a LUNAME that is not duplicated.

For Service Personnel Only: No action is required.

7400

Description: A DTE Address and an LCN were both defined for the same node on the X.25 APPN Nodes panel.

Possible Cause: The DTE Address or the LCN should not have been defined for this node.

User Action: Remove the definition for the DTE Address or for the LCN.

For Service Personnel Only: No action is required.

7401

Description: Incorrect printer port prefix was entered. This field should have the value 26.

Possible Cause: N/A

User Action: Change your response to 26, and retry.

For Service Personnel Only: No action is required.

7402

Description: Incorrect printer port was entered. Only printer ports 1 through 31 are valid.

Possible Cause: N/A

User Action: Change your response, and retry.

For Service Personnel Only: No action is required.

7403

Description: An incorrect character was entered under the Class field. Only Xs or blanks are valid.

Possible Cause: N/A

User Action: Enter an X or leave a blank, and retry.

For Service Personnel Only: No action is required.

7404

Description: An incorrect character was entered under the Display Ports field. Only Xs or blanks are valid.

Possible Cause: N/A

User Action: Enter an X or leave a blank, and retry.

For Service Personnel Only: No action is required.

7405

Description: Duplicate printer ports were entered.

Possible Cause: N/A

User Action: Change the duplicate printer port to a unique value.

For Service Personnel Only: No action is required.

7406

Description: An incorrect mode was entered under the Mode field.

0 = System Mode. The host directly initiates the transfer of data from the display buffer to the printer buffer, and the printing of that data.

1 = Local Mode. The operator of the display device can initiate a local copy by pressing the Print key. This is performed independently of the host.

2 = Shared Mode. The same printer performs both host-directed printing operations and local copy operations.

Possible Cause: N/A

User Action: Enter a valid mode.

For Service Personnel Only: No action is required.

7407

Description: The Control diskette is not assigned to a 2.4-MB drive on the Central Site Customizing Parameter Assignments panel.

Possible Cause: N/A

User Action: Assign the Control diskette to a 2.4-MB drive.

For Service Personnel Only: No action is required.

Status Codes

7408

Description: This is an informational message.

A 2.4-MB diskette is in the drive and is about to be overwritten.

Possible Cause: N/A

User Action: Press **Enter** to continue, or **Quit** or **Cancel** to avoid overwriting the diskette.

For Service Personnel Only: No action is required.

7409

Description: A 2.4-MB diskette drive is needed for this Central Site Customizing function.

Possible Cause: N/A

User Action: Either install a 2.4-MB diskette drive, or do not use this Central Site Customizing function.

For Service Personnel Only: No action is required.

7410

Description: An incorrect select line command was entered.

Possible Cause: N/A

User Action: Refer to the information in the "PAM procedure" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7411

Description: An incorrect LOCATE command was entered on the select line.

Possible Cause: N/A

User Action: For a valid LOCATE command, refer to the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7412

Description: An incorrect PF key was pressed. Page Backward is not valid on this screen.

Possible Cause: N/A

User Action: Use a PF key indicated on the screen, or refer to "PF key information" in the "How to Define the PAM" or "How to Define Devices" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7413

Description: An incorrect PF key was pressed. Page Forward is not valid on this screen.

Possible Cause: N/A

User Action: Use a PF key indicated on the screen, or refer to the information in "How to Define the PAM" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7414

Description: A profile was specified on the X.25 APPN Nodes panel that was not defined.

Possible Cause: An incorrect profile was specified.

User Action: Perform one of the following actions:

1. Change the profile to a defined profile.
2. Define the specified profile.

For Service Personnel Only: No action is required.

7415

Description: A profile on the X.25 Circuit Profiles panel was defined with Q401 = 2 (incoming call) and neither Q461 nor Q463 was defined on the X.25 1A host panel. When Q401 = 2 (incoming call), you must define logical channels for incoming calls by answering Q461 or Q463.

Possible Cause: Incompatible responses were entered for Q401 in a profile defined on the X.25 Circuit Profiles panel and Q461 or Q463 on the X.25 1A host.

User Action: Perform one of the following actions:

1. Change the response to Q401 so that it is not for incoming calls.
2. Define some logical channels for incoming calls by answering Q461 and Q462.
3. Define some logical channels for two-way calling by answering Q463 and Q464.

For Service Personnel Only: No action is required.

7416

Description: When Q401 = 3 (outgoing call), you must define logical channels for outgoing calls by answering Q463 or Q465.

Possible Cause: Incompatible responses for Q401 in a profile defined on the X.25 Circuit Profiles panel and Q463 or Q465 on the X.25 1A host.

User Action: Perform one of the following actions:

1. Change the response to Q401 so that it is not for outgoing calls.
2. Define some logical channels for two-way calling by answering Q463 and Q464.
3. Define some logical channels for outgoing calls by answering Q465 and Q466.

For Service Personnel Only: No action is required.

7417

Description: When Q401 = 4 (two-way calling), you must define logical channels by answering Q461, Q463, or Q465.

Possible Cause: Incompatible responses for Q401 in a profile defined on the X.25 Circuit Profiles panel and Q461, Q463, or Q465 on the X.25 1A host.

User Action: Perform one of the following actions:

1. Change the response to Q401 so that it is not for two-way calling.
2. Define some logical channels by answering one of these pairs of questions:
 - a. 461 and 462
 - b. 463 and 464
 - c. 465 and 466.

For Service Personnel Only: No action is required.

7418

Description: The response to Q432 (Negotiated Window Size or PVC Window Size) on an X.25 profile defined on the X.25 Circuit Profiles panel cannot be > 07 if the response to Q431 on the X.25 1A host is 0.

Possible Cause: The response to Q432 is invalid.

User Action: Perform one of the following actions:

1. Change the response to Q432.
2. Change the response to Q421 on the 1A host.

For Service Personnel Only: No action is required.

7419

Description: There is a customization error in defining WAN.

Possible Cause: When you tried to do a microcode upgrade, the upgrade did not occur or occurred only partially due to a WAN profiles error. You then selected Customize the Control Diskette from the Master Menu and tried to file the response without correcting the WAN problem.

User Action: Reconfigure WAN profiles.

For Service Personnel Only: No action is required.

Status Codes

7420

Description: One or more panels in the WAN profiles could not be upgraded.

Possible Cause: The WAN configuration data was corrupted or not present.

User Action: Reconfigure WAN profiles.

For Service Personnel Only: No action is required.

7421

Description: An incorrect RPQ diskette was inserted. This diskette does not contain any RPQs.

Possible Cause: N/A

User Action: Replace with a valid RPQ diskette.

For Service Personnel Only: No action is required.

7422

Description: An incorrect diskette was inserted.

Possible Cause: N/A

User Action: Follow your local procedure for problem recovery.

For Service Personnel Only: No action is required.

7423

Description: A duplicate RPQ was selected. The RPQ selected to be merged already exists on the Control disk.

Possible Cause: N/A

User Action: To perform the merge, delete the duplicate RPQ from the Control disk.

For Service Personnel Only: No action is required.

7424

Description: An incorrect option was entered.

1 = Include.

2 = Omit.

3 = Delete.

4 = Merge.

Possible Cause: N/A

User Action: Enter a valid option.

For Service Personnel Only: No action is required.

7425

Description: Incorrect parameter list data was entered. Alphabetic characters are not allowed.

Possible Cause: N/A

User Action: Enter digits 0–9.

For Service Personnel Only: No action is required.

7426

Description: The maximum number of RPQs are present on the Control disk. The maximum allowed is 10.

Possible Cause: N/A

User Action: An RPQ must be deleted from the Control disk before another RPQ can be merged.

For Service Personnel Only: No action is required.

7427

Description: You have exceeded 25 KB, which is the maximum amount of space allotted on the Control disk for RPQs.

Possible Cause: N/A

User Action: To merge another RPQ, you must delete an existing RPQ from the Control disk.

For Service Personnel Only: No action is required.

7428

Description: The RPQ that you are attempting to merge is incompatible with the release level of the Control disk.

Possible Cause: N/A

User Action: If this is a problem, exit this procedure and follow your local procedure for problem recovery.

For Service Personnel Only: No action is required.

7429

Description: The RPQ that you are attempting to merge is incompatible with an RPQ already existing on the Control disk.

Possible Cause: N/A

User Action: To merge this RPQ, you have to delete the incompatible RPQ on the Control disk, which is highlighted on your display screen. If this is a problem, exit this procedure and follow your local procedure for problem recovery.

For Service Personnel Only: No action is required.

7430

Description: The RPQ you are attempting to merge is incompatible with a previously merged RPQ.

Possible Cause: N/A

User Action: Review the RPQs that were previously merged, and determine which RPQ is incompatible. Consult the descriptive documentation that accompanied these RPQs. To perform the merge, you must delete the previously merged RPQ by pressing PF3 and returning to the RPQ panel. If both RPQs are needed, follow your local procedure for problem recovery.

For Service Personnel Only: No action is required.

7431

Description: An incorrect RPQ identifier was entered.

Possible Cause: N/A

User Action: Check the value that was entered for the RPQ identifier. The identifier cannot begin with a numeric character or contain any imbedded blanks.

For Service Personnel Only: No action is required.

7432

Description: The "Select Adapter" PF key was pressed, but none of the RPQs on the RPQ Utility panel have the S option specified.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Select another PF key, or
2. Change the option to an S for one of the RPQs.

For Service Personnel Only: No action is required.

7433

Description: If the Circuit Type is PVC (401 = 1), then the Logical Channel Number (LCN) must be provided.

Possible Cause: Incompatible responses were entered for the LCN and Q401 in the X.25 profile specified on the X.25 APPN Nodes panel.

User Action: Perform one of the following actions:

1. Recustomize Q401 in the specified profile to a response other than 1.
2. Customize an LCN on the X.25 APPN Nodes panel.

Status Codes

For Service Personnel Only: No action is required.

7434

Description: If the Circuit Type is PVC (401 = 1), then the Logical Channel Number (LCN) must be less than the identifiers for any logical channels reserved for incoming calls. (LCN on the X.25 APPN Nodes panel must be less than Q461 on the X.25 1A host.)

Possible Cause: Incompatible responses were entered for the LCN on the X.25 APPN Nodes panel for Q401 and Q461 on the X.25 1A host panel.

User Action: Perform one of the following actions:

1. Recustomize Q401 in the specified profile to a response other than 1.
2. Customize an LCN on the X.25 APPN Nodes panel that is less than the response to Q461 for the X.25 1A host.

For Service Personnel Only: No action is required.

7435

Description: If the Circuit Type is PVC (401 = 1), then the Logical Channel Number (LCN) must be less than the identifiers for any logical channels reserved for two-way calling. (LCN on the X.25 APPN Nodes panel must be less than Q463 on the X.25 1A host.)

Possible Cause: Incompatible responses were entered for the LCN on the X.25 APPN Nodes panel: Q401 in the profile specified on the X.25 APPN Nodes panel and Q463 specified for the X.25 1A host.

User Action: Perform one of the following actions:

1. Recustomize Q401 in the specified profile to a response other than 1.
2. Customize an LCN on the X.25 APPN Nodes panel that is less than the response to Q463 for the X.25 1A host.

For Service Personnel Only: No action is required.

7436

Description: If the Circuit Type is PVC (401 = 1), then the Logical Channel Number (LCN) must be less than the identifiers for any logical channels reserved for outgoing calls. (LCN on the X.25 APPN Nodes panel must be less than Q465 on the X.25 1A host.)

Possible Cause: Incompatible responses were entered for the LCN on the X.25 APPN Nodes panel: Q401 in the profile specified on the X.25 APPN Nodes panel and Q465 specified for the X.25 1A host.

User Action: Perform one of the following actions:

1. Recustomize Q401 in the specified profile to a response other than 1.
2. Customize an LCN on the X.25 APPN Nodes panel that is less than the response to Q465 for the X.25 1A host.

For Service Personnel Only: No action is required.

7437

Description: When Q401 = 1 (PVC) the DTE Address must not be configured.

Possible Cause: Incompatible responses were entered for the DTE Address and Q401 in the X.25 profile specified on the X.25 APPN Nodes panel.

User Action: Perform one of the following actions:

1. Recustomize Q401 in the specified profile to a response other than 1.
2. Do not customize a DTE address on the X.25 APPN Nodes panel.

For Service Personnel Only: No action is required.

7438

Description: When Q401 = 3 or 4, the DTE Address must be configured.

Possible Cause: Incompatible responses were entered for the DTE Address and Q401 in the X.25 profile specified on the X.25 APPN Nodes panel.

User Action: Perform one of the following actions:

1. Recustomize Q401 in the specified profile to a response other than 3 or 4.
2. Customize a DTE address on the X.25 APPN Nodes panel.

For Service Personnel Only: No action is required.

7439

Description: When Q401 = 2 and Q420 = 1xxxxxx, a DTE address must be configured.

Possible Cause: Incompatible responses were entered for the DTE address and Q401 and Q420 in the X.25 profile specified on the X.25 APPN Nodes panel.

User Action: Perform one of the following actions:

1. Recustomize Q420 in the specified profile to not validate the calling DTE address on incoming calls.
2. Customize a DTE address on the X.25 APPN Nodes panel.

For Service Personnel Only: No action is required.

7440

Description: If Q420 or Q421 specify Connection Identifier, then the Connection ID must be provided.

Possible Cause: Incompatible responses were entered for Q420 or Q421 on the profile specified and the Connection ID on the X.25 APPN Nodes panel.

User Action: Perform one of the following actions:

1. Recustomize Q420 and Q421 in the specified profile to not specify Connection Identifier.
2. Customize a Connection ID on the X.25 APPN Nodes panel.

For Service Personnel Only: No action is required.

7441

Description: The drive number selected for the Control diskette must be 1 or 2. Drives 1 and 2 are diskette drives.

Possible Cause: N/A

User Action: Enter a 1 or 2 in the Control diskette drive field.

For Service Personnel Only: No action is required.

7442

Description: The storage that is installed is not sufficient to support the central site customizing function selected.

- If you have a fixed disk selected as the Library disk, you need 1.0 MB of storage or greater.
- If you have your Control diskette in working copy, you need 2.0 MB of storage or greater.
- If you have your Control diskette in working copy and a fixed disk selected as the Library disk, you need 2.5 MB of storage or greater.

Possible Cause: N/A

User Action: Change your selections on the parameter assignments panel. For more information about storage, refer to "Hardware Requirements" in the *3174 Central Site Customizing User's Guide*.

For Service Personnel Only: No action is required.

7443

Description: The Create Library Diskette function is not valid when a fixed disk drive has been selected for the library drive.

Possible Cause: N/A

User Action: Return to the Parameter Assignment Panel and select a diskette drive for the Library disk, and, then go forward to the Central Site Customizing menu and retry the Create Library Diskette function.

For Service Personnel Only: No action is required.

7444

Description: The fixed disk drive specified does not contain an LIB subdirectory, so one is being created.

Possible Cause: N/A

User Action: No response is required.

For Service Personnel Only: No action is required.

Status Codes

7445

Description: The specified library member is being processed during initialization of the Library disk.

Possible Cause: N/A

User Action: No response is required.

For Service Personnel Only: No action is required.

7450

Description: You are attempting to select more than one IML source subdirectory for the same disk type. For example, UTL is already selected and you are attempting to select the LFU subdirectory for your IML source subdirectory. This is not allowed.

Possible Cause: N/A

User Action: If you wish to select the subdirectory as an IML source, you must first deselect the same type of subdirectory.

For Service Personnel Only: No action is required.

7451

Description: The customization utility "Media Management" was selected from the Master Menu on a 3174 that does not have any fixed disks installed.

Possible Cause: N/A

User Action: This is not a valid selection for 3174s that do not have fixed disks installed. Press **PF3** to quit and select another option from the Master Menu.

For Service Personnel Only: No action is required.

7452

Description: You are attempting to delete a subdirectory that was not previously selected.

Possible Cause: N/A

User Action: No action is required. This is an informational message.

For Service Personnel Only: No action is required.

7455

Description: The maximum number of library members has been copied to the fixed disk.

Possible Cause: N/A

User Action: No action is required. To copy other library members to this fixed disk you will have to delete library members that are no longer needed for your network.

For Service Personnel Only: No action is required.

7461

Description: The Downstream Load microcode you are attempting to merge already exists on the *to* diskette.

Possible Cause: N/A

User Action: If you still wish to merge, delete the duplicate Downstream Load microcode from the *To* disk.

For Service Personnel Only: No action is required.

7462

Description: The diskette that you inserted is blank.

Possible Cause: N/A

User Action: Replace the diskette with a valid Downstream Load diskette.

For Service Personnel Only: No action is required.

7463

Description: You are attempting to merge more than 4 different Downstream Load diskettes onto a 3174 Downstream Load disk. The maximum number you can merge is 4.

Possible Cause: N/A

User Action: You must delete one of the currently merged Downstream Load diskettes from the *To* disk before merging another different Downstream load diskette.

For Service Personnel Only: No action is required.

7464

Description: A node is customized for incoming calls (Q401 = 2 or 4). For these nodes, the first digit of Q420 must be 1 (validate calling DTE address on incoming calls).

Possible Cause: A node is configured with Q401 = 2 or 4, and the first digit of Q420 is not equal to 1.

User Action: Perform one of the following actions:

1. Change the response to Q420 to 1xxxxxx.
2. Change the response to Q401 so that it is not 2 or 4.

For Service Personnel Only: No action is required.

7465

Description: The connection IDs defined on the X.25 APPN Nodes panel are not unique for nodes that have undefined or the same DTE Addresses.

Possible Cause: The same connection ID is defined for different nodes on the X.25 APPN Nodes panel.

User Action: Change the connection IDs so that they are unique or change the DTE Addresses so that they are unique.

For Service Personnel Only: No action is required.

7466

Description: When Q401 = 2 or 4 (incoming or two-way calls) and digit 6 of Q420 (connection ID) is not set, the DTE address must be unique.

Possible Cause: A DTE Address was defined for an APPN that has Q401 = 2 or 4 and Q420 = xxxxx0xx that is not unique.

User Action: Perform one of the following actions:

1. Change the DTE Address so that it is unique.
2. Change the response to Q420 to xxxxx1xx.

For Service Personnel Only: No action is required.

7467

Description: When Q401 = 1 (PVC), the LCN must be unique.

Possible Cause: An LCN was defined for an APPN node that has Q401 = 1 that is not unique.

User Action: Change the LCN so that it is unique.

For Service Personnel Only: No action is required.

7468

Description: When Q401 = 3 or 4 (outgoing or two-way calls) and digit 1 of Q421 (3174 DTE Address) is set, Q424 (3174 DTE Address) must be defined.

Possible Cause: An X.25 APPN Node is configured for a circuit type of two-way or outgoing, with the 3174 DTE address digit of Q421 = 1 and Q424 on the 1A host for the link is not defined.

User Action: Perform one of the following actions:

1. Change digit 1 of Q421 to 0.
2. Provide the 3174 DTE Address in Q424 on the 1A host.

For Service Personnel Only: No action is required.

Status Codes

7469

Description: An X.25 APPN Adjacent node is defined, or an X.25 Circuit Profile is defined and the 1A host is not defined as X.25.

Possible Cause: The 1A host is not defined as an X.25 host.

User Action: Define the 1A host as X.25.

For Service Personnel Only: No action is required.

7470

Description: Both a Dump and a Trace diskette were selected on the Create Diskette panel.

Possible Cause: N/A

User Action: Select only one type of diskette to be created, or press **PF3** to exit.

For Service Personnel Only: No action is required.

7471

Description: Both a 1.2-MB and a 2.4-MB diskette were selected on the Create Diskette panel.

Possible Cause: N/A

User Action: Select only one type of diskette or press **PF3** to exit.

For Service Personnel Only: No action is required.

7472

Description: A 2.4-MB diskette was selected on the Create Diskette panel, but the target is a 1.2-MB drive.

Possible Cause: N/A

User Action: Change the target to a 2.4-MB drive or press **PF3** to exit.

For Service Personnel Only: No action is required.

7473

Description: There is not enough storage to read in the files from the Utility diskette selected on the Create Diskette panel.

Possible Cause: N/A

User Action: No action is required. Press **PF3** to exit.

For Service Personnel Only: No action is required.

7474

Description: The diskette type was not selected on the Create Diskette panel.

Possible Cause: N/A

User Action: Select either a Trace or Dump diskette or press **PF3** to exit.

For Service Personnel Only: No action is required.

7475

Description: The diskette density was not selected on the Create Diskette panel.

Possible Cause: N/A

User Action: Select either a 1.2-MB or 2.4-MB diskette, or press **PF3** to quit.

For Service Personnel Only: No action is required.

7481

Description: The microcode release level of the diskette being copied to the fixed disk is not a supported level for this function. The minimum support microcode release level is A4.0 or S4.0

Possible Cause: N/A

User Action: Either replace the source diskette with a diskette at or greater than microcode release level A4.0 or S4.0 and press **Enter**, or press **PF3** to quit.

For Service Personnel Only: No action is required.

7482

Description: A single-drive full copy was attempted from a fixed disk drive to the same fixed disk drive.

Possible Cause: N/A

User Action: Either select a different "From" drive or a different "To" drive on the Available Drives panel.

For Service Personnel Only: No action is required.

7483

Description: An unformatted disk is being used as the *from* disk. Unformatted disks cannot be copied.

Possible Cause: N/A

User Action:

For diskettes:

Insert a valid 3174 diskette and retry the copy utility.

For fixed disks:

The subdirectory containing the disk image you are trying to copy has not been formatted. Refer to "Initializing the Fixed Disk" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7484

Description: When KDU is configured, the Q121 languages and the KDU languages must all be in the same compatibility list.

Possible Cause: N/A

User Action: Check the language responses for KDU and Q121 responses for any configured hosts and make sure that they are all in the same compatibility list (for example, CECP, Eastern European, Eastern European Cyrillic).

For Service Personnel Only: No action is required.

7485

Description: When KDU is configured, and the KDU languages selected are different from the Q121 languages, and all of the languages are in the CECP compatibility list, then Q123 (CECP) must be 1.

Possible Cause: N/A

User Action: Change the response to Q123 on the 1A host to 1.

For Service Personnel Only: No action is required.

7501

Description: RPQs were moved from the *old* disk to the *new* disk during a microcode upgrade.

Possible Cause: N/A

User Action: If new RPQ diskettes were received with the new microcode release level you are installing, delete the existing RPQs that were moved and merge the new RPQs. Use the RPQ Merge utility.

For Service Personnel Only: No action is required.

Status Codes

7502

Description: During a microcode upgrade, the modify keyboard customization data was not upgraded.

Possible Cause: N/A

User Action: Perform the Modify Keyboard procedure to upgrade the modify keyboard data. Refer to the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7503

Description: During a microcode upgrade, errors were detected in multiple configure panels.

Possible Cause: N/A

User Action: Reconfigure the Control disk.

For Service Personnel Only: No action is required.

7504

Description: During a microcode upgrade, the printer authorization matrix (PAM) data could not be upgraded.

Possible Cause: N/A

User Action: Reconfigure the PAM. Refer to "How to Define the PAM" or "How to Define Devices" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7505

Description: During a microcode upgrade, errors were detected in multiple asynchronous emulation adapter (AEA) configure panels.

Possible Cause: N/A

User Action: Reconfigure the AEA. Refer to "Defining AEA" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7521

Description: The Encrypt/Decrypt adapter is not present.

Note: This feature can be installed only on 3174 Models 1R and 2R.

If the adapter is not installed and you need it for your installation, contact your IBM Representative.

Possible Cause: N/A

User Action: Check card location 24 for card type 9030.

If the adapter is installed, request service.

For Service Personnel Only: Exchange FRU Type 9030 in location 24.

7522

Description: Incorrect characters were entered for the Encrypt/Decrypt Master Key or CID values.

Only the following characters are valid: 0123456789ABCDEF.

Possible Cause: N/A

User Action: Re-enter the Master Key or CID value using valid characters.

For Service Personnel Only: No action is required.

7523

Description: A digit pair in the master key value does not have odd parity.

Possible Cause: N/A

User Action: The master key value must have odd parity in every byte (2 digits) of the key. Odd parity means that the number of bits set to 1 in each byte of the master key must be odd. For example, 08 has odd parity (that is, 1 bit is set); 24 is even parity (that is, 2 bits are set).

For Service Personnel Only: No action is required.

7524

Description: Encrypt/Decrypt Adapter error.

Possible Cause:

- The Encrypt/Decrypt key was in the vertical position when the controller was turned on.
- Encrypt/Decrypt adapter.
- Battery on the adapter card.

User Action:

1. Turn the Encrypt/Decrypt key to the horizontal position. Then, turn it back to the vertical position. Then call the system security supervisor to install the master key value.
2. Replace the battery on the Encrypt/Decrypt Adapter.
3. Request service.

For Service Personnel Only: Exchange FRU Type 9030 in location 24.

7525

Description: Encrypt/Decrypt Adapter error.

Possible Cause:

- The Encrypt/Decrypt key was in the vertical position when the controller was turned on.
- Encrypt/Decrypt adapter.
- Battery on the adapter card.

User Action:

1. Turn the Encrypt/Decrypt key to the horizontal position. Then, turn it back to the vertical position. Then call the system security supervisor to install the master key value.
2. Replace the battery on the Encrypt/Decrypt Adapter.
3. Request service.

For Service Personnel Only: Exchange FRU Type 9030 in location 24.

7526

Description: An incorrect CID was entered.

Possible Cause: N/A

User Action: A CID must contain at least 1 alphanumeric character. Empty spaces cannot be interspersed between characters.

For Service Personnel Only: No action is required.

7527

Description: An incorrect option was selected.

Possible Cause: N/A

User Action: Select only options available on the panel.

For Service Personnel Only: No action is required.

Status Codes

7528

Description: The master key value stored in the Encrypt/Decrypt adapter does not agree with the Encrypt/Decrypt diskette.

Possible Cause: N/A

User Action: This happens if the wrong Encrypt/Decrypt diskette is inserted in the drive or if someone has changed the master key value on the diskette using another controller. Insert the correct diskette. If the correct diskette was inserted, follow your local security procedure.

For Service Personnel Only: No action is required.

7529

Description: The Encrypt/Decrypt diskette matches the current key.

Possible Cause: N/A

User Action: The master key value in the Encrypt/Decrypt adapter and on the Encrypt/Decrypt diskette are in agreement.

For Service Personnel Only: No action is required.

7530

Description: Either the key on the Encrypt/Decrypt adapter is not in the correct position or the adapter is defective.

Possible Cause: N/A

User Action:

1. Verify that the Encrypt/Decrypt adapter key is in the vertical position.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Exchange FRU Type 9030 in location 24.

7531

Description: The Encrypt/Decrypt diskette is not initialized.

Possible Cause: N/A

User Action: Use Option 1 to initialize the Encrypt/Decrypt diskette with a master key value.

For Service Personnel Only: No action is required.

7534

Description: A selection was made on the Central Site Customizing menu which requires a label data type to be specified.

Possible Cause: N/A

User Action:

1. Press **PF7** (Back) from the Central Site Customizing menu and respond with a "Y" to one or more label data types, or
2. Change the selection on the Central Site Customizing menu to a function that does not require a label data type to be specified on the Parameter Assignment panel.

For Service Personnel Only: No action is required.

7535

Description: A Control diskette must be installed when the Generate Labels function is being performed.

Possible Cause: N/A

User Action: Insert a Control diskette that is the same microcode release level of the library member for which labels are being printed, and press **Enter**.

For Service Personnel Only: No action is required.

7536

Description: There is a problem with the printer being used to generate labels.

Possible Cause: N/A

User Action:

1. Make sure that the label forms are correctly installed in the printer paper path.
2. Turn the printer Off and then On again.

For Service Personnel Only: No action is required.

7537

Description: The printer being used to generate labels is switched Off.

Possible Cause: N/A

User Action:

1. Turn the printer On.
2. Retry the operation.

For Service Personnel Only: No action is required.

7538

Description: A hardware error has been detected with the printer being used to print labels.

Possible Cause: N/A

User Action:

1. Turn the printer Off and then On again.
2. Make sure that the label forms are correctly installed in the printer paper path.
3. Retry the operation.
4. Refer to the printer problem determination documentation.

For Service Personnel Only: No action is required.

7539

Description: A printer is not attached to the specified printer port.

Possible Cause: N/a

User Action:

1. Connect the printer to the controller port and turn it On.
2. Check the coax between the printer and the controller and ensure that it is correctly attached.
3. Turn the printer Off and then On again.
4. Retry the operation.

For Service Personnel Only: No action is required.

7540

Description: Printer hardware errors.

Possible Cause: N/A

User Action:

1. Turn the printer Off and then On again.
2. Retry the operation.
3. Refer to the printer documentation.

For Service Personnel Only: No action is required.

Status Codes

7541

Description: Your response is not valid. The Date Format entered on the Central Site Customizing Date and Time Panel was not valid.

Possible Cause: N/A

User Action: Enter a correct Date Format (as indicated on the panel) and press the **Enter** key.

For Service Personnel Only: No action is required.

7542

Description: Your response is not valid. The new date entered on the Central Site Customizing panel is not valid for the Date Format that has been selected.

Possible Cause: N/A

User Action: Enter the new date in the Date Format selected and press the **Enter** key.

For Service Personnel Only: No action is required.

7543

Description: Your response is not valid. The new time entered on the Central Site Customizing panel is not valid for the Time Format that has been selected.

Possible Cause: N/A

User Action: Enter the new time in the Time Format selected and press the **Enter** key.

For Service Personnel Only: No action is required.

7544

Description: Your response is not valid. There is an error in the Central Site Customizing Date and Time panel; the AM/PM indicator was specified incorrectly for the 12-hour time format.

Possible Cause: N/A

User Action: For the 12-hour time format, specify either an "A" or "P" for an AM or PM indication on the Central Site Customizing Time and Date panel.

For Service Personnel Only: No action is required.

7545

Description: Your response is not valid. The Time format entered on the Central Site Customizing Date and Time panel is not valid.

Possible Cause: N/A

User Action: Enter a correct Time format (as indicated on the panel) and press the **Enter** key.

For Service Personnel Only: No action is required.

7546

Description: Your response is not valid. A drive number entered on the Parameter Assignment panel of the Central Site Customizing is not valid.

Possible Cause: N/A

User Action: Re-enter a valid drive number.

For Service Personnel Only: No action is required.

7547

Description: Your response is not valid. The same drive number was used for the Library and Control disks on the Parameter Assignment panel of the Central Site Customizing procedure.

Possible Cause: N/A

User Action: Change the drive number for either the Library disk or the Control disk.

For Service Personnel Only: No action is required.

7548

Description: Your response is not valid. A Y (yes) response was not made for one of the data types.

Possible Cause: N/A

User Action: Re-enter a valid "Y" response for one of the data types, and press **Enter**.

For Service Personnel Only: No action is required.

7549

Description: Your response is not valid. Selection of the Source for the GET operation was not made, or the selection was incorrect.

Possible Cause: N/A

User Action: Select a valid source (as indicated on the panel) and press **Enter**.

For Service Personnel Only: No action is required.

7550

Description: The Control disk microcode release level is at a higher level than the Utility microcode you are using.

Possible Cause: N/A

User Action:

For diskettes:

Replace the Control diskette with another Control diskette that is less than or equal to the release level of the Utility microcode you are using.

For fixed disk drives:

Use a Utility disk with a microcode release level that is equal to or greater than that of the Control disk.

To determine the release level of the microcode on the fixed disk, refer to "Display Disk Information" in the 3174 Utilities Guide.

For Service Personnel Only: No action is required.

7551

Description: The Control disk microcode level is not the same as the Utility disk microcode level.

Possible Cause: N/A

User Action:

For diskettes:

Replace the Control diskette with another Control diskette that is equal to the release level of the Utility microcode you are using.

For fixed disk drives:

Use a Control disk with a microcode release level that is equal to that of the Utility disk.

To determine the release level of the microcode on the fixed disk, refer to "Display Disk Information" in the 3174 Utilities Guide.

For Service Personnel Only: No action is required.

7552

Description: Your response is not valid. A character other than an "X," space, or null was found on one or more member input fields on the Central Site Customizing Library Members panel.

Possible Cause: N/A

User Action: Enter a valid character ("X," space, or null) into the input fields in error, and press **Enter**.

For Service Personnel Only: No action is required.

Status Codes

7553

Description: Your command was not valid. The command entered on the select line of the Central Site Customizing Library Members panel is not supported by the currently selected option.

Possible Cause: N/A

User Action: Correct the command on the select line, or leave the Central Site Customizing Library Members panel and change the option.

For Service Personnel Only: No action is required.

7554

Description: Your response is not valid. The library member number entered is not on the Library disk.

Possible Cause: N/A

User Action: Enter a valid member number.

For Service Personnel Only: No action is required.

7555

Description: Your selection is not valid. More than one member was selected on the Central Site Customizing Library Members panel, but the currently selected option operates only on a single library member.

Possible Cause: N/A

User Action: Elect only one member to be processed.

For Service Personnel Only: No action is required.

7556

Description: The entered member name is not valid.

Possible Cause: N/A

User Action: Enter a valid member name.

For Service Personnel Only: No action is required.

7557

Description: No selection was made on the Central Site Customizing Library Members panel; a member must be selected or specified on the select line before pressing **Enter**.

Possible Cause: N/A

User Action: Select a Library member or enter a member name on the select line.

For Service Personnel Only: No action is required.

7558

Description: Library disk processing is in progress.

Possible Cause: N/A

User Action: Wait until the Library disk processing is complete before entering a command.

Note: Processing may take more than 1 minute to complete.

For Service Personnel Only: No action is required.

7559

Description: The Library diskette is required.

Possible Cause: N/A

User Action: Insert the Library diskette in the specified diskette drive and press **Enter**.

For Service Personnel Only: No action is required.

7560

Description: The maximum number of microcode levels for this Library disk has been reached.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Use another Library diskette that has four or fewer microcode levels or a library fixed disk that has nine or fewer microcode levels.
2. Use another Library diskette that already contains library members at the same microcode level as the member for which the PUT process initially failed
3. Delete the library members from the Library disk that are at the oldest microcode level, and repeat the PUT process for the new member.

For Service Personnel Only: No action is required.

7561

Description: The Central Site Library disk being used already contains the maximum number of library members.

Possible Cause: N/A

User Action: Use another Library disk and PUT the member there.

For Service Personnel Only: No action is required.

7562

Description: You are doing a PUT data to a Library member which does not exist; the PUT data option has been selected and you have entered a member name which does not already exist on this Library disk.

Possible Cause: N/A

User Action: Either press **Enter** to proceed, or press quit or cancel.

For Service Personnel Only: No action is required.

7563

Description: A Control disk has been generated. There are more disks to be generated as previously marked on the Library Members panel.

Possible Cause: N/A

User Action: Press **Enter** to start the generate process.

For Service Personnel Only: No action is required.

7564

Description: You are doing a Put data to a library member which already exists.

Possible Cause: N/A

User Action: Either press **Enter** to proceed, or press quit or cancel.

For Service Personnel Only: No action is required.

7565

Description: Library members specified for processing on the Library Members panel are at a microcode level that is not compatible with the Utility disk from which the Central Site Customizing procedure was loaded.

Note: The message displayed at the terminal lists the number of each member in error. A "+" indicates that there are more member numbers that would not fit on the message line.

Possible Cause: N/A

User Action: Perform one of the following actions for each member selected:

1. If the member is at a lower microcode level than the Utility disk, perform the Microcode Upgrade procedure on the Central Site Customizing Create and Modify panel.
2. If the member is at a higher microcode level than the Utility disk, use a new Utility disk that has a microcode level greater than or equal to the member.

For Service Personnel Only: No action is required.

Status Codes

7566

Description: The Fullgen option on the Central Site Customizing Generate Output panel was chosen before loading the master Control diskette into storage.

Possible Cause: N/A

User Action: Press **PF9** (Ctldsk) to initiate the copying of a Control diskette into storage in the 3174.

For Service Personnel Only: No action is required.

7567

Description: The wrong diskette is in the drive; in order to perform the Generate function, you must use the master Control diskette.

Possible Cause: N/A

User Action: Replace the diskette presently in the specified diskette drive with the master Control diskette and press **Enter**.

For Service Personnel Only: No action is required.

7568

Description: The wrong diskette is in the diskette drive. A diskette other than the Control diskette is in the diskette drive.

Possible Cause: N/A

User Action: Replace the diskette presently in the specified diskette drive with the Control diskette and press **Enter**.

For Service Personnel Only: No action is required.

7569

Description: The Library member for which the Control diskette is being generated does not contain configure data.

Possible Cause: N/A

User Action: Configure data must be stored in the library member using the Put data function before generating a Control diskette for the member.

For Service Personnel Only: No action is required.

7570

Description: A diskette is not inserted in the diskette drive. A diskette must be inserted to create a Library diskette.

Possible Cause: N/A

User Action: Insert ANY diskette and press **Enter**.

For Service Personnel Only: No action is required.

7571

Description: A valid 3174 diskette is in the drive and is about to be overwritten.

Possible Cause: N/A

User Action: Either press **Enter** to proceed or **QUIT** or **CANCEL**.

For Service Personnel Only: No action is required.

7572

Description: The data types selected for the Get function were not found in the library member.

Possible Cause: N/A

User Action: Redefine new data type selections and press **Enter**.

For Service Personnel Only: No action is required.

7573

Description: Customizing data is being upgraded to the level of the Utility disk.

Possible Cause: N/A

User Action: No action is required. This is only an informational message.

For Service Personnel Only: No action is required.

7574

Description: During Central Site Customizing, you pressed the LOCATE key, but did not supply a library member name or number on the select line.

Possible Cause: N/A

User Action: Type the member name or number and press the LOCATE key again.

For Service Personnel Only: No action is required.

7575

Description: The correct Library diskette is not in the diskette drive.

Possible Cause: N/A

User Action: Insert the correct Library diskette into the drive and press **Enter**.

For Service Personnel Only: No action is required.

7576

Description: The requested Library Member was not found on the Library disk.

Possible Cause: N/A

User Action: Enter the name of a valid, existing Library Member.

For Service Personnel Only: No action is required.

7577

Description: The Control diskette is missing for Generate Control diskette processing.

Possible Cause: N/A

User Action: Insert a Control diskette into the specified drive.

For Service Personnel Only: No action is required.

7578

Description: The Control diskette is missing for the Get Data request.

Possible Cause: N/A

User Action: Insert a Control diskette into the specified drive and press **Enter**.

For Service Personnel Only: No action is required.

7579

Description: The Library diskette has not been installed.

Possible Cause: N/A

User Action: Insert the Library diskette and press **Enter**.

For Service Personnel Only: No action is required.

7580

Description: The version number entered on the select line is incorrect.

Possible Cause: N/A

User Action: Enter a valid version number.

For Service Personnel Only: No action is required.

Status Codes

7581

Description: An incorrect check digit was entered.

Possible Cause: N/A

User Action: Check the patch data. If the check digit is correct, contact your next level of support.

For Service Personnel Only: No action is required.

7582

Description: An incorrect DOS file name/extension was entered.

Possible Cause: N/A

User Action: Check the patch data. If the file name and extension are correct, contact your next level of support.

For Service Personnel Only: No action is required.

7601

Description: You specified an incorrect language code.

Possible Cause: N/A

User Action: Refer to question 121 in the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7602

Description: An incorrect keyboard layout type was specified.

Possible Cause: N/A

User Action: Specify the KB field entry with a 0, 1, 2, 3, or 4.

For Service Personnel Only: No action is required.

7603

Description: An incorrect keypad layout type was specified.

Possible Cause: N/A

User Action: Specify the KP field entry with a 0, 1, or 2.

For Service Personnel Only: No action is required.

7604

Description: The language field has been changed.

Possible Cause: N/A

User Action: This is an informational warning that you have changed from one valid language code to another valid code. If you confirm this new language number by entering a 1 on the 909 field, all the IDs specified will be given new, unmodified keyboard tables. All previous master panel entries will be lost as well as any previous keyboard table modifications.

For Service Personnel Only: No action is required.

7605

Description: An incorrect entry was specified in the modify field.

Possible Cause: N/A

User Action: Specify the modify field entry with a 0, 1, 2, or 3.

For Service Personnel Only: No action is required.

7606

Description: An incorrect entry was specified in the 909 field.

Possible Cause: N/A

User Action: Specify a 0, 1, or F.

For Service Personnel Only: No action is required.

7607

Description: The 909 field equals 1, and all the modify fields equal 0 (with the associated KB and KP fields also equal to 0) or R.

Possible Cause: N/A

User Action: If you do not change any of the R or 0 entries in the modify field to indicate that you want to make further modifications or want to view a modified keyboard, you must enter F in the 909 entry area to indicate that the definition procedure is finished.

For Service Personnel Only: No action is required.

7608

Description: The language specified does not support Data Entry, APL, or IBM Enhanced keyboard layout.

Possible Cause: N/A

User Action: Enter a language ID that supports the selected keyboard layout, or select a keyboard layout that is supported by the language you selected.

For Service Personnel Only: No action is required.

7610

Description: You cannot select a keypad without selecting a keyboard.

Possible Cause: N/A

User Action: The KB field equals 0, and the KP field does not equal 0. You cannot select a keypad without selecting a keyboard type. Select a keyboard layout along with the keypad layout.

For Service Personnel Only: No action is required.

7611

Description: You must select a keyboard type to change the modify field.

Possible Cause: N/A

User Action: The KB field equals 0, the KP field equals 0, and the M field does not equal 0. You cannot modify a keyboard that has not been selected. The KB and modify field entries are intensified to indicate that you must select a keyboard to be modified or change the modify field to a 0.

For Service Personnel Only: No action is required.

7612

Description: You cannot enter a 2 or a 3 in the modify field, unless the modify field for this KB ID was an R.

Possible Cause: N/A

User Action: Re-specify your response.

For Service Personnel Only: No action is required.

7613

Description: You cannot change the keyboard type (KB) unless the modify field is changed to a 0 or a 1.

Possible Cause: N/A

User Action: You cannot transfer the modifications of one keyboard table to another keyboard table by simply specifying a different keyboard. If you do specify a 0 or a 1 in the modify field, the previously defined keyboard layout is erased and you must completely redefine the keyboard layout for the new keyboard type.

For Service Personnel Only: No action is required.

Status Codes

7614

Description: You cannot change the keypad type (KP) unless the modify field is changed to a 0 or 1.

Possible Cause: N/A

User Action: If you do specify a 0 or a 1 in the modify field, the previously defined keyboard layout is erased. You must completely redefine the keyboard layout for the new keypad type.

For Service Personnel Only: No action is required.

7615

Description: The 909 field equals F, and all modify fields do not equal 0 (with the associated KB fields also equal to 0) or R.

Possible Cause: N/A

User Action: If you have another keyboard panel request outstanding (that is, a modify entry equal to 1, 2, or 3) when the Enter key is pressed, error code 15 is displayed and the 909 field is intensified. All modify field entries that are not a 0 or R are also intensified.

If the 909 field equals F, and the modify field equals 0, but the KP field does not equal 0 (which implies that the KB field does not equal 0), you have specified a nondefault keypad and an unmodified keyboard table. This is an error because, to overlay a keypad, the keyboard must be modified.

For Service Personnel Only: No action is required.

7616

Description: Duplicate DLCI numbers were specified.

Possible Cause: N/A

User Action: Correct the duplicate DLCI numbers and retry.

For Service Personnel Only: No action is required.

7617

Description: Each DLCI and SAP pair must be unique for entries.

Possible Cause: N/A

User Action: Fill in a DLCI and SAP pair combination with an unique value.

For Service Personnel Only: No action is required.

7618

Description: DLCI is out of range for entries.

Possible Cause: N/A

User Action: Fill in the DLCI field with a decimal value in the range of 16 to 1007 or change the DLC type.

For Service Personnel Only: No action is required.

7619

Description: DLCI must be configured when DLC type is 5 for entries.

Possible Cause: N/A

User Action: Fill in the DLCI field or change the DLC type so that the DLC type is not equal to 5.

For Service Personnel Only: No action is required.

7620

Description: Duplicate DLCI and SAP pairs have been defined on the Frame-Relay Index Assignment panel for the following hosts:

The host numbers are displayed when this message appears.

Possible Cause: N/A

User Action: Change one of the duplicate combinations to a unique value.

For Service Personnel Only: No action is required.

7621

Description: SAP value not multiple of 4 or out of range for entries.

Possible Cause: N/A

User Action: Change the SAP value to be a multiple of 4 or to be within the range of X'04' and X'EC'.

For Service Personnel Only: No action is required.

7622

Description: PU DLCI/SAP pair duplicated at entries.

Possible Cause: N/A

User Action: Change the duplicate combinations to a unique value.

For Service Personnel Only: No action is required.

7623

Description: At least one DLCI must be defined when Q569 is 'Y'.

Possible Cause: N/A

User Action: Define at least one optional DLCI on the Frame-Relay Optional DLCI Specification panel, or return to the Frame-Relay Description panel and change Q569 to 'N'.

For Service Personnel Only: No action is required.

7630

Description: An incorrect character input on mode selection row.

Possible Cause: N/A

User Action: The only valid characters for the mode select row are 0–8 and X. Each incorrect character is reset to the default number, and each group that had an incorrect character entered is intensified. The cursor is placed at the first number of the first incorrect group.

For Service Personnel Only: No action is required.

7631

Description: Incorrect modes were selected.

Possible Cause: N/A

User Action: Mode selection row is also checked to verify that one, and only one, number has been selected in each group. If not, the groups in error are intensified, all incorrect entries are reset to the default number, and the cursor is placed at the first entry of the first incorrect group. The groups with no incorrect entries are not intensified.

For Service Personnel Only: No action is required.

7632

Description: Incorrect I/O interface table code specified.

Possible Cause: N/A

User Action: You have specified an undefined code while performing a copy from the I/O translate table. The erroneous entry is intensified, and the cursor is moved to the first position of the "I/O =" entry area. Check the table of I/O Interface Codes for the language that you are using in the *3174 Character Set Reference*.

For Service Personnel Only: No action is required.

7633

Description: The cursor is located in an incorrect location (on the boundary of a key or outside the keyboard boundary).

Possible Cause: N/A

User Action: When you are doing a full-key change, you may place the cursor anywhere on the key. When you are doing a single-shift change, you must place the cursor in the desired shift row on the key.

For Service Personnel Only: No action is required.

Status Codes

7640

Description: Make/break keys must remain make/break.

Possible Cause: N/A

User Action: You may not:

1. Copy a make/break key to a non-make/break key, or vice versa
2. Copy an I/O interface table function to a make/break key, because none of the I/O table functions are make/break functions.

You may, however, delete a make/break function.

The following keys are make/break keys:

- Shift lock
- Upshift (two keys)
- RESET/DEV CNCL
- ALT (two keys)
- Enter (on main keyboard only)
- Downshift (data entry keyboard only).

For Service Personnel Only: No action is required.

7641

Description: A change involving the ALT (alternate), upshift, downshift, or SHIFTLOCK keys was tried in single-shift mode.

Possible Cause: N/A

User Action: Any changes that involve the shift keys must be made in full-key mode only. When an error is detected, the keyboard table is returned to the state that it was in before this change was tried.

For Service Personnel Only: No action is required.

7658

Description: You have tried to eliminate a mandatory key function.

Possible Cause: N/A

User Action: The keyboard table is restored to its original state.

For Service Personnel Only: No action is required.

7660

Description: An incorrect entry was made in the 910 field.

Possible Cause: N/A

User Action: The only valid entries for the 910 field are 1, 2, 3, A, and F.

For Service Personnel Only: No action is required.

7661

Description: An incorrect entry was made in the 910 subfield.

Possible Cause: N/A

User Action: The only valid entries for the 910 subfield are 0 and 1.

For Service Personnel Only: No action is required.

7662

Description: You attempted to enter I/O mode while in APL.

Possible Cause: N/A

User Action: I/O mode is not permitted while in APL.

For Service Personnel Only: No action is required.

7663

Description: An incorrect KDU name was entered.

Possible Cause: N/A

User Action: Re-enter a valid KDU name. Use **A** through **Z**, **0** through **9**, spaces and underscores. You must use an alphabetic character as the first character of the name. You **cannot** use interspersed spaces or underscores.

For Service Personnel Only: No action is required.

7664

Description: You attempted to modify a key in single-shift mode in a manner that you will not be able to use the key in all shifts for CAPSLOCK or SHIFTLOCKS.

Possible Cause: N/A

User Action: The CAPSLOCK and SHIFTLOCK functions may be mixed on one of the make-break keys or you may exit the Modify Keyboards Utility. You can move them to another key in full-shift mode and then move them on the new key in single-shift mode. All shifts of the new key must have CAPSLOCK or SHIFTLOCK, in any arrangement.

For Service Personnel Only: No action is required.

7665

Description: You attempted to modify a restricted key.

The following keys are restricted keys:

- Left and right shift.
- ALT shift.
- CAPSLOCK/SHIFTLOCK.

Possible Cause: N/A

User Action: You may modify another key or exit the Modify Keyboards Utility.

For Service Personnel Only: No action is required.

7666

Description: Q554 must be non-zero when Q300 is 1.

Possible Cause: N/A

User Action: Correct Q554 or Q300 and retry.

For Service Personnel Only: No action is required.

7668

Description: Frame Relay must be enabled when host attach is frame relay.

Possible Cause: N/A

User Action: Correct Q300 or Host Attach (Q101) and retry.

For Service Personnel Only: No action is required.

7669

Description: DLCI number/SAP combination must be unique across all hosts (Q090).

Possible Cause: N/A

User Action: Correct duplicate addresses in Q090 and retry.

For Service Personnel Only: No action is required.

7670

Description: Frame Relay must be Enabled when Q569 is 'Y'.

Possible Cause: N/A

User Action: Enable Frame Relay (Q300=1) or set Q569 to 'N'.

For Service Personnel Only: No action is required.

Status Codes

7694

Description: Frame Relay must be enabled (Q300) if TCP/IP (Q066) is configured.

Possible Cause: N/A

User Action: Correct Q066 or Q300 and retry.

For Service Personnel Only: No action is required.

7695

Description: Q052 and Q066 cannot be equal after applying their Subnet Masks.

Possible Cause: N/A

User Action: Correct either Q052, Q066, or the Subnet Masks and retry.

For Service Personnel Only: No action is required.

7696

Description: Either Q052 or Q066 must be customized.

Possible Cause: N/A

User Action: Fill in one of the above with a nonzero address.

For Service Personnel Only: No action is required.

7697

Description: Type 40 characters or less. Bar marks 41.

Possible Cause: N/A

User Action: Re-type and press **Enter**.

For Service Personnel Only: No action is required.

7698

Description: Label data is longer than selected label size.

Possible Cause: N/A

User Action: Go back a few screens and select longer label size, or accept that this label will not be printed.

For Service Personnel Only: No action is required.

7699

Description: Change the 909 field from 0 to 1.

Possible Cause: N/A

User Action: If the 909 field equals 0 and all other master panel entries are valid, error code 99 is displayed to remind you to change the 0 to a 1.

All the responses on the master panel are valid, but you have not yet indicated visual confirmation of the entries.

For Service Personnel Only: No action is required.

7701

Description: You do not have the correct type of disk for the operation you are performing.

Possible Cause: N/A

User Action:

For diskette drives:

Insert the correct diskette and press **Enter**.

For fixed disk drives:

Determine if the type of disk you require has been copied onto the fixed disk. If required, copy the diskette you need onto the fixed disk, then retry your original operation. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7705

Description: You cannot perform this procedure on a one-disk-drive controller.

Possible Cause: N/A

User Action: Use a two-disk-drive controller to perform this procedure.

For Service Personnel Only: No action is required.

7706

Description: A diskette with incompatible configuration levels was inserted.

Possible Cause: N/A

User Action:

1. Compare the IMLed Utility diskette with the *To* diskette. The release levels must be the same.
2. Compare the configuration levels of your Control diskettes. The configuration level of the *To* diskette must be higher than the configuration level of the *From* diskette.

For Service Personnel Only: No action is required.

7707

Description: A diskette with incompatible release levels was inserted.

Possible Cause: N/A

User Action:

1. Compare the IMLed Utility diskette with the *To* diskette. The release levels must be the same.
2. Compare the release levels of your Control diskettes. The release level of the *To* diskette must be higher than the release level of the *From* diskette.

For Service Personnel Only: No action is required.

7708

Description: A diskette with incompatible suffix levels was inserted.

Note: The suffix level is the last 2 digits of the microcode release level. For example, A3.01 is a suffix level of A3.00.

Possible Cause: N/A

User Action:

1. Compare the IMLed Utility diskette with the *To* diskette. The release levels must be the same.
2. Compare the suffix levels of your Control diskettes. The suffix level of the *To* diskette must be higher than the suffix level of the *From* diskette.

For Service Personnel Only: No action is required.

7709

Description: A diskette with incompatible maintenance levels was inserted.

Note: A maintenance release level has to be the same as the functional release level. For example, if the functional release level is A4.0, then the maintenance release has to be A4.0.

Possible Cause: N/A

User Action: Compare the maintenance levels of your diskettes. The maintenance level of the *To* diskette must be higher than the maintenance level of the *From* diskette.

For Service Personnel Only: No action is required.

7710

Description: An uncustomized *From* Control disk is being used.

Possible Cause: N/A

User Action:

For diskette drives:

Insert a customized diskette.

Status Codes

For fixed disk drives:

You must customize the CTL subdirectory on the fixed disk before you can continue. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7711

Description: An uncustomized *To Control* disk is being used.

Possible Cause: N/A

User Action:

For diskette drives:

Insert a customized diskette.

For fixed disk drives:

You must customize the CTL subdirectory on the fixed disk before you can continue. Refer to the *3174 Planning Guide*.

For Service Personnel Only: No action is required.

7712

Description: A non-3174 product diskette is installed in the diskette drive.

Possible Cause: N/A

User Action: Install a valid 3174 diskette in the drive.

For Service Personnel Only: No action is required.

7714

Description: Disk media release level mismatch between the disk drives.

Possible Cause: N/A

User Action:

For diskette drives:

Insert the correct diskette and press **Enter**.

For fixed disk drives:

Copy the required diskette at the correct release level onto the fixed disk and retry your original operation. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7715

Description: Disk media configuration level mismatch between the disk drives.

Possible Cause: N/A

User Action:

For diskette drives:

Insert the correct diskette and press **Enter**.

For fixed disk drives:

Copy the required diskette at the correct configuration level onto the fixed disk and retry your original operation. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7716

Description: The diskette drive does not contain the original diskette.

Possible Cause: N/A

User Action: Verify that the correct diskette is installed.

For Service Personnel Only: No action is required.

7717

Description: The diskette drive does not contain the original diskette.

Possible Cause: N/A

User Action:

1. Use a PF key to exit.
2. Verify that the correct diskette is installed.

For Service Personnel Only: No action is required.

7718

Description: The drive does not contain the original diskette.

Possible Cause: N/A

User Action:

1. Install the correct diskette.
2. Retry the utility.
3. Perform an **ALT 2 IML**; see page 2-3.
4. Record additional status codes and data.
5. Request service.

For Service Personnel Only: No action is required.

7719

Description: The diskette in drive 1 is not the original Utility diskette.

Possible Cause: N/A

User Action:

1. Verify that the correct diskette is installed.
2. Re-IML and retry.

For Service Personnel Only: No action is required.

7720

Description: The diskette in drive 2 is not the original Utility disk.

Possible Cause: N/A

User Action:

1. Verify that the correct diskette is installed.
2. Re-IML and retry.

For Service Personnel Only: No action is required.

7721

Description: The configuration levels of the Utility and Control diskettes are incompatible. The Control diskette and the Utility diskette must have the *same* configuration levels.

Possible Cause: N/A

User Action: Replace the Control diskette with a Control diskette that has the same configuration level as the IMLed Utility diskette, and press **Enter**.

For Service Personnel Only: No action is required.

Status Codes

7722

Description: The release levels of the Utility and Control diskettes are incompatible. The Control diskette and the Utility diskette must have the *same* release levels.

Possible Cause: N/A

User Action: Replace the Control diskette with a Control diskette that has the same release level as the IMLed Utility diskette, and press **Enter**.

For Service Personnel Only: No action is required.

7723

Description: The suffix levels of the Utility and Control diskettes are incompatible. The Control diskette and the Utility diskette must have the *same* suffix levels.

Note: The suffix level is the last 2 digits of the microcode release level. For example, A3.01 is a suffix level of A3.00.

Possible Cause: N/A

User Action: Replace the Control diskette with a Control diskette that has the same suffix level as the IMLed Utility diskette, and press **Enter**.

For Service Personnel Only: No action is required.

7724

Description: The maintenance levels of the Utility and Control diskettes are incompatible. The Control diskette and the Utility diskette must have a maintenance level the *same as or higher than* the IMLed Utility diskette.

Note: A maintenance release level has to be the same as the functional release level. For example, if the functional release level is A4.0, then the maintenance release has to be A4.0.

Possible Cause: N/A

User Action: Replace the Control diskette with a Control diskette that has a maintenance level the *same as or higher than* the IMLed Utility diskette, then press **Enter**.

For Service Personnel Only: No action is required.

7725

Description: The maximum number of different microcode levels has been reached on the target disk.

Maximum of 5 on a diskette.

Maximum of 10 on a fixed disk.

Possible Cause: N/A

User Action:

1. If the Target disk is a diskette:
 - a. Replace the full diskette with another formatted diskette.
 - b. Press **Enter** to continue with the full copy
2. If the Target disk is a fixed disk:
 - a. Press **PF3** to quit.
 - b. Delete any unwanted old microcode levels.
 - c. Retry the operation.

For Service Personnel Only: No action is required.

7726

Description: You attempted to use a utility on the fixed disk but the Utility subdirectory has been deleted.

Possible Cause: N/A

User Action: IML from a Utility diskette or recopy the Utility diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7727

Description: Disk media configuration level mismatch between the disks.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7728

Description: Disk media release level mismatch between the disks.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7729

Description: Disk media suffix level mismatch between the disks.

Note: The suffix level is the last 2 digits of the microcode release level. For example, A3.01 is a suffix level of A3.00.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7730

Description: Disk media maintenance level mismatch between the disks.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.

For Service Personnel Only: No action is required.

7731

Description: The fixed disk being copied *from* is uncustomized.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Customize the *from* Control disk. Refer to "How to Configure the Control Disk" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

Status Codes

7732

Description: The fixed disk being copied to is uncustomized.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Customize the to Control disk. Refer to "How to Configure the Control Disk" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7733

Description: Disk media configuration level mismatch between the Utility and Control disks.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7734

Description: Disk media release level mismatch between the Utility and Control disks.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7735

Description: Disk media suffix level mismatch between the Utility and Control disks.

Note: The suffix level is the last 2 digits of the microcode release level. For example, A3.01 is a suffix level of A3.00.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7736

Description: Disk media maintenance level mismatch between the Utility and Control disks.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Use compatible disks.
3. Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7737

Description: The requested subdirectory was not found on the fixed disk being processed.

Possible Cause: N/A

User Action: Copy the required diskette onto the fixed disk. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7738

Description: Diskette/diskette drive incompatibility error.

Possible Cause: N/A

User Action: Select a 2.4-MB drive as your source and target for a single-drive full copy.

For Service Personnel Only: No action is required.

7739

Description: A full copy of a 2.4-MB diskette is being attempted to a diskette in a 1.2-MB drive.

Possible Cause: N/A

User Action: Select a 2.4-MB drive as your source and target for a single-drive full copy.

For Service Personnel Only: No action is required.

7740

Description: A full copy of a 2.4-MB diskette is being attempted, but there is no 2.4-MB drive.

Possible Cause: N/A

User Action: No action is required. Quit and use another option.

For Service Personnel Only: No action is required.

7741

Description: Diskette/diskette drive incompatibility error. A 1.2-MB drive cannot read a 2.4-MB diskette.

Possible Cause: N/A

User Action: Replace the diskette with one of correct density or press **PF3** to exit.

For Service Personnel Only: No action is required.

7742

Description: Diskette/diskette drive incompatibility error. A 1.2-MB drive cannot read a 2.4-MB diskette.

Possible Cause: N/A

User Action: No action is required. Press **PF3** to quit.

For Service Personnel Only: No action is required.

7743

Description: Diskette/diskette drive incompatibility error. A 1.2-MB drive cannot read a 2.4-MB diskette.

Possible Cause: N/A

User Action: No action is required. Press **PF3** to quit.

For Service Personnel Only: No action is required.

Status Codes

7744 or 7745

Description: The source disk requested for the Modify and Copy function cannot have customizing question 101=M.

Possible Cause: N/A

User Action: Perform one of the following actions:

1. Use a disk that is not customized with question 101=M, or
2. Exit the utility and recustomize the source disk.

For Service Personnel Only: No action is required.

7751 to 7756

Description: Disk drive is not ready or is defective.

Possible Cause: N/A

User Action:

For diskette drives:

1. Insert the required diskette, close the door, and press **Enter**.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For fixed disk drives:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For RAM disk (HG = 07):

1. Verify that the RAM disk is installed securely; refer to *8250 Workstation Networking Module Problem Determination and Service Guide*.
2. Re-initialize the RAM disk and re-IML. Refer to "How to Copy Files" in the *8250 WNM Installation and Customization Guide*.
3. Perform a **Test All 82**; refer to the *8250 Workstation Networking Module Problem Determination and Service Guide*.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the file adapter.

For Models 21H through 92R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

For WNM: Exchange the WNM.

7757 to 7759

Description: A diskette or RAM disk is write-protected.

Possible Cause: N/A

User Action:

For diskette drive (HG = 01):

1. Remove the write protection or replace the diskette.
2. Retry the ALT 1 IML; see page 2-1.
3. Request service.

For RAM disk (HG = 07):

1. If the error occurred during an IML, re-IML.
2. Request service.

For Service Personnel Only:

For diskette drive (HG = 01): Exchange the WNM.

For RAM disk (HG = 07): Contact your next level of support.

7760

Description: A file adapter or disk drive failure has occurred.

Possible Cause: N/A

User Action:

1. Perform an **ALT 2 IML**; see page 2-3.
2. Request service.

For Service Personnel Only: Exchange the FRU indicated by the results of the ALT 2 IML. Refer to Chapter 3 in the maintenance manual for your model.

7761 to 7769

Description: Disk media error: Disk or directory full.

Possible Cause: N/A

User Action:

For diskette drives:

1. Exchange the Control or Utility diskette and retry the operation.
2. Request service.

For fixed disk drives:

1. Delete any unnecessary subdirectories. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Retry the operation.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the file adapter.

For Models 21H through 92R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

7770 to 7772

Description: Disk media error: File not found.

Possible Cause: N/A

User Action: Ensure that the subdirectory, file, or library member exists on the selected drive.

For diskette drives:

1. Use a backup diskette.
2. Retry the operation.
3. Request service.

For fixed disk drives:

1. Run the "Fixed Disk Media Tests" on page 2-5.

If data restoration is required, recopy your diskettes onto the fixed disk as required for your 3174 configuration. See "Restoring Your Data" on page 2-10.

2. Retry the operation.
3. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the file adapter.

For Models 21H through 92R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the planar board.

Status Codes

Refer to Chapter 3 in the maintenance manual for your model.

7773

Description: Disk media error: File not found. The message on the display identifies the subdirectory in error.

Possible Cause: N/A

User Action: Retry the operation. If another error occurs, follow these procedures:

1. To restore the subdirectory:
 - a. Record the subdirectory name.
 - b. Use "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide* to restore the subdirectory identified in the message.
 - c. Retry the operation.
2. Perform an **ALT 2 IML**.
3. Run the "Fixed Disk Media Tests" on page 2-5 and retry the operation.
4. Request service.

For Service Personnel Only: Contact your next level of support.

7774

Description: Disk media error: End of file error.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit or **Enter** to continue.
2. Verify that the subdirectory, file, or library member should exist on the selected drive.
3. Retry the operation.

For Service Personnel Only: Contact your next level of support.

7775

Description: A media error has occurred on the specified fixed disk drive.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit, or press **Enter** to retry.
2. Run the "Fixed Disk Media Tests" on page 2-5.

If data restoration is required, copy your diskettes onto the fixed disk as required for your 3174 configuration. See "Restoring Your Data" on page 2-10.

3. Retry the operation.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the file adapter.

For Models 21H through 92R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

7776

Description: An error has occurred on the specified fixed disk drive in the requested subdirectory.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit, or press **Enter** to retry.
2. Copy the diskette onto the fixed disk to replace the subdirectory you selected. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7777 or 7778

Description: A disk error has occurred, the directory is full on the specified drive.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit, or press **Enter** to retry.
2. Delete any unwanted subdirectories or library members and retry. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7779 to 7781

Description: An error has occurred on the specified fixed disk drive in a file within the requested subdirectory.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit, or press **Enter** to retry.
2. Copy the diskette onto the fixed disk to replace the subdirectory you selected. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7782 to 7785

Description: A file was not found in the requested subdirectory on the specified drive.

Possible Cause:

1. File, library member, or subdirectory does not exist.
2. Microcode.

User Action:

1. Press **PF3** to quit and ensure that the subdirectory, file, or member exists on the specified drive and retry. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.
2. Request service.

For Service Personnel Only: Contact your next level of support.

7786 or 7787

Description: A disk error has occurred on the specified fixed disk drive.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Run the "Fixed Disk Media Tests" on page 2-5.

If data restoration is required, copy your diskettes onto the fixed disk as required for your 3174 configuration. See "Restoring Your Data" on page 2-10.

3. Retry the operation.
4. Request service.

For Service Personnel Only:

For Models 1L through 14R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the file adapter.

For Models 21H through 92R:

1. Exchange the diskette drive or fixed disk.
2. Exchange the planar board.

Refer to Chapter 3 in the maintenance manual for your model.

7788 or 7789

Description: An error has occurred on the specified fixed disk drive in the requested subdirectory.

Possible Cause: N/A

Status Codes

User Action:

1. Press **PF3** to quit.
2. Copy the required diskette to restore the subdirectory you selected and retry the operation. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7790

Description: A directory full condition has occurred on the specified fixed disk for the requested subdirectory.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit.
2. Copy the required diskette to restore the subdirectory you selected and retry the operation. Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7791

Description: A disk error has occurred, the specified disk is full.

Possible Cause: N/A

User Action: Delete any unneeded subdirectories or members and retry the operation. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7792 to 7794

Description: A disk change error has occurred. Possible microcode problem.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit or press **Enter** to retry.
2. Request service.

For Service Personnel Only: Contact your next level of support.

7795

Description: The fixed disk, selected as the source disk for the copy operation, is unformatted.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit the copy operation.
2. Retry the copy function by specifying a formatted disk as the source.

For Service Personnel Only: No action is required.

7796

Description: The file adapter or disk is defective. No further processing is possible.

Possible Cause: N/A

User Action:

1. Press **PF3** to quit the copy operation.
2. Perform an **ALT 2 IML**, see page 2-3.
3. Request service and report the status code from the **ALT 2 IML**.

For Service Personnel Only: Take the action specified by the status code from the **ALT 2 IML**.

7797

Description: You attempted to copy a 2.4-MB source diskette to a 1.2-MB target diskette in a 2.4-MB drive.

Possible Cause: N/A

User Action:

1. Remove the 1.2-MB diskette from the target drive.
2. Insert a 2.4-MB diskette into the target drive.
3. Press **Enter** to continue the copy operation.

For Service Personnel Only: No action is required.

7798

Description: A file being renamed by customization already exists with the same file name.

Alert Sent = None.

Possible Cause: Possible microcode problem.

User Action:

1. Perform an **ALT 1 IML**; see page 2-1.
2. Request service.

For Service Personnel Only: Contact your next level of support.

7880

Description: Incorrect response to a customizing question.

Possible Cause: N/A

User Action: Verify that your response to the question highlighted on the screen is correct, and retry.

For Service Personnel Only: No action is required.

7882

Description: The cursor is in an incorrect location.

Possible Cause: N/A

User Action: Move the cursor to a valid field.

For Service Personnel Only: No action is required.

7883

Description: The range you specified for this customizing question is not within the allowable range.

Possible Cause: N/A

User Action: Verify that your response to this question is correct, and re-specify.

For Service Personnel Only: No action is required.

7884

Description: An incorrect PF key was pressed.

Possible Cause: N/A

User Action: Verify that the correct PF keys for this configuration procedure were pressed.

For Service Personnel Only: No action is required.

7886

Description: An incorrect PF key, or the Enter key, was pressed in response to a customizing question.

Possible Cause: N/A

User Action: Press a valid PF key that is displayed on the screen.

For Service Personnel Only: No action is required.

Status Codes

7887

Description: The option you selected is not a valid option for this procedure.

Possible Cause: N/A

User Action: Select a valid option that is displayed on the screen.

For Service Personnel Only: No action is required.

7888

Description: You selected Option 5 or 7 from the Master Menu, and the level of microcode you are using does not support those utilities.

Possible Cause: N/A

User Action: Select a valid option from the Master Menu.

For Service Personnel Only: No action is required.

7901 to 7912

Description: A controller microcode failure has occurred.

Possible Cause: N/A

User Action:

1. Retry the operation.
2. Perform an **ALT 2 IML**; see page 2-3.
3. Request service.

For Service Personnel Only: Contact your next level of support.

7913

Description: An incorrect Patch ID was entered.

Possible Cause:

- The Patch ID is not prefixed with a P or a Z.
- The Patch ID does not contain a minimum of four hex digits.
- The Patch ID does not contain any hex digits.

User Action: Check the Patch ID. If the Patch ID was entered correctly, request service.

For Service Personnel Only: No action is required.

7914

Description: A Patch ID was entered that already exists on the disk.

Possible Cause: N/A

User Action: Check the Patch ID. If the Patch ID was entered correctly, the existing patch must be deleted before the new patch is installed.

For Service Personnel Only: No action is required.

7915

Description: A customization microcode error has occurred.

Possible Cause: N/A

User Action: Request service.

For Service Personnel Only: Contact your next level of support.

7916

Description: The microcode level that was entered does not match the microcode level of the disk being used.

Possible Cause: N/A

User Action: Verify that the correct microcode level was entered. If the microcode level was entered correctly and the microcode level of the disk being used is different, verify that the patches to be installed are valid for the disk being used.

For Service Personnel Only: No action is required.

7917

Description: The amount of text on the failing REP line is greater than the amount of text on the corresponding VER line.

Possible Cause: N/A

User Action: Verify that the patch data was entered correctly. If the data was entered correctly, contact your next level of support.

For Service Personnel Only: No action is required.

7918

Description: A character was entered in a field that allows only hexadecimal.

Possible Cause: N/A

User Action: Verify that the patch data was entered correctly. If the data was entered correctly, contact your next level of support.

For Service Personnel Only: No action is required.

7920

Description: An incomplete response was entered.

Possible Cause: N/A

User Action: Enter the required input in the fields that are highlighted. If all the required data has been entered for the patch being installed and the failure continues, contact your next level of support.

For Service Personnel Only: No action is required.

7921

Description: The verify check failed for the text in the zap patch.

Possible Cause: N/A

User Action: Verify that all the patch data was keyed in correctly. If the failure continues, contact your next level of support.

For Service Personnel Only: No action is required.

7922

Description: An incorrect option was found.

One of the following conditions occurred:

- An option other than 1, 2, 3, or X was entered. Perform action 1.
- An X was entered for a Patch ID that did not previously contain an X option. Perform action 2.
- A 2 or 3 option was entered for a Patch ID whose previous option was an X. Perform action 3.

Possible Cause: N/A

User Action:

1. Enter an option of 1, 2, 3, or X.
2. Enter an option of 1, 2, or 3.
3. Enter an option of X or 1.

For Service Personnel Only: No action is required.

7923

Description: An incorrect Clan value was found. Check the conditions below for the cause of the failure, and perform the corresponding action for that condition.

- The Clan was not prefixed with an F or an H. Perform action 1.
- Hexadecimal values were not entered for the last 2 characters of the Clan. Perform action 2.

Possible Cause: N/A

User Action:

1. Prefix the Clan with an F or an H.
2. Enter hexadecimal values for the last two characters of the clan.

For Service Personnel Only: No action is required.

Status Codes

7924

Description: Incorrect return register value.

Possible Cause: N/A

User Action: Verify that the patch data (value between 0 and 30) was entered. If the patch data was entered correctly, contact your next level of support.

For Service Personnel Only: No action is required.

7925

Description: An incorrect CSECT alignment value was entered.

Possible Cause: N/A

User Action: Check the patch data that was entered. If the patch data was entered correctly, contact your next level of support.

For Service Personnel Only: No action is required.

7926

Description: An RLD type was entered other than A, J, K, L, V, W, or Y.

Possible Cause: N/A

User Action: Check the RLD type that was entered. If the RLD type was entered correctly, contact your next level of support.

For Service Personnel Only: No action is required.

7927

Description: More than one patch area was defined for the patch being entered.

Possible Cause: N/A

User Action: Check the patch data that was entered. If the patch data was entered correctly, contact your next level of support.

For Service Personnel Only: No action is required.

7930 to 7941

Description: An error occurred during the Patch utility.

Possible Cause: N/A

User Action: Contact your next level of support.

For Service Personnel Only: No action is required.

7942 to 7947

Description: An 3174 Internal error occurred.

Possible Cause: N/A

User Action: Contact your next level of support.

For Service Personnel Only: No action is required.

7948

Description: An attempt was made to install a patch other than a ZC or PC patch on the Control disk.

Possible Cause: N/A

User Action:

1. Verify that the patch information is correct with your next level of support. If the patch being installed is for the Control disk, the patch ID must start with the letters ZC or PC.
2. If the patch being installed is for the Utility or DSL disk, then return to the Patch Menu by pressing the quit PF key twice. Then select the appropriate disk.

For Service Personnel Only: No action is required.

7949

Description: An attempt was made to install a patch other than a ZU patch on the Utility disk.

Possible Cause: N/A

User Action:

1. Verify that the patch information is correct with your next level of support. If the patch being installed is for the Utility disk, the patch ID must start with the letters ZU.
2. If the patch being installed is for the Control or DSL disk, then return to the Patch Menu by pressing the quit PF key twice. Then select the appropriate disk.

For Service Personnel Only: No action is required.

7950

Description: An attempt was made to install a patch other than a ZM patch on the DSL disk.

Possible Cause: N/A

User Action:

1. Verify that the patch information is correct with your next level of support. If the patch being installed is for the DSL disk, the patch ID must start with the letters ZM.
2. If the patch being installed is for the Control or Utility disk, then return to the Patch Menu by pressing the quit PF key twice. Then select the appropriate disk.

For Service Personnel Only: No action is required.

7951

Description: DSL patch was selected from the Patch Menu and the asynchronous emulation adapter (AEA) microcode is not present.

Possible Cause: N/A

User Action:

For diskettes:

Insert the AEA diskette and retry the operation.

For fixed disk drives:

To verify that the AEA microcode has been installed:

1. Perform a normal IML on the 3174.
2. On a 3270 terminal, press and hold **ALT**, then press **TEST**.
3. Key in **/5,1** and press **Enter**.
4. 30 20.XX XXXXXXXXXX is displayed under the DSL information if the AEA microcode is present.
 - If the AEA microcode is present, retry the patch utility.
 - If the AEA microcode is not present, copy an AEA diskette onto the fixed disk.

Refer to "How to Copy Files" and "How to Perform Media Management" in the *3174 Utilities Guide*.

For Service Personnel Only: No action is required.

7952

Description: The microcode level of the *to* disk does not match the microcode level of the disk that was used to invoke the patch utility.

Possible Cause: N/A

User Action: Use a disk that has the same microcode level as that of the disk being used to invoke the patch utility.

For Service Personnel Only: No action is required.

7953

Description: An incorrect Line Count value was entered on the Patch Header panel.

Possible Cause: N/A

User Action: Enter a valid decimal number (00-99) for the Line Count.

For Service Personnel Only: No action is required.

Status Codes

7954

Description: The total number of lines of patch data entered does not equal the number specified in the Line Count field of the Patch Header panel.

Possible Cause: N/A

User Action: Return to the Patch panel by pressing **PF3** (Quit), and then redefine the patch.

For Service Personnel Only: No action is required.

8888

Description: The ROS tests did not start or ROS is suspended. 8888 is also displayed during the lamp test (IML push button pressed and held). If a lamp test is not being performed, this code indicates a hardware failure.

Possible Cause: N/A

User Action:

1. Re-IML.
2. Request service.

For Service Personnel Only:

For Models 1L through 14R:

Go to MAP 0400 in the maintenance manual for your model.

For Models 21H through 92R:

Go to MAP 0500 in the maintenance manual for your model.

Chapter 2. Status Code Reference Information

This chapter contains reference information that supports the Status Code Chart.

Alt 1 IML Procedure

This section contains operations that can be selected after an Alt 1 IML has been performed. Alt 1 IML provides the capability to run offline tests and various utilities such as customizing and performing a normal (operational) IML.

Before starting this procedure, note the following information and instructions:

3174 microcode is required to perform the Alt 1 IML procedures. This microcode is contained either on diskette, or a copy of the 3174 diskettes can be stored on a fixed disk. If you are using a diskette drive, use 3174 diskettes. If you are using a fixed disk, use the microcode on the fixed disk.

- If the function selection number being used is 41, 42, or 43, Control microcode is required. Downstream Load microcode may be required depending on your controller configuration.
- If the function selection number being used is 40, 80, 81, 82, or 87, Utility microcode is required.

When performing the Alt 1 IML procedure, select the parameters from Table 2-1 on page 2-2.

1. If you are performing an Alt 1 IML using diskettes, insert the correct diskette at this time.
2. Press and hold **Alt 1**.
3. Press and release **IML**.
4. Release **Alt 1**.
5. 40 appears in the status display.
Note: If 40 does not appear, start again with step 2.
6. The rest of the procedure is model dependent:
 - For Models 81R, 82R, 90R, 91R, and 92R, go to step 11.
 - For all other models, continue with step 7.
7. At 40, key in the device selection (DS) and the function selection (FS). See Table 2-1 on page 2-2.
8. Press **Advance** and continue with step 9, or press **Enter** to execute.
9. Key in the test parameter **TP** (valid only with 8x test functions). See Table 2-1 on page 2-2.
10. Press **Enter**; test execution begins.
11. At 40, press **Advance** until the desired FS number is displayed.
12. At FS, press **Enter**; FS-- is displayed.
13. At FS--, press **Advance** until the desired test parameter (TP) is displayed, or press **Enter** to execute.
14. At TP, press **Enter**; FSTP is displayed.
15. At FSTP, press **Enter**; test execution begins.

Table 2-1. Alt 1 IML Selection Parameters

Alt 1 IML Selections

DS = IML device selection

- = 01 = Diskette drive 1 without storage initialization
 - = 02 = Diskette drive 2 without storage initialization
 - = 03 = Fixed disk 1 without storage initialization
 - = 04 = Fixed disk 2 without storage initialization
 - = 08 = Auto IML device selection without storage initialization (see note 4)
 - = 11 = Diskette drive 1 with storage initialization
 - = 12 = Diskette drive 2 with storage initialization
 - = 13 = Fixed disk 1 with storage initialization
 - = 14 = Fixed disk 2 with storage initialization
 - = 18 = Auto IML device selection with storage initialization (see note 4)
-

FS = Function selection

- = 40 = Display Master Menu at port 0
 - = 41 = Normal IML
 - = 42 = Access Host Backup level changes
 - = 43 = Access Host Trial level changes
 - = 44 = Reserved
 - = 45 = Reserved
 - = 80 = Load test control monitor
 - = 81 = Test All (CSU mode)
 - = 82 = Test All (Installed Mode) (same as Alt 2 IML)
 - = 87 = Test Processor and Storage
-

TP = Test Parameter (used only with 8x function selections)

- = 90 = No Options - Default
 - = 91 = Loop
 - = 92 = Stop on error
 - = 93 = Loop, stop on error
 - = 94 = Workstation control
 - = 95 = Loop, workstation control
 - = 96 = Stop on error, workstation control
 - = 97 = Loop, stop on error, workstation control
-

Notes:

1. If an IML device (DS) is not entered, the 3174 defaults to diskette drive 1 as the IML device.
2. If no input parameters are entered (Enter pressed without any data), the 3174 defaults to diskette drive 1 and the Master Menu is displayed on the terminal connected to port 0 of the controller.
3. If storage initialization is bypassed, the 3174 will bypass the file adapter tests.
4. Auto device selection causes the 3174 to try to load operational microcode from each IML device. Device search order is fixed disk 1, fixed disk 2, diskette drive 1, and then diskette drive 2.

Alt 2 IML Procedures for Testing the 3174

There are two procedures for testing the 3174 controller. In one procedure, you test the controller using the ALT 2 push button. In the other procedure, you test the controller using the ALT 1 push button. The test procedure you use depends on the following conditions:

- If the Utility microcode is stored on a fixed disk, use "Procedure B – Testing the 3174."
- If the controller is a Model 51R, 52R, or 53R with two diskette drives and drive 2 is labeled 2.4, use "Procedure B – Testing the 3174."
- For all other cases, use "Procedure A – Testing the 3174."

Procedure A – Testing the 3174

Note: This procedure interrupts all host services. Notify the users if necessary.

1. Have the host operator take the controller offline.
2. Set the Channel Interface switch to Offline. Wait for the offline indicator to light.
3. Insert a Utility diskette into Drive 1. If the controller has two diskette drives, insert a valid 3174 diskette into Drive 2, making sure that if the diskette is labeled 2.4, the drive is also labeled 2.4.
4. Press and hold **Alt 2**.
5. Press and release **IML**.
6. Release **Alt 2**.

Progress numbers appear in the Status display of the operator panel as the test runs (1 to 3 minutes). If the test is successful, 2082 appears in the Status display. If the test stops with a number other than 2082, look up that number in the Status Code Chart in Chapter 1.

Procedure B – Testing the 3174

Note: This procedure interrupts all host services. Notify the users if necessary.

1. Have the host operator take the controller offline.
2. Set the Channel Interface switch to Offline. Wait for the offline indicator to light.
3. Insert the Utility diskette into:
 - Drive 1 on single-diskette-drive controllers.
 - Drive 2 on two-diskette-drive controllers. Then, insert a valid 3174 diskette into Drive 1, making sure that if the diskette is labeled 2.4 that the drive is also labeled 2.4.
4. Press and hold **Alt 1**.
5. Press and release **IML**.
6. Release **Alt 1**.
7. At 40, key in **0X82**, where:
 - 0X = 02 = Access the Utility microcode in Diskette Drive 2.
 - 0X = 03 = Access the Utility microcode on Fixed Disk 1.
 - 0X = 04 = Access the Utility microcode on Fixed Disk 2.
 - 82 = Load and run the Alt 2 tests.
8. Press **Enter**.

Progress numbers appear in the Status display on the operator panel as the test runs (1 to 3 minutes). If the test is successful, 2082 appears in the Status display. If the test stops with a number other than 2082, look up that number in the Status Code Chart in Chapter 1.

Bootstrap Write Procedure

The bootstrap write procedure writes the bootstrap loader onto the specified fixed disk.

Note: Because text messages are available with the completion codes, it is recommended that you use workstation control to perform the procedure.

Perform the following actions:

1. Load the test monitor, using a Utility diskette with a microcode level of at least Configuration Support A or S Release 4 or Configuration Support B Release 1. See "How to Load the Test Monitor" on page 2-12.
2. With 4001 displayed, key in **0352** or **0452**, where:
0352 = Write bootstrap loader onto fixed disk 1
0452 = Write bootstrap loader onto fixed disk 2.
3. Press **Enter**.
4. The procedure is completed with one of the following status codes:
4430 01HG – Write Bootstrap Loader complete. Retry the **Alt 1 IML**.
4431 01HG – Write Bootstrap Loader complete, Full Format required. Press **Enter**, and then go to Step 2 of the "Fixed Disk Full Format" on page 2-9.
4432 01HG – Write Bootstrap Loader complete, Select IML source required. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*, and then retry the **IML**.

For all other status codes, see the Status Code Chart in Chapter 1.

Fixed Disk Media Tests

The fixed disk media tests consist of the surface scan and defect fix. The following procedure invokes the defect fix, which automatically runs the surface scan first. The surface scan detects any defective or damaged sectors, and then the defect fix test reassigns those sectors to an unused area on the disk.

Note: Because text messages are available with the completion codes, it is recommended that you perform the procedure using workstation control.

1. Load the Test Monitor. See "How to Load the Test Monitor" on page 2-12.
2. With 4001 displayed, key in **0332** or **0432**, where:
 - 0332 = Run tests on fixed disk 1
 - 0432 = Run tests on fixed disk 2.
3. Press **Enter**; 23XX is displayed, where:
 - 23 = Test in progress
 - XX = A number decreasing to zero.
4. The tests complete with one of the following codes:
 - 4408 01HG – Defect fix complete; No new defects found. Data restoration is not required for this completion code. Return to the status code that sent you here.
 - 4409 01HG – Defect fix complete; All defects found. Data restoration is not required for this completion code. Return to the status code that sent you here.
 - 4410 01HG – Defect fix complete; Select IML source required. The "IML Select Utility" for one or more fixed disk subdirectories is required. Refer to "How to Perform Media Management" in the *3174 Utilities Guide*, and then return to the status code that sent you here.
 - 4411 01HG – Defect fix complete; Data restoration required.

If the original status code you recorded earlier *is* in the following list, return to that status code in Chapter 1 to determine which diskettes need to be copied onto your fixed disk.

 - 388-00 to 06HG
 - 388-07HG
 - 388-11HG
 - 388-56HG

If the original status code you recorded earlier *is not* in the list above, you must copy all of your diskettes onto the fixed disk. See "Restoring Your Data" on page 2-10.
 - 4411 02HG – Data restoration required; Key 1, press Enter to display the Restore Data List, press Enter to quit.

See "Restore Data List" on page 2-6.
 - 4412 01HG – Defect fix complete; Full format required. Press **Enter**, then go to Step 2 on page 2-9.

For all other status codes, see the Status Code Chart in Chapter 1.

Restore Data List

The Restore Data List shows the subdirectories or parts of subdirectories that need to be restored onto the fixed disk. If the entry on the screen has a filename and extension listed, it may be possible to restore that file into the subdirectory. On the other hand, if there is no filename or extension, the entire subdirectory needs to be restored.

If you use Central Site Change Management (CSCM), contact the central site manager to obtain the latest level of backup diskettes.

To make these restorations, see Table 2-2 on page 2-7. After the fixed disk has been restored, re-IML the controller.

Example Figure 2-1 shows that complete Subdirectories CTL00001, DSL00001, and UTL00001 need to be restored. However, CONFIG01.LMA, CONFIG02.LMB, AND CONFIG25.LMA of Subdirectory LIB00001 only need to have the file restored. MUX and ROOT files have special procedures for restoration that are addressed later in this section.

| Restore Data List | | |
|--|----------|--------------|
| Entry | Subdir | Filename.Ext |
| Total entries: | | |
| Record all entries in this table before pressing PF 3. | | |
| 1 | CTL00001 | |
| 2 | DSL00001 | |
| 3 | LIB00001 | CONFIG01.LMA |
| 4 | LIB00001 | CONFIG02.LMB |
| 5 | LIB00001 | CONFIG25.LMA |
| 6 | LIB00001 | B0300.MUA |
| 7 | LIB00001 | B0301.MUB |
| 8 | UTL00001 | |
| 9 | ROOT | VPDDATA.OPR |
| 10 | ROOT | BRGCFG.DAT |
| PF: 3=Quit 7=Back 8=Fwd | | |

Figure 2-1. Example of Restore Data List

Important:

1. The files with the *LMx* file extension, CONFIG01, CONFIG02, and CONFIG25, are the library member file names that were assigned when the library members were defined.
2. The file extension of *MUx* denotes the microcode unique data files. The first five characters represent the configuration and release level of the microcode unique data files.
3. For *LMx* and *MUx*, x ties the library member to a unique microcode level, for example, if you have four levels of microcode on your fixed disk, x = A, B, C, or D. In the example in Figure 2-1, CONFIG02.LMB and B0301.MUB are at the same level of microcode.

Table 2-2 lists the fixed disk subdirectories that you may need to recover and provides a description and instructions of how to recover each one.

Table 2-2 (Page 1 of 2). Recovering Fixed Disk Subdirectories

| Subdirectory | Source | Restoration |
|----------------------|--|---|
| CTL00001 | Control Diskette | <p>If you have backup diskettes:</p> <ul style="list-style-type: none"> • Delete the CTL00001 subdirectory using the Media Management utility. • Copy the backup diskette to your disk. • Reselect the IML source. <p>If you do not have backup diskettes:</p> <p>Perform Steps 1, 2, 3, 5, and 10 in "Restoring Your Data" on page 2-10.</p> |
| UTL00001 LFU00001 | Utility Diskette Limited Function Utility Diskette | <p>If you have backup diskettes:</p> <ul style="list-style-type: none"> • Delete the UTL00001 or LFU00001 subdirectory using the Media Management utility. • Copy the backup diskette to your disk. • Reselect the IML source. <p>If you do not have backup diskettes:</p> <p>Perform Steps 6 and 10 in "Restoring Your Data" on page 2-10.</p> |
| DSL00001 | DSL Diskette | <p>If you have backup diskettes:</p> <ul style="list-style-type: none"> • Delete the DSL00001 subdirectory using the Media Management utility. • Copy the backup diskette to your disk. • Reselect the IML source. <p>If you do not have backup diskettes:</p> <p>Perform Steps 4, 5, and 10 in "Restoring Your Data" on page 2-10.</p> |
| LIB00001 | Library Diskette | <p>If you have backup diskettes:</p> <p>Warning: If your library contains a large number of files, using the copy utility takes a long time. You may wish to re-create the files you have lost. If so, perform Steps 7 and 10 in "Restoring Your Data" on page 2-10.</p> <ul style="list-style-type: none"> • Delete the LIB00001 subdirectory using the Media Management utility. • Copy all of the backup library diskettes to your disk. • Reselect the IML source. <p>If you do not have backup diskettes:</p> <p>Perform Steps 7 and 10 in "Restoring Your Data" on page 2-10.</p> |

Table 2-2 (Page 2 of 2). Recovering Fixed Disk Subdirectories

| Subdirectory | Source | Restoration |
|--------------|------------------|---|
| ROOT | Control diskette | <p data-bbox="721 285 1062 315"><i>If you have backup diskettes:</i></p> <p data-bbox="721 327 1008 357"><i>For Releases B3 and B4:</i></p> <p data-bbox="721 369 1435 491">Copy the Extended Vital Product Data to the disk using the Copy Vital Product Data utility. The backup Control diskette should be at the same microcode level as the CTL00001 subdirectory on the fixed disk drive.</p> <p data-bbox="721 504 906 533"><i>For Release C1:</i></p> <p data-bbox="721 546 1406 667">Copy the Extended Vital Product Data and the Bridge Configuration Data to the disk using the 3174-Peer Parameters. The backup Control diskette should be at the same microcode level as the CTL00001 subdirectory on the fixed disk drive.</p> <p data-bbox="721 680 1143 709"><i>If you do not have backup diskettes:</i></p> <p data-bbox="721 722 1373 785">If the Root file contains Vital Product Data, perform Step 8 in "Restoring Your Data" on page 2-10.</p> <p data-bbox="721 798 1399 861">If the Root file contains Bridge Configuration, perform Step 9 in "Restoring Your Data" on page 2-10.</p> <p data-bbox="721 873 1425 961">If the Root file contains both Vital Product Data and Bridge Configuration, perform Steps 8 and 9 in "Restoring Your Data" on page 2-10.</p> |

Fixed Disk Full Format

Warning: This procedure erases all the data on the fixed disk. Make sure that it is necessary to run this procedure before you begin.

1. Load the Test Monitor. See "How to Load the Test Monitor" on page 2-12.
2. With 4001 displayed, key in **0333** or **0433**, where:
 - 0333 = Format fixed disk 1
 - 0433 = Format fixed disk 2.
3. Press **Enter**; 4415 is displayed. This is a **warning** message indicating that full format erases your data. Be sure that you have selected the correct fixed disk for formatting.
 - To cancel the full format, press **Enter**; 4001 is displayed.
 - To format the disk, key in **2** and press **Enter**.
4. 23XX is displayed, where:
 - 23 = Full format in progress
 - XX = A number that decreases to 00.
5. Full format ends with one of the following codes and messages:
 - 4416 01HG – Full format complete. Data restoration is required; see "Restoring Your Data" on page 2-10.
 - 4417 01HG TYPE LOCA – Full format terminated; Disk replacement required. Request service.For all other status codes, see the Status Code Chart in Chapter 1.

Restoring Your Data

Data on the fixed disk has been erased and that data must be restored or written back onto the fixed disk before it can be used again.

What you must do to restore that data depends on whether or not you use Central Site Change Management (CSCM) and whether or not you have a current set of backup diskettes. CSCM users must contact their Central Site Manager for a complete set of backup diskettes.

- If you have a complete set of backup diskettes for your current hardware configuration or you have the original diskettes that were copied onto the fixed disk, copy each diskette back onto the fixed disk. (Refer to “How to Copy Files” and “How to Perform Media Management” in the *3174 Utilities Guide*.)
- If you do *not* have a complete set of diskettes for your current hardware configuration, perform the following actions as a guideline to prepare the diskettes.
 1. Configure a Control diskette for your current hardware configuration. The diskette must be at Release Level A4.0, S4.0, B1.0, or higher. (Refer to the *3174 Planning Guide* and the *3174 Utilities Guide*.)
 2. If you had any RPQs in your fixed disk CTL subdirectory, merge the RPQs onto the Control diskette you just configured. (Refer to “How to Merge RPQs” in the *3174 Utilities Guide*.)
 3. If you had any patches installed, they may need to be reinstalled. Contact your IBM representative for further information.
 4. If you merged DSL diskettes in your fixed disk DSL subdirectory, merge the DSL code onto one DSL diskette. (Refer to “How to Merge DSL Code” in the *3174 Utilities Guide*.)
 5. Copy the diskettes that are applicable. (Refer to “How to Copy Files” and “How to Perform Media Management” in the *3174 Utilities Guide*.)
 6. If you had Utility or LFU subdirectories on your fixed disk, copy the Utility or LFU diskette to the fixed disk.
 7. If you had any libraries on your fixed disk:
 - a. If one or more library members (file name extension of LMx on the example in Figure 2-1 on page 2-6) appears on the Restore Data Panel, perform the following actions using the Central Site Customizing Utility.
 - 1) Delete the library members.
 - 2) Create new library members.
 - 3) Put the new members back on the disk.
 - b. If one or more microcode level files (file name extension of MUX on the example in Figure 2-1 on page 2-6) appears on the Restore Data Panel, perform the following actions using the Central Site Customizing Utility.
 - 1) Create a library diskette.
 - 2) Put a valid library member on the library diskette created in Step b.1. This library member has to be at the same microcode level as the MUX file that needs to be restored.

If the “Restore Data List” panel shows more than one MUX file, you must put the library members on that diskette for each of the listed microcode levels.

If you need more than one of these backup diskettes (because you can only copy the entire library), make copies of this backup diskette (using copy).
 - 3) Copy the LIB00001 remaining library member files to the diskettes created in Steps b.1 and b.2.

- 4) Delete the LIB00001 on the disk that needs to be restored.
- 5) Copy the newly created diskettes back on to the library subdirectory of the fixed disk.
8. If you had a Root file that contained Extended Vital Product Data on your fixed disk, perform the following actions:
 - a. IML from the fixed disk that needs to be restored. This creates your Extended Vital Product Data Root directory.
 - b. Have each terminal user re-enter his or her individual data, using the Online Test facility.
9. If you had a Root file that contained Bridge Configuration on your fixed disk, perform one of the following actions:
 - If you use customization (including CSCM) to maintain your controller, re-IML. The file is automatically rebuilt.
 - If you use an online test to maintain your data, perform the following actions:
 - a. IML from the fixed disk that needs to be restored. This creates your Bridge Configuration Root directory.
 - b. Have each terminal user re-enter his or her individual data, using the Online Test facility.
 - If you use the LAN Manager, IML and get the LAN Manager to update the 3174 again.
10. The fixed disk is now restored and the controller can be IMLed.

How to Load the Test Monitor

The Test Monitor is part of the Utility microcode that is contained on diskette or fixed disk. The following three procedures describe loading the Test Monitor. The first procedure uses the Utility diskette in drive 1, the second procedure uses the Utility diskette in drive 2, and the third procedure uses the Utility microcode on a fixed disk. Configuration Support B Utility diskettes are 2.4-MB diskettes and require a 2.4-MB drive.

Loading the Test Monitor from Diskette Drive 1

1. Insert the Utility diskette into drive 1. If the diskette is labeled 2.4, make sure that drive 1 is also labeled 2.4; otherwise, use "Loading the Test Monitor from Diskette Drive 2."
2. Press and hold **Alt 1**.
3. Press and release **IML**.
4. Release **Alt 1**.
5. 40 is displayed:

For operator panel control

- a. Key in **80**.
- b. Press **Enter**.
- c. 4001 is displayed.

For workstation control

- a. Key in **8094**.
- b. Press **Enter**.
- c. Go to the terminal connected to port 0 on the Hardware Group 26 Terminal Adapter.
- d. 4001 is displayed.

Loading the Test Monitor from Diskette Drive 2

1. Insert the Utility diskette into drive 2. If the diskette is labeled 2.4, make sure that drive 2 is also labeled 2.4; otherwise, use "Loading the Test Monitor from Diskette Drive 1."
2. Press and hold **Alt 1**.
3. Press and release **IML**.
4. Release **Alt 1**.
5. 40 is displayed:

For operator panel control

- a. Key in **0280**.
- b. Press **Enter**.
- c. 4001 is displayed.

For workstation control

- a. Key in **0280**.
- b. Press **Advance**.
- c. Key in **94**.
- d. Press **Enter**.
- e. Go to the terminal connected to port 0 on the Hardware Group 26 Terminal Adapter.
- f. 4001 is displayed.

Loading the Test Monitor from Fixed Disk

1. Press and hold **Alt 1**.
2. Press and release **IML**.
3. Release **Alt 1**.
4. 40 is displayed:

For operator panel control

- a. Key in **0380** or **0480** where:
 - 03 = Fixed disk drive 1
 - 04 = Fixed disk drive 2
 - 80 = Load test monitor.
- b. Press **Enter**.
- c. 4001 is displayed.

For workstation control

- a. Key in **0380** or **0480** where:
 - 03 = Fixed disk drive 1
 - 04 = Fixed disk drive 2
 - 80 = Load test monitor.
- b. Press **Advance**.
- c. Key in **94**
- d. Press **Enter**.
- e. Go to the terminal connected to port 0 on the Hardware Group 26 Terminal Adapter.
- f. 4001 is displayed.

Status Code 399–21 Failure

The following procedure isolates this failure to 3174 hardware or incorrect customization.

1. Determine how many ISDN or CCA adapters are required by checking the hardware group number contained in status code 399 21HG.

| If the HG # is: | You need: | Card Type Number: |
|------------------------|------------------|--------------------------|
| 36 | 1 ISDN Adapter | 9341 |
| 37 | 2 ISDN Adapters | 9341 |
| 38 | 3 ISDN Adapters | 9341 |
| 39 | 4 ISDN Adapters | 9341 |
| 51 | 1 CCA Adapter | 926X |
| 52 | 2 CCA Adapters | 926X |

2. Check the 3174 to see if the number of adapters required to support your configuration is present.

| If the 3174 Model number is: | Check Card Locations: |
|-------------------------------------|------------------------------|
| I 1L–14R | 11 through 17 |
| I 21L–24R | 11 through 15 |
| I 51R–64R | 04 and 05 |

3. If the correct number of adapters required for your configuration are installed, request service. If the correct number of adapters required are not installed, either recustomize the 3174, or contact your IBM Representative to obtain the necessary adapter.

Type Numbers

Type numbers are assigned to each logic field replaceable unit (FRU) as an identifier. The FRU type number is 4 digits, and 9 is always the first digit.

Table 2-3 (Page 1 of 3). 3174 Type Numbers

| Type | FRU Description | Applicable Models |
|------|---|-------------------------------------|
| 0000 | Incorrect or Unknown | All |
| 9000 | Empty Card Location | All |
| 9001 | Incorrect Card/Cond | All |
| 9010 | Operator Panel Adapter | 1L, 1R, 2R, 3R |
| 9011 | Operator Panel Adapter | 11L, 11R, 12L, 12R, 13R, 14R |
| 9021 | Planar Board (EIA/V.35) (512 KB) | 51R |
| 9022 | Planar Board (1 MB) | 53R |
| 9025 | Planar Board (EIA/V.35) (1 MB) | 51R |
| 9030 | Encrypt/Decrypt Adapter | 1R, 2R, 11R, 12R |
| 9051 | Storage Card (512 KB) | 1L, 1R, 2R, 3R, 51R, 52R, 53R |
| 9052 | Storage Card (1 MB) | 1L through 14R, 51R, 52R, 53R |
| 9053 | Storage Card (2 MB) | 1L through 14R, 51R, 53R |
| 9070 | Terminal Multiplexer Adapter | 1L through 14R, 21L through 24R |
| 9110 | 1.2-MB Diskette Drive | 1L, 1R, 2R, 3R |
| 9111 | 1.2-MB Diskette Drive 1 | 51R, 52R, 53R |
| 9112 | 1.2-MB Diskette Drive 2 | 51R, 52R, 53R |
| 9113 | 1.2-MB Diskette Drive | 81R, 82R |
| 9114 | 2.4-MB Diskette Drive | 1L through 14R |
| 9115 | 2.4-MB Diskette Drive 1 (RPQ) | 51R, 52R, 53R |
| 9116 | 2.4-MB Diskette Drive 2 | 51R, 52R, 53R |
| 9120 | File Adapter | 1L, 1R, 2R, 3R |
| 9132 | Fixed Disk Drive | 1L through 14R |
| 9133 | Fixed Disk Drive | 51R, 52R, 53R |
| 9150 | Terminal Adapter | 1L, 1R, 2R, 3R |
| 9154 | File/Terminal Adapter | 1L through 14R |
| 9155 | Terminal Adapter (3270 Port Expansion) | 11L through 14R |
| 9160 | Planar Board (EIA/V.35) (1 MB) | 81R |
| 9161 | Planar Board (X.21) (1 MB) | 82R |
| 9176 | Terminal Multiplexer Adapter | 21L through 24R |
| 917x | Terminal Multiplexer Adapter | 1L through 14R |
| 9210 | Channel Adapter | 1L, 11L |
| 9221 | Planar Board (X.21) (512 KB) | 52R |
| 9225 | Planar Board (X.21) (1 MB) | 52R |
| 9230 | Channel Driver/Receiver | 1L, 11L |
| 9253 | Type 1 Communication Adapter (EIA/V.35) | 1L, 1R, 3R, 11L, 11R, 12L, 13R, 14R |

Table 2-3 (Page 2 of 3). 3174 Type Numbers

| Type | FRU Description | Applicable Models |
|------|--|---|
| 9263 | Type 1 Concurrent Communication Adapter (EIA/V.35) | 1L through 24R, 51R, 61R, 62R, 63R, 64R |
| 9267 | Type 2 Concurrent Communication Adapter (X.21) | 1L through 24R, 51R, 61R, 62R, 63R, 64R |
| 927x | Type 2 Communication Adapter (X.21) | 1L, 2R, 3R, 11L, 12L, 12R, 13R, 14R |
| 9311 | Asynchronous Emulation Adapter | 21L through 24R |
| 9331 | Asynchronous Emulation Adapter | 1L through 14R, 51R, 52R, 61R, 62R, 63R, 64R |
| 9341 | ISDN Adapter | 1L, 1R, 2R, 11L, 11R, 12L, 12R, 21L, 21R, 22L, 61R, 62R |
| 9344 | Ethernet Adapter | 11L, 11R, 12L, 12R, 13R, 14R, 21H, 21L, 21R, 22L, 22R, 23R, 24R, 61R, 62R, 63R, 64R |
| 9350 | Token-Ring Adapter (4 Mbps) | 1L, 1R, 2R, 3R, 51R, 52R, 53R |
| 9351 | Token-Ring Adapter (16/4 Mbps) | 1L through 64R |
| 9361 | 2.4-MB Diskette Drive | 21L through 24R |
| 9365 | Fixed Disk Drive | 21L through 24R |
| 9401 | 2.4-MB Diskette Drive | 90R, 91R, 92R |
| 9421 | 2.4-MB Diskette Drive | 61R, 62R, 63R, 64R |
| 9422 | 1.2-MB Diskette Drive | 61R, 62R, 63R, 64R |
| 9431 | Fixed Disk Drive | 61R, 62R, 63R, 64R |
| 9482 | Storage Card (2 MB) | 21L, 21R, 22L, 23R, 24R, 61R, 62R, 63R, 64R |
| 9486 | Storage Card (1 MB) | 21L, 21R, 22L, 23R, 24R, 61R, 62R, 63R, 64R |
| 9493 | Storage Card (4 MB) | 21L, 21R, 22L, 23R, 24R, 61R, 62R, 63R, 64R |
| 9497 | Storage Card (6 MB) | 21L, 21R, 22L, 23R, 24R, 61R, 62R, 63R, 64R |
| 9500 | Processor Card | 1L, 1R, 2R, 3R |
| 9501 | Processor Card | 11L through 14R |
| 9520 | Operator Panel | 1L, 11L |
| 9521 | Operator Panel | 1R, 2R, 3R, 11R, 12L, 12R, 13R, 14R |
| 9522 | Operator Panel | 51R through 64R |
| 9523 | Operator Panel | 81R through 92R |
| 9540 | AEA Cable Assembly | 1L through 14R |
| 9541 | AEA Cable Assembly | 51R through 64R |
| 9545 | Token-Ring Adapter (16/4 Mbps) | 90R |
| 9550 | Operator Panel | 21L |
| 9551 | Internal Channel Tailgate Assembly | 21H, 21L |
| 9552 | Tailgate Assembly | 21L |
| 9560 | Operator Panel | 21R, 22L, 23R, 24R |
| 9621 | Planar Board (EIA/V.35) | 61R |

Table 2-3 (Page 3 of 3). 3174 Type Numbers

| Type | FRU Description | Applicable Models |
|-------------|------------------------------|--------------------------|
| 9622 | Planar Board (X.21) | 62R |
| 9623 | Planar Board | 63R |
| 9630 | Planar Board (32 ports) | 21L |
| 9661 | Planar Board (32 ports) | 21R, 22L, 23R, 24R |
| 9710 | Planar Board (64 ports) | 21L |
| 9731 | Planar Board (64 ports) | 21R, 22L, 23R, 24R |
| 9734 | Planar Board (64 ports) | 22R |
| 9750 | Fiber Optic Terminal Adapter | 1L through 24R |
| 9760 | Planar Board (EIA/V.35) | 91R |
| 9761 | Planar Board (X.21) | 92R |
| 9766 | Planar Board (EIA/V.35) | 90R |
| 9810 | ES Connection Adapter | 12L, 22L |
| 9860 | Planar Board (32 ports) | 22R |

Hardware Group Numbers

| HG | Unit | HG | Unit |
|-----------|--------------------------------|-----------|----------------------------------|
| 00 | Incorrect or unknown | 26/27 | Terminal Multiplexer Adapter |
| 01 | Diskette Drive 1/File Adapter | 31 | Token-Ring Adapter |
| 02 | Diskette Drive 2/File Adapter | 36 | ISDN Adapter |
| 03 | Fixed Disk 1/File Adapter | 37 | ISDN Adapter |
| 04 | Fixed Disk 2/File Adapter | 38 | ISDN Adapter |
| 08 | Timer | 39 | ISDN Adapter |
| 09 | Operator Panel | 41 | Ethernet Adapter |
| 11 | Communication Adapter | 46 | Encrypt/Decrypt Adapter |
| 16 | Channel Adapter | 51 | Concurrent Communication Adapter |
| 16 | Channel Driver/Receiver | 52 | Concurrent Communication Adapter |
| 17 | ES Connection Adapter | 80 | Test Monitor |
| 21 | Asynchronous Emulation Adapter | 81 | Test All CSU Mode |
| 22 | Asynchronous Emulation Adapter | 82 | Test All Installed Mode |
| 23 | Asynchronous Emulation Adapter | 87 | Processor/Storage |
| 26/27 | Fiber Optic Terminal Adapters | 99 | Unassigned Hardware Group |
| 26/27 | Terminal Adapters | | |

Figure 2-2. Hardware Group Numbers

Microcode Level Support

Table 2-4 helps you determine which features the present microcode levels support.

Table 2-4 (Page 1 of 2). Features Supported by Microcode Support Level

| Feature | A/S Rel 5 | B Rel 1 and 2 | B Rel 3 | B Rel 4 | C Rel 1, 2, and 3 | C Rel 4 | C Rel 5 |
|--|-----------|---------------|---------|---------|-------------------|---------|---------|
| Min. Storage Required | Note 1 | Note 1 | Note 1 | Note 1 | Note 1 | Note 1 | Note 1 |
| Max. Storage Supported by Operational Code | 4 MB | 6 MB | 6 MB | 6 MB | 6 MB | 6 MB | 6 MB |
| 512-KB Storage Card | YES | YES | YES | YES | YES | YES | YES |
| 1-MB Storage Card | YES | YES | YES | YES | YES | YES | YES |
| 2-MB Storage Card | YES | YES | YES | YES | YES | YES | YES |
| 4-MB Storage Card | YES | YES | YES | YES | YES | YES | YES |
| 6-MB Storage Card | YES | YES | YES | YES | YES | YES | YES |
| File Adapter | YES | YES | YES | YES | YES | YES | YES |
| File/Terminal Adapter | YES | YES | YES | YES | YES | YES | YES |
| Terminal Adapter (HG 26) | YES | YES | YES | YES | YES | YES | YES |
| Terminal Adapter (HG 27) | NO | NO | NO | YES | YES | YES | YES |
| Port Expansion Feature | NO | NO | NO | YES | YES | YES | YES |
| TMA | YES | YES | YES | YES | YES | YES | YES |
| Channel Adapter | YES | YES | YES | YES | YES | YES | YES |
| ES Connection Adapter | NO | NO | YES | YES | YES | YES | YES |
| Type 1 Communication Adapter | YES | YES | YES | YES | YES | YES | YES |
| Concurrent Communication Adapter | NO | YES | YES | YES | YES | YES | YES |
| Type 2 Communication Adapter | YES | YES | YES | YES | YES | YES | YES |
| Asynchronous Emulation Adapter | YES | YES | YES | YES | YES | YES | YES |
| 4-MB Token-Ring Adapter | YES | YES | YES | YES | YES | NO | YES |
| 16/4-MB Token-Ring Adapter | YES | YES | YES | YES | YES | NO | YES |
| 1.2-MB Diskette Drive | YES | YES | YES | YES | NO | NO | NO |
| 2.4-MB Diskette Drive | Note 3 | YES | YES | YES | YES | YES | YES |
| Fixed Disk | YES | YES | YES | YES | YES | YES | YES |
| 3299 Models 1, 2, and 3 | YES | YES | YES | YES | YES | YES | YES |
| 3299 Model 32 | Note 4 | NO | YES | YES | YES | YES | YES |
| Fiber Optic Terminal Adapter | Note 4 | NO | YES | YES | YES | YES | YES |
| ISDN Adapter | NO | NO | NO | NO | YES | YES | YES |
| Advanced Peer-to-Peer (APPN) | NO | NO | NO | NO | YES | YES | YES |
| Ethernet Adapter | NO | NO | NO | NO | NO | YES | YES |
| Frame Relay Communications | NO | NO | NO | NO | NO | NO | YES |

Table 2-4 (Page 2 of 2). Features Supported by Microcode Support Level

| Feature | A/S Rel 5 | B Rel 1 and 2 | B Rel 3 | B Rel 4 | C Rel 1, 2, and 3 | C Rel 4 | C Rel 5 |
|--------------------|------------------|--------------------------|----------------|----------------|------------------------------|----------------|----------------|
| Peer Communication | NO | NO | NO | NO | YES | Note 5 | Note 5 |

Notes:

1. Minimum storage requirements depend on each 3174 configuration and customization.
2. Token-Ring gateway requires Configuration Support S.
3. Configuration Support A and S Release 5 support 2.4-MB diskettes in 1.2-MB mode only.
4. 3299 Model 32 and the FTA require Configuration Support A Release 5.3, or Configuration Support B Release 3 or higher.
5. For Ethernet, Peer Communications is supported only for coax-to-coax communication; coax-to-Ethernet bridge is not supported in this configuration.

X.25 Cause and Diagnostic Codes

This section defines the X.25 cause and diagnostic codes:

Clear Indication Packet Cause Codes: Table 2-5 lists the X.25 cause codes received from the data circuit-terminating equipment (DCE) for a Clear Indication packet.

Table 2-5. X.25 Cause Codes Received from the DCE (Clear Request Packet)

| Hex Code | Meaning |
|----------|--|
| 00 | DTE originated (see note) |
| 01 | Number busy |
| 03 | Incorrect facility request |
| 05 | Network congestion |
| 09 | Out of order |
| 0B | Access barred |
| 0D | Not obtainable |
| 11 | Remote procedure error |
| 13 | Local procedure error |
| 15 | RPOA out of order |
| 19 | Reverse-charging acceptance not subscribed |
| 21 | Incompatible destination |
| 29 | Fast select acceptance not subscribed |
| 80 | DTE originated (see note) |

Note: When the cause code is X'00' or X'80', the diagnostic code field has been passed through the network from the remote DTE's original Clear Request, Reset Request, or Restart Request packet. See "Determining Which Diagnostic Code Table to Use" on page 2-23 for the correct table.

Reset Indication Packet Cause Codes: Table 2-6 lists the X.25 cause codes received from the data circuit-terminating equipment (DCE) for a Reset Indication packet.

Table 2-6. Cause Codes Received from the DCE (Reset Request Packet)

| Hex Code | Meaning |
|----------|----------------------------|
| 00 | DTE originated (see note.) |
| 01 | Out of order |
| 03 | Remote procedure error |
| 05 | Local procedure error |
| 07 | Network congestion |
| 09 | Remote DTE operational |
| 0F | Network operational |
| 11 | Incompatible destination |
| 80 | DTE originated (see note.) |

Note: When the cause code is X'00' or X'80', the diagnostic code field has been passed through the network from the remote DTE's original Clear Request, Reset Request, or Restart Request packet. See "Determining Which Diagnostic Code Table to Use" on page 2-23 for the correct table.

Restart Indication Packet Cause Codes: Table 2-7 lists the X.25 cause codes received from the data circuit-terminating equipment (DCE) for a Restart Indication packet.

Table 2-7. Cause Codes Received from the DCE (Restart Request Packet)

| Hex Code | Meaning |
|----------|-----------------------|
| 01 | Local procedure error |
| 03 | Network congestion |
| 07 | Network operational |

Cause Codes Sent by the 3174: Table 2-8 lists the X.25 cause codes the 3174 sends for Clear, Reset, and Restart Indication packets.

Table 2-8. Cause Codes Sent by the 3174 (Clear, Reset, and Restart Indication Packets)

| Hex Code | Meaning |
|----------|----------------|
| 00 | DTE originated |
| 80 | DTE originated |

Determining Which Diagnostic Code Table to Use: For cause codes greater than 0 and less than 80, see Table 2-11 on page 2-24.

Some networks and DTEs have defined additional diagnostic codes. For information about these additional codes, refer to the specific X.25 network or DTE diagnostic specifications.

For cause codes 00 and 80, see Table 2-9 and Table 2-10 to determine which diagnostic code table to use. Use Table 2-9 for restarts and for clears when a virtual call has not been established. Use Table 2-10 for resets and for clears when a virtual call has been established.

Table 2-9. Table Directory for Clears (when a virtual call has not been established) and Restarts

| Response to Configuration Question 400 | Use this Table |
|---|-------------------------|
| xx x 0 | Table 2-12 on page 2-25 |
| xx x 1 | Table 2-13 on page 2-28 |

Table 2-10. Table Directory for Clears (when a virtual call has been established) and Resets

| Response to Configuration Question 453 (see note) | Use this Table |
|--|-------------------------|
| x0xxxxxx | Table 2-12 on page 2-25 |
| x1xxxxxx | Table 2-13 on page 2-28 |

Note: This table works under the assumption that if the response to question 453 specifies ISO in the 3174, then the remote DTE is also using ISO codes.

Diagnostic Codes from the DCE

Table 2-11 lists the diagnostic code fields received from the data circuit-terminating equipment (DCE).

Table 2-11. Diagnostic Code Fields Received from DCE

| Hex Code | Meaning |
|----------|--|
| 00 | No additional information |
| 01 | Incorrect P(S) |
| 02 | Incorrect P(R) |
| 10 | Packet type incorrect—general |
| Code: | For state: |
| 11 | R1 |
| 12 | R2 |
| 13 | R3 |
| 14 | P1 |
| 15 | P2 |
| 16 | P3 |
| 17 | P4 |
| 18 | P5 |
| 19 | P6 |
| 1A | P7 |
| 1B | D1 |
| 1C | D2 |
| 1D | D3 |
| 20 | Packet not allowed—general |
| 21 | Unidentifiable packet |
| 22 | Call on one-way logical channel |
| 23 | Incorrect packet type on PVC |
| 24 | Packet on unassigned logical channel |
| 25 | Reject not subscribed to |
| 26 | Packet too short |
| 27 | Packet too long |
| 28 | Incorrect GFI |
| 29 | Restart with nonzero GFI |
| 2A | Packet type incompatible with facility |
| 2B | Unauthorized interrupt confirmation |
| 2C | Unauthorized interrupt |
| 30 | Timer expired—general |
| 31 | Incoming call |
| 32 | Clear indication |
| 33 | Reset indication |
| 34 | Restart indication |
| 40 | Call setup problem—general |
| 41 | Facility code not allowed |
| 42 | Facility parameter not allowed |
| 43 | Incorrect called—address |
| 44 | Incorrect calling—address |
| 50 | Call clearing problem—general |
| 51 | Nonzero address lengths field |
| 52 | Nonzero facility lengths field |

SNA Diagnostic Codes from the DTE

Table 2-12 lists the diagnostic code fields generated by the IBM (SNA) DTE.

Table 2-12 (Page 1 of 3). Diagnostic Code Fields Generated by IBM (SNA) DTE

| Hex Code | Meaning |
|----------|--|
| 00 | Normal initialization or termination |
| 01 | Incorrect packet send sequence number |
| 02 | Incorrect packet receive sequence number |
| 0C | Incorrect LLC type |
| 10 | Incorrect Packet type—general |
| Code: | For state: |
| 11 | R1 |
| 12 | R2 |
| 13 | R3 |
| 14 | P1 |
| 15 | P2 |
| 16 | P3 |
| 17 | P4 |
| 18 | P5 |
| 19 | P6 |
| 1A | P7 |
| 1B | D1 |
| 1C | D2 |
| 1D | D3 |
| 20 | DCE timer expired—general |
| 21 | Incoming call |
| 22 | Clear indication |
| 23 | Reset indication |
| 24 | Restart indication |
| 30 | DTE timer expired—general |
| 31 | Call request |
| 32 | Clear request |
| 33 | Reset request |
| 34 | Restart request |
| 37 | Reject not subscribed to |
| 40 | Unassigned—general |
| 43 | Incorrect calling address |
| 44 | Incorrect called address |
| 45 | Unassigned—general |
| 48 | Call collision |
| 49 | Unassigned—general |

Table 2-12 (Page 2 of 3). Diagnostic Code Fields Generated by IBM (SNA) DTE

| Hex Code | Meaning |
|----------|---------------------------------|
| 50 | QLLC error—general |
| 51 | Undefined C-field |
| 52 | Unexpected C-field |
| 53 | Missing I-field |
| 54 | Undefined I-field |
| 55 | I-field too long |
| 56 | QFRMR received |
| 57 | Incorrect QLLC header |
| 58 | Data received in non-data state |
| 59 | Timeout condition |
| 5A | Incorrect Nr (number received) |
| 5B | Recovery rejected or terminated |
| 5C | XID negotiation in wrong state |
| 5D | ELLC timeout condition |
| 5E | Q-bit discrepancy |
| 60 | PSH error—general |
| 61 | Sequence error |
| 62 | PS header too short |
| 63 | PSH format incorrect |
| 64 | Command undefined |
| 65 | Incorrect PSH protocol |
| 66 | Data received in non-data state |
| 69 | Timeout condition |
| 70 | Pad error — general |
| 71 | Pad access facility failure |
| 72 | SDLC FCS error |
| 73 | SDLC timeout |
| 74 | SDLC frame incorrect |
| 75 | I-field too long |
| 76 | SDLC sequence error |
| 77 | SDLC frame aborted |
| 78 | SDLC FRMR received |
| 79 | SDLC response incorrect |
| 7B | Incorrect packet type |
| 7F | Pad inoperable |
| 80 | DTE-specific |
| 81 | 8100 DPPX-specific |
| 82 | INN QLLC-specific |
| 83 | INN QLLC-specific |
| 84 | INN QLLC-specific |
| 85 | INN QLLC-specific |
| 86 | INN QLLC-specific |
| 87 | INN QLLC-specific |
| 88 | INN QLLC-specific |
| 89 | INN QLLC-specific |
| 8A | INN QLLC-specific |
| 8B | INN QLLC-specific |
| 8C | INN QLLC-specific |
| 8D | INN QLLC-specific |
| 8E | INN QLLC-specific |
| 8F | INN QLLC-specific |

Table 2-12 (Page 3 of 3). Diagnostic Code Fields Generated by IBM (SNA) DTE

| Hex Code | Meaning |
|----------|--|
| 90 | Network-specific |
| 91 | DDX-P RNR packet received |
| A0 | Packet not allowed |
| A1 | Incorrect M-bit packet sequence |
| A2 | Incorrect packet type received |
| A3 | Incorrect packet on PVC |
| A4 | Unassigned logical channel number |
| A5 | Diagnostic packet received |
| A6 | Packet too short |
| A7 | Packet too long |
| A8 | Incorrect GFI |
| A9 | Not identifiable |
| AA | Not supported |
| AB | Incorrect packet send sequence number |
| AC | Incorrect packet receive sequence number |
| AD | Incorrect D-bit received |
| AE | Incorrect Q-bit received |
| B0 | DTE-specific (NPSI Gate/Date) |
| B1 | No LU-LU session |
| B2 | Abend 703 in progress |
| B3 | Cancel chain command |
| C0 | DTE-specific codes |
| C1 | Termination pending |
| C2 | Channel inoperative |
| C3 | Unauthorized interrupt confirmation |
| C4 | Unauthorized interrupt request |
| C5 | PU resource not available |
| C6 | Inactivity timeout |
| C7 | Incompatible line configuration |
| C8 | Reset indication for Pad, translated from signal |
| C9 | DTE not operational |
| D0 | Resources—general |
| D1 | Buffers depleted |
| D2 | PIU too long |
| E0 | Local procedure error—general |
| E1 | Packet received with LC not equal to 0 |
| E2 | Restart or Diagnostic packet received with LC not equal to 0 |
| E3 | Incoming call received on wrong LC |
| E4 | Facility not subscribed |
| E5 | Incorrect packet for LC equal to 0 |
| E6 | Facility parameters not supported |
| E7 | Facility not supported |
| E8 | Unexpected calling DTE |
| E9 | Incorrect D-bit received |
| EA | Reset indication on virtual call |
| EB | Incorrect protocol identifier |
| EC | Connection identifier mismatch |
| ED | Missing cause/diagnostic code |
| F0 | Remote procedure error — general |
| FA | Link reset |

ISO Diagnostic Codes from the DTE

Table 2-13 (Page 1 of 3). ISO Diagnostic Code Fields from the DTE

| Hex Code | Meaning |
|----------|--|
| 00 | No additional information |
| 01 | Incorrect packet send sequence number |
| 02 | Incorrect packet receive sequence number |
| 10 | Incorrect Packet type — general |
| Code: | For state: |
| 11 | R1 |
| 12 | R2 |
| 13 | R3 |
| 14 | P1 |
| 15 | P2 |
| 16 | P3 |
| 17 | P4 |
| 18 | P5 |
| 19 | P6 |
| 1A | P7 |
| 1B | D1 |
| 1C | D2 |
| 1D | D3 |
| 20 | Packet not allowed – general |
| 21 | Unidentifiable packet |
| 22 | Call on one-way logical channel |
| 23 | Incorrect packet type on a PVC |
| 24 | Packet on unassigned logical channel |
| 25 | Reject not subscribed to |
| 26 | Packet too short |
| 27 | Packet too long |
| 28 | Incorrect general format identifier |
| 29 | Restart or registration with LCI≠X'000' |
| 2A | Packet type not compatible with facility |
| 2B | Unauthorized interrupt confirmation |
| 2C | Unauthorized interrupt |
| 2D | Unauthorized reject |
| 30 | Timer expired (or limit surpassed) – general |
| 31 | For incoming call or call request |
| 32 | For clear indication or request |
| 33 | For reset indication or reset request |
| 34 | For restart indication or request |
| 35 | For call deflection |

Table 2-13 (Page 2 of 3). ISO Diagnostic Code Fields from the DTE

| Hex Code | Meaning |
|----------|---|
| 40 | Call setup/clearing or registration problem – general |
| 41 | Facility/registration code not allowed |
| 42 | Facility/registration parameter not allowed |
| 43 | Incorrect called address |
| 44 | Incorrect calling address |
| 45 | Incorrect facility/registration length |
| 46 | Incoming call barred |
| 47 | No logical channel available |
| 48 | Call collision |
| 49 | Duplicate facility requested |
| 4A | Nonzero address length |
| 4B | Nonzero facility length |
| 4C | facility not provided when expected |
| 4D | Incorrect CCITT-specified DTE facility |
| 4E | Maximum redirections/deflections exceeded |
| 50 | Miscellaneous |
| 51 | Incorrect cause code from DTE |
| 52 | Non-octet aligned |
| 53 | Inconsistent Q-bit settings |
| 54 | NUI (network user identifier) problem |
| 70 | International problem – general |
| 71 | Remote network problem |
| 72 | Protocol problem |
| 73 | Link out of order |
| 74 | Link busy |
| 75 | Transit network facility problem |
| 76 | Remote network facility problem |
| 77 | Routing problem |
| 78 | Temporary routing problem |
| 79 | Unknown called data network identification code |
| 7A | Maintenance action |
| 90 | Timer expired (or limit surpassed) – general |
| 91 | For interrupt confirmation |
| 92 | For data packet retransmission |
| 93 | For reject packet retransmission |
| A0 | DTE-specific signals |
| A1 | DTE operational |
| A2 | DTE not operational |
| A3 | DTE resource constraint |
| A4 | Fast select not subscribed |
| A5 | Incorrect partially full data packet |
| A6 | D-bit procedure not supported |
| A7 | Registration/cancellation confirmed |

Table 2-13 (Page 3 of 3). ISO Diagnostic Code Fields from the DTE

| Hex Code | Meaning |
|----------|---|
| E0 | Open systems interconnection (OSI) network service problem – general |
| E1 | Disconnection (transient condition) |
| E2 | Disconnection (permanent condition) |
| E3 | Connection rejection — reason unspecified (transient condition) |
| E4 | Connection rejection — reason unspecified (permanent condition) |
| E5 | Connection rejection — requested quality of service not available (transient condition) |
| E6 | Connection rejection — requested quality of service not available (permanent condition) |
| E7 | Connection rejection — OSI network address unreachable (transient problem) |
| E8 | Connection rejection — OSI network address unreachable (permanent problem) |
| E9 | Reset — reason unspecified |
| EA | Reset — congestion |
| EB | Connection rejection — OSI network address unknown (permanent condition) |
| F0 | Disconnection — normal |
| F1 | Disconnection — abnormal |
| F2 | Disconnection — incompatible information in user data |
| F3 | Higher layer initiated disconnection — general |
| F4 | Connection rejection — reason unspecified (transient condition) |
| F5 | Connection rejection — reason unspecified (permanent condition) |
| F6 | Connection rejection — requested quality of service not available (transient condition) |
| F7 | Connection rejection — requested quality of service not available (permanent condition) |
| F8 | Connection rejection — incompatible information in user data |
| F9 | Connection rejection — unrecognizable protocol identifier in user data |
| FA | Reset — resynchronization |

Diagnostic Code Modifiers

Table 2-14 lists the X.25 diagnostic code modifiers.

Table 2-14. X.25 Diagnostic Code Modifiers

| Hex Code | Meaning |
|---------------|---|
| 00 | No additional information provided. See diagnostic code. |
| 01 | Unexpected Calling DTE |
| 02 | PU not available — Incorrect state |
| 03 | Facilities other than RPOA are included when configuration indicates that none is expected. |
| 04 | PU not available — Local mode |
| 05 (see note) | Packet size facility is included but is not configured. |
| 06 | Incoming CUG does not match the configured value. |
| 07 | Call requests reverse charging, but the function is not configured. |
| 08 | Call requests reverse charging not requested, but the function is not configured. |
| 09 (see note) | Call included window size facility, but the window size facility is not configured. |
| 10 | Facility length is too long. |
| 11 | CID is included but does not match the configured value. |
| 12 | Reserved |
| 13 | Protocol ID is incorrect. |
| 14 | CUG facility is configured but is not included in the Call Request packet. |
| 15 | Throughput class facility is configured but not included. |
| 16 | Reserved. |
| 17 | Reverse-charge facility is configured but not included. |

Note: Configured = Either configured value or value entered from the Dial Screen.

X.21 Error Completion Modifier Bits

Table 2-15 shows the meanings of the error completion modifier bits for an X.21 communication failure.

Table 2-15. Error Completion Modifier Bits

| Byte | Bit | Description |
|-------------|------------|--|
| B1 | 0 | Reserved. |
| | 1 | Reserved. |
| | 2 | The T1 (3-second) timer expired, indicating that the microcode did not receive the "proceed to select" state in response to signaling a call request. |
| | 3 | The T2 (20-second) timer has expired, indicating that, on an outgoing call, neither a 'call progress' signal nor 'ready for data' is detected after the selection signals are sent. |
| | 4 | The T5 or T6 (2-second) timer has expired, indicating that the DTE did not detect the DCE ready state in response to a DTE clear request or DTE clear confirmation. |
| | 5 | The T3A (2-second) timer has expired, indicating that 'ready for data' is not detected after 'call progress' signals are received and the calling DTE has not been told to wait 60 seconds. The T3B (60-second) timer has expired after a 'call progress' signal was received, telling the calling DTE to wait 60 seconds for the 'ready for data' signal (manual answer). |
| | 6 | The T4 (2-second) timer has occurred during an incoming call when 'ready for data' is not detected after the microcode has signaled 'call accepted.' |
| | 7 | Reserved. |

Call Progress Signal Code

The 'call progress' (CP) signal is sent by the network to advise a calling terminal/host about the progress of a call or about the circumstances that have prevented a connection from being established. The network transmits the signal after receiving end-of-dialing, and the signal is not repeated.

Note: The meaning of the codes may be different in each country. Ask a specialist for details about code meanings.

Table 2-16. Call Progress Signal Code

| CPS Code | CPS Meaning |
|-----------------|--------------------------------------|
| 00 | Wait |
| 01 | Terminal called |
| 02 | Redirected call |
| 03 | Connect when free |
| 20 | Number busy |
| 21 | Selection signal procedure error |
| 22 | Procedure error |
| 23 | Selection signal transmission error |
| 41 | Access barred |
| 42 | Changed number |
| 43 | Not obtainable |
| 44 | Out of order |
| 45 | Controlled not ready |
| 46 | Uncontrolled not ready |
| 47 | DCE power off |
| 48 | Incorrect facility request |
| 49 | Network fault in local loop |
| 51 | Call information service |
| 52 | Incompatible user class of service |
| 61 | Network congestion |
| 71 | Long-term network congestion |
| 72 | RPOA out of order |
| 81 | Registration/cancellation confirmed. |

Possible Data Chain Errors

The following list shows the possible incorrect *data chain* sequences that could have occurred to cause status code 404 02. For an explanation of data chaining, refer to the *3174 Functional Description*.

- A Data Chain (Begin) structured field was received when the device was already in data chain state.
- A Data Chain (Only) structured field was received when the device was already in data chain state.
- A Data Chain (Continue) structured field was received when the device was not in data chain state.
- A Data Chain (End) structured field was received when the device was not in data chain state.
- A Write Structured field, whose first structured field was other than Data Chain, was received when the device was in Data Chain state.

Port Control Area Bit Definitions

Bits defined as *Reserved* or *Reserved for engineering use* may contain zeros or ones. They should be disregarded unless otherwise directed by your next level of the support. Bits are assumed to be set to B'1' unless otherwise noted.

The meanings of the bits when they are on and when they are off is shown in the following table.

Table 2-17. Port Control Area Bit Definitions

| Location | Bit | Bit Descriptions |
|-----------------------------------|------------------------------|---|
| Byte 08 | 0 | 1 = Native mode 0 = 3278 mode |
| | 1 | 1 = Numeric lock 0 = No numeric lock |
| | 2 | 1 = Keyboard functions have been redefined 0 = No modifiable keyboard—Keyboard functions have not been redefined |
| | 3-7 | Modifications keyboard ID |
| | | Bit 2 = 0 Bit 2 = 1 |
| | | 00000 Reserved Reserved |
| | | 00001 Typewriter A |
| | | 00010 Data Entry 1 B |
| | | 00011 APL C |
| | | 00100 through 11111 Reserved D |
| Byte 09 ¹ (Display) | 0-3 | 0000 - Reserved |
| | | 0001 - APL keyboard/numeric lock |
| | | 0010 - Text keyboard/numeric lock |
| | | 0011 - RPQ typewriter keyboard/numeric lock |
| | | 0100 - Typewriter Attribute Select keyboard/numeric lock |
| | | 0101 - APL keyboard |
| | | 0110 - Text keyboard |
| | | 0111 - APL Attribute Select keyboard |
| | | 1000 - Data Entry 2 keyboard/numeric lock |
| | | 1001 - Data Entry keyboard/numeric lock |
| | | 1010 - Typewriter/numeric lock |
| | 1011 - Reserved | |
| | 1100 - Data Entry 2 keyboard | |
| | 1101 - Data Entry 1 keyboard | |
| | 1110 - Typewriter | |
| | 1111 - No keyboard | |
| | 4-6 | 010 - Model 2 (24 rows) |
| | | 011 - Model 3 (32 rows) |
| 101 - 30 rows | | |
| 7 | 110 - Model 5 | |
| | 111 - Model 4 | |
| | 0 - indicates display byte | |

¹Actual features identified to the 3174 by the terminal.

Communication Adapter Cable Part Numbers

Table 2-18 shows valid part numbers for communication cables in the 3174. These cables can have 1, 2, or 3 TEST/OPER switches.

Table 2-18. Communication Adapter Part Numbers

| Interface | Part Number | Country |
|-----------|-------------|------------------------|
| EIA | 39F7858 | U.S./World Trade |
| | 39F7961 | |
| | 53F4779 | |
| | 53F4780 | |
| | 53F4781 | |
| | 53F4782 | |
| | 6423153 | |
| | 6423154 | |
| | 25F8492 | Japan and Korea |
| | 39F7966 | |
| | 53F4783 | |
| | 73X3722 | |
| | 73X3723 | |
| | 25F7432 | Germany |
| | 25F7433 | |
| 39F7965 | | |
| 39F7967 | | |
| V.35 | 25F8490 | U.S./World Trade |
| | 39F7963 | |
| | 6423325 | |
| | 6423327 | |
| | 25F8491 | France and Switzerland |
| | 39F7964 | |
| | 6423326 | |
| 6423328 | | |
| X.21 | 6168155 | |
| | 6168156 | |

Token-Ring Status Codes

The following example shows the meanings of the bits in the token-ring status codes that are contained in the extended data of 3174 status codes. The following example shows how to use the extended data for a typical 3174 status code that contains a token-ring status code in the extended data.

Ring Status Example:

| | | | | | |
|-------------|------|------|------|------|------|
| Status Code | QAHG | B1B2 | B3B4 | B5B6 | B7B8 |
| 580 | 05HG | 9350 | 1200 | 0000 | 0840 |

The extended data bytes B7 and B8 contain the ring status code information.

Bytes B7 and B8 have the following bits turned on:

| | | | |
|---------|---------|-----------|-------------|
| 0 1 2 3 | 4 5 6 7 | 8 9 10 11 | 12 13 14 15 |
| 0 0 0 0 | 1 0 0 0 | 0 1 0 0 | 0 0 0 0 |

For hex 0840, bits 4 and 9 are on. This means that a lobe wire fault has occurred (bit 4), and the error occurred when a single station was attached to the ring (bit 9).

Note: Bits 11 through 15 are always 0 and have no meaning. Table 2-19 defines the bits in the Token-Ring status codes.

Table 2-19. Token-Ring Status Codes

| Bit | Function | Description |
|-----|----------------------|--|
| 0 | Signal loss | The receive signal is not being detected. |
| 1 | Hard error | Beacon frames are being transmitted or received. |
| 2 | Temporary error | The token-ring adapter has transmitted a soft error report MAC frame. |
| 3 | Transmit beacon | The token-ring adapter is transmitting beacon frames. |
| 4 | Lobe wire fault | An open or short circuit has been detected in the lobe data path. The token-ring adapter will be closed. |
| 5 | Auto Removal Error 1 | An internal hardware error was detected following the beacon auto-removal process. The token-ring adapter has removed from the ring. The adapter will be closed. |
| 6 | None | Reserved. |
| 7 | Remove received | A remove MAC frame has been received. The token-ring adapter will be closed. |
| 8 | Counter overflow | One of the error log counters has increased from 254 to 255. The DIR.READ.LOG command should be issued. |
| 9 | Single station | The adapter has opened and is the only station on the ring. This bit will be reset when another station inserts. |
| 10 | Ring recovery | The token-ring adapter is transmitting or receiving monitor contention MAC frames. This bit is reset on receipt of a ring purge MAC frame. |

LAN Return Codes

LAN return codes are divided into four groups:

- Return codes set for any command (Table 2-20)
- Return codes set for transmit and receive commands (Table 2-21 on page 2-38)
- Return codes that apply to the direct interface (Table 2-22 on page 2-38)
- Return codes that apply to the DLC/IEEE 802.2 Interface (Table 2-23 on page 2-39)

Table 2-20. Common Return Codes

| Return Codes | Description |
|--------------|---|
| 00 | The requested operation was completed successfully. |
| 01 | The command code was not recognized by the LAN Adapter. No action was performed for the command. |
| 02 | A duplicate command is already being processed by the LAN Adapter. No action was performed for the command. |
| 03 | The LAN Adapter is open, and a command was received that can be processed only when the adapter is closed. No action was performed for the command. Note: The LAN Adapter has to be closed, and the command has to be issued again. |
| 04 | The LAN Adapter is closed, and a command was received other than an open or close adapter command. Note: The LAN Adapter has to be opened, and the command has to be issued again. |
| 05 | At least one required parameter for which the LAN Adapter provides no default has a zero value. No action was performed for the command. Note: Change the parameter to a valid value and issue the command again. |
| 06 | A command was received with missing, incorrect, or incompatible options. For example: Note: This return code may be set if an attempt is made to add an IEEE-type SAP to a non-IEEE-type group SAP, or a non-IEEE-type SAP to an IEEE-type SAP group. In this case the command is completed up to the point where the failing item in the GSAP list was encountered; otherwise, no action is performed for the command. |
| 07 | The LAN Adapter is unable to complete the command, because of a critical failure. The command has been canceled. |
| 08 | The requested access priority is greater than the access priority authorized for the LAN Adapter. No action was performed for the command. |
| FF | A received command is being processed. |
| 15 | Invalid Frame Format for LAN Adapter. |
| 18 | Illegal Address for patch. |
| 19 | Patch address out of allowable range. |

Table 2-21. Transmit and Receive Return Codes

| Return Codes | Description |
|--------------|---|
| 20 | This return code is set by the controller in response to the Receive Data command from the LAN Adapter. The return code indicates that not enough buffer space is available to receive the data. The LAN Adapter sets local busy if the frame was for a Link Station. This return code has no effect at the Direct and SAP interface. |
| 22 | The LAN Adapter has transmitted the frame, but the PCFE received when the frame was stripped from the LAN indicates that the frame may not have been received by the destination adapter. Note: This error code is not returned for frames transmitted using the DLC/IEEE 802.2 Link Station interface. |
| 23 | The LAN Adapter was unable to transmit the frame, or an error was detected during the frame strip process. The transmit Error does not contain valid data if this return code is set. |
| 24 | The source class in the MAC frame passed to the Direct Interface is not authorized for this adapter, or PCF byte 1 written to the DHB by the controller for a transmission at the SAP Interface indicates an attempt to send a MAC frame. No action was performed for this command. |
| 25 | The maximum number of transmit commands was exceeded. Up to 128 transmit commands can be outstanding for a given SAP or Link Station, or at the Direct Interface. |
| 26 | The command correlator in a Transmit command or the buffer address in a Receive command is not the one expected by the LAN Adapter, or a Transmit command was received when none was expected. |
| 27 | The link has left the link opened state because of a received frame or because the retry count has been exhausted. The new link state will be reported by a DLC Status. |
| 28 | The frame length given in a Transmit Data command is less than the LAN header length (and DLC header if applicable) at the Direct or SAP interface, or is greater than the DHB length. |

Table 2-22. Direct Interface Return Codes

| Return Codes | Description |
|--------------|--|
| 30 | The LAN Adapter does not have enough receive buffers available to complete the Open adapter sequence. One of the following items should be reduced: <ul style="list-style-type: none"> The maximum frame length The number of service access points The number of link stations The number of DHBs requested. |
| 32 | An incorrect node address has been detected. A new address must be assigned to the LAN Adapter in the device that has the incorrect address. |
| 33 | An incorrect receive buffer length is defined. The receive buffer length is less than 96, or more than 2048, or not a multiple of 8. |
| 34 | An incorrect transmit buffer length is defined. The transmit buffer length is less than 96, or more than 2048, or not a multiple of 8. |

Table 2-23. DLC/IEEE 802.2 Interface Return Codes

| Return Codes | Description |
|--------------|--|
| 40 | Either the STATION.ID is not recognized by the LAN Adapter or the command code is not allowed for the station type. |
| 41 | The requested command cannot be accepted with the existing primary link state. |
| 42 | One of the parameters exceeded the maximum acceptable value. |
| 43 | The SAP value coded on an Open SAP command has already been used on a previous Open SAP command, and the resulting SAP station has not been closed, or an attempt has been made to issue an Open Station command for a link that already exists (local and remote SAPs and the remote address are the same as those used for an existing link). |
| 44 | The routing information provided in a Connect Station command does not have the correct format. No action was performed for this command. |
| 45 | Membership has been requested in a group SAP that is not open. The command was completed up to the point where the LAN Adapter encountered the error. For example: The SAP is open if the request was an Open SAP SRB, or the other parameters have been changed if it was a Modify command. Open the Group SAP and issue a Modify command to request membership. |
| 46 | All SAP, Group SAP, or Link Station control blocks created during Open Adapter have been allocated. The request cannot be honored until a SAP or Link Station that is open has closed. At that time the request may be re-issued. |
| 47 | An SAP with dependent Link Stations will not be closed until all the stations have closed. Either close the stations and re-issue the command, or use the Reset command if the situation is critical. |
| 48 | A Group SAP will not be closed while it has active members. |
| 49 | Membership has been requested in a Group SAP that already has all the members requested on the Open SAP command. The Open SAP or Modify SRB that encountered the error was completed up to the point that the error was detected. |
| 4A | When a Close Station or Connect Station command has been accepted, no other SRB will be accepted against the Link Station until the command completes processing. The only command that will be accepted is Reset SRB issued against the SAP. |
| 4B | The LAN Adapter transmitted a DISC command-poll to the remote station in response to a Close Station command. Despite retransmission, no acknowledgment has been received. The Link Station is closed. |
| 4C | A Close SAP or Close Station command will not be accepted if there are commands outstanding. Either wait for the commands to complete processing or use a Reset command if the situation is critical. |
| 4D | The LAN Adapter transmitted a SABME command-poll to the remote station in response to a Connect Station command. Despite retransmission, either no acknowledgment has been received or a DM response was received. The Link Station has been returned to Disconnected Mode. Either close the Link Station or verify that the routing information is correct and retry the command. |
| 4E | The controller requested a SAP that should be deleted as a member of a Group SAP, but the SAP could not be found in the list of members of the Group SAP. The Modify SRB that encountered the error has been completed up to the point of the error. |
| 4F | The remote address parameter has the high bit of the high byte set to 1. Resubmit the request with a valid address. |

Link States

Table 2-14 defines the link primary and secondary states.

Table 2-24. Link Primary and Secondary States

| Link Primary State | Link Secondary State |
|---------------------------|--|
| Bit 0 = Link Closed | Bit 0 = Checkpointing |
| Bit 1 = Disconnected | Bit 1 = Local Busy (User set) |
| Bit 2 = Disconnecting | Bit 2 = Local Busy (Buffer set) |
| Bit 3 = Link Opening | Bit 3 = Remote Busy |
| Bit 4 = Resetting | Bit 4 = Rejection |
| Bit 5 = FRMR Sent | Bit 5 = Clearing |
| Bit 6 = RRMR Received | Bit 6 = Dynamic Window Algorithm Running |
| Bit 7 = Link Opened | Bit 7 = Reserved |

SNA Sense Codes

Each sense data category has modifiers for further description in sense byte 1. The modifier codes supported and the controller or terminal condition causing the sense data to be returned are described below. Refer to the *SNA Formats Reference Summary* for a generic definition.

The following definitions are 3174-specific. Also listed are the Central Site Change Management (CSCM) SNA registered sense codes with a reference to the *3174 Central Site Customizing User's Guide*. For architecture sense codes, refer to the *SNA Formats Reference Summary*.

Note: In addition to the SNA sense codes, the error log and the SNA Alert function may provide additional information about error recovery.

Path Error X'80'

X'8000'—Incorrect command received or Connect Command

Incorrect command received or Connect Command not received.

Associated Sense Code: 401-02

X'8002 0000'—Link Failure

Data link failure.

X'8004'—Unrecognized DAF

The DAF address is not customized.

Associated Status Code: 412-03

X'8005'—NO SESSION

- A Bind has not been received or accepted.
- A request other than Bind is sent to an SLU that has already accepted a Bind, and the OAF is not X'00' or the OAF in the accepted Bind.

Associated Status Code: 412-02, 412-03, 412-08

X'8006 0000'

Incorrect FID type.

Associated Status Code: 851-06

X'8007'—Segmenting Error

One of following conditions exists:

- First BIU segment had less than 10 bytes.
- BIU segments were received out of order.
- The sequence number of a middle or last BIU segment did not match the sequence number of the first BIU segment.
- The OAF of a middle or last BIU segment did not match the OAF of the first BIU segment.
- A segmented RU, which was not a Function Management Data request, was received.

Associated Status Code: 497-03

X'8007 0002'—Interleaved Bind Segments Not Allowed

A Bind receiver that is in the middle of receiving segments of one Bind received a segment from a different Bind. The receiver rejects both Binds and disconnects the link.

X'8008'–PU NOT Active

The 3174 has not received or accepted an ACTPU.

Associated Status Code: 412-04

X'8009'–LU NOT Active

The 3174 has not received or accepted an ACTLU.

Associated Status Code: 412-05

X'800B 0000'

Incorrect transmission header length.

Associated Status Code: 851-06

X'800F'–Incorrect Address Combination

A request was addressed to the PU (DAF=X'00'), and the OAF was not SSCP (OAF=X'00').

X'800F 0000'

The DAF, OAF (FID2) combination or the LSID (FID3) specified an incorrect type of session.

Associated Status Code: 412-01

X'800F 0001'

The FID2 ODAI setting in a received Bind was incorrect and the Bind was rejected.

X'8014 0001'

No route exists.

Associated Status Code: 854-09

X'8014 0003'

The destination is not available.

Associated Status Code: 854-09

X'8014 0005'

- The Route Selection Control Vector (RSCV) exceeds the maximum length.
- The Route Selection Control Vector (RSCV) was truncated because the route was too long.

Associated Status Code: 854-02, 854-09

X'8019 0001'–Receiving Node Incorrect

Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for more information.

X'8019 0002'–Receiving Node Incorrect

Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for more information.

X'8200'–Incorrect command received or Connect Command

Incorrect command received or Connect Command not received.

Associated Status Code: 401-02

RH Error X'40'**X'4000'–Insufficient host buffers**

Insufficient host buffers.

Associated Status Code: 540-55

X'4003'–Begin Bracket (BB) Not Allowed

An FMD request carried BB, but it was not first in chain or it did not contain an FMH-5.

Associated Status Code: 415-08

X'4004'—Conditional End Bracket (CEB) or End Bracket (EB) Not Allowed

- An FMD request or LUSTAT request carried EB.
- A –LIC FMD request carried CEB.
- An FMD request or LUSTAT request carried CEB and the DR2 and Exception Response bits in the RH were set to **1**.
- An FMD request or LUSTAT request carried BB, CEB, and specified exception response.
- An FIC request carried BB, and the LIC request carried CEB and specified exception response.

Associated Status Code: 415-09

X'4005'—Incomplete RH

First BIU segment was less than 3 bytes in length.

Associated Status Code: 415-04, 415-07

X'4005 0000'

Incorrect RH length.

Associated Status Code: 851-06

X'4006'—Exception Response Not Allowed

LIC carried exception response when the Bind specified definite response only.

Associated Status Code: 415-01

X'4007'—Definite Response Not Allowed

LIC carried definite response when the Bind specified exception response only or – LIC carried definite response.

Associated Status Code: 415-02

X'4008'—Pacing Not Supported

An SC request specified pacing.

Associated Status Code: 415-15

X'4009'—Change Direction (CD) Not Allowed

- A BIS, RTR, or SIGNAL request carried CD.
- A –LIC FMD request carried CD.
- An FMD or LUSTAT request carried CD and CEB.
- An FMD or LUSTAT request carried CD and the DR1 bit was set to **1** and the DR2 and Exception Response bits in the RH were set to **0**.

Associated Status Code: 415-11

X'400B'—Chaining Not Supported

A DFC request, a SC request, or a response was received that did *not* have both the Begin and End Chain indicators on.

Associated Status Code: 415-16

X'400C'—Brackets Not Supported

A BIS, RTR, SIGNAL, or SC request carried a bracket indicator (BB, EB, or CEB).

Associated Status Code: 415-22

X'400D'—CD Not Supported

An SC request carried CD.

Associated Status Code: 415-06

X'400F'—Incorrect Use of Format Indicator (FI)

- For LU Type 1 – An FM request received by the 3174 indicated FM header included, when the Bind command specified FM headers not allowed.
- For LU Type 6.2 – A DFS or SC request was received with the FI bit in the RH set to **0**.

Associated Status Code: 415-03, 415-18

X'4010'—Alternate Code Not Supported

A DFC, FMD, or SC request was received with the Code Selection indicator bit in the RH set to **1**.

Associated Status Code: 415-19

X'4011'—Incorrect Specification of RU Category

- For LU Types 1, 2, and 3 – The RU category indicator was specified incorrectly; for example, an expedited flow request was specified with RU category = FMD.
- For LU Type 6.2:
 - An expedited FMD request or FMD response was received.
 - A normal flow SC request was received.
 - A normal flow response was received with an RU category that was different from the RU category of the last request sent.

Associated Status Code: 415-05, 415-20

X'4012'—Incorrect Specification of Request Code

- An expedited DFC response with a request code – = SIGNAL was received.
- A normal flow DFC response was received with a request code that was different from the request code of the last DFC request sent.

Associated Status Code: 415-12

X'4013'—Incorrect Specification of Sense Data Indicator (SDI), RTI

- A negative response was received with the SDI bit in the RH set to **0**.
- A positive response was received with the SDI bit in the RH set to **1**.

Associated Status Code: 415-21

X'4014'—Incorrect Use of Definite Response (DR) and Exception Response (ER) Indicators

- A SIGNAL, RTR, or SC request was received that did not have the DR1 bit set to **1** and the DR2 and ERI bits set to **0**.
- A BIS request did not have the DR1 bit or the ERI bit set to **1**.
- An FMD or LUSTAT request did not have the DR1 or the DR2 bit set to **1**.

Associated Status Code: 415-17

X'4015'—Incorrect Use of Queued Response Indicator (QRI)

A BIS, RTR, SIGNAL, or SC request carried QRI.

Associated Status Code: 415-23

X'4016'–Incorrect Use of Enciphered Data Indicator (EDI)

A DFC or SC request was received with the EDI bit in the RH set to **1**.

Associated Status Code: 415-24

X'4017'–Incorrect Use of Padded Data Indicator (PDI)

A DFC or SC request was received with the PDI bit in the RH set to **1**.

Associated Status Code: 415-25

X'4018'–Incorrect Setting of Queued Response Indicator (QRI) with Bidder's BB

- An FMD or LUSTAT request carried BB but did not carry QRI.
- An LUSTAT request or first-in-chain FMD request carried QRI but did not carry BB.

Associated Status Code: 415-13

X'4019'–Incorrect Indicators on Last-In-Chain (LIC) Request

- An LUSTAT request or LIC FMD request specified exception response but did not carry CEB or CD.
- An LIC FMD request with the DR1 bit set to **1** and the DR2 and ERI bits set to **0** did not carry CEB.

Associated Status Code: 415-14

State Error X'20'

X'2000'–3174 ESCON Adapter Bus Out check (Non-SNA)

The 3174 ESCON Adapter Bus Out check (non-SNA).

Associated Status Code: 540-02

X'2000'–Host Channel or 3174 Channel Adapter error (Non-SNA)

The Host Channel or 3174 Channel Adapter has an error.

Associated Status Code: 540-01, 540-51

X'2000'–3174 initiated Command Retry (Non-SNA)

The 3174 initiated a Command Retry.

Associated Status Code: 540-51

X'2000'–Insufficient Host Buffer (Non-SNA)

Insufficient host buffers.

Associated Status Code: 540-55

X'2001'–Sequence Number Error

The sequence number of the normal flow request did not match the number expected.

Associated Status Code: 416-01, 416-09

X'2002'–Chaining Error

Chain elements were received out of order.

Associated Status Code: 416-02, 416-10, 540-02

X'2003'–Bracket State Error

- For LU Types 1, 2, and 3 — A bracket state error occurred.
- For LU Type 6.2:
 - An RTR request was received on a first speaker session.
 - An Attach Header was received before a bracket was started or a second Attach Header was received after a bracket was started.

Associated Status Code: 416-03, 416-19

X'2004'–Direction Error

- A normal flow request without Begin Bracket was received while the 3174 was in Send State.
- For LU Type 6.2 — A first-in-chain normal flow request was received after a request carrying Change Direction.

Associated Status Code: 416-05, 416-11

X'2005'–Data Traffic Reset

An FMD or DFC request was received before a SDT was received or accepted.

Associated Status Code: 416-04

X'2005 0001'–Type Address Field Error

The type address field in the SNA address list subvector is not equal to 2.

X'2006'–Host Channel or 3174 Channel Adapter Error

The Host Channel or 3174 Channel Adapter has an error.

Associated Status Code: 540-01, 540-04, 540-51

X'2008'–No Begin Bracket

A request carrying Begin Bracket was received after a BIS request.

Associated Status Code: 416-12

X'2009'–Session Control Protocol Violation (Encrypt/Decrypt Feature)

An FMD request was received before a valid CRV on a Crypto session. SDT was already received and accepted.

Associated Status Code: 416-06

X'200A'–Immediate Request Mode Error

A normal flow request was received before the response was sent to a chain that requested definite response.

Associated Status Code: 416-13

X'200B'–Queued Response Indicator (QRI) Error

The QRI bit value was different for the middle or last-in-chain FMD request than for the first-in-chain FMD request.

Associated Status Code: 416-14

X'200E'--Response Correlation Error

- A positive FMD or LUSTAT response was received and one of the following conditions occurred:
 - The session was between brackets
 - There was not an outstanding request
 - The sequence number of the response was incorrect.
- An RTR response was received and one of the following conditions occurred:
 - There was not an outstanding request
 - The sequence number of the response did not match the sequence number of the outstanding request.
- A SIGNAL response was received when a SIGNAL request was not outstanding.

Associated Status Code: 437-01

X'200F'--Response Protocol Error

- A positive FMD response was received when one of the following conditions occurred:
 - Before the LIC request was sent
 - After a negative response to the chain had been already received
 - In response to a chain or to a request that specified exception response.
- A positive LUSTAT response was received in response to a request that specified exception response.
- A negative FMD response was received after a negative response to the chain was already received.

Associated Status Code: 416-15

X'2010'--BIS Protocol Error

- A second BIS request was received on the same session.
- A BIS reply was received.

Associated Status Code: 416-16

X'2011'--Pacing Error

An outbound pacing overrun occurred.

Associated Status Code: 416-17

X'2011 0000'

A normal flow request was received by a half session after the pacing count had been reduced to 0 and before a pacing response had been sent.

X'2011 0001'--Unexpected Isolated Pacing Message (IPM)

An IPM was received when the receiver was in a state that did not allow it.

X'2011 0002'--Unexpected Pacing Request Received

A request with the pacing indicator set was received when the receiver was in a state that did not allow it.

X'2011 0003'--Pacing Response Indicator Incorrectly Set

The pacing indicator was set in a non-IPM response that was received while adaptive pacing was being used.

X'2012'—Incorrect Sense Code Received

- A negative BIS response was received.
- A negative RTR response was received with a sense code other than X'08190000'.
- A negative FMD or negative LUSTAT response was received with a sense code other than X'08460000' or X'088B0000'. (X'088B0000' is valid only if the corresponding request carried Begin Bracket.)

Associated Status Code: 416-07

Request Error X'10'

X'1000'—3174 Failure (Non-SNA)

3174 failure.

Associated Status Code: 315-01, 315-02, 315-03, 315-04, 381-21

X'1001'—RU Data Error (With Index)

Data in the Request RU is not acceptable to the 3174; for example, a character code is not in the set supported, a formatted data field is not acceptable to presentation services, a value specified in the length field (LL) of a structured field is incorrect, a required name in the request has been omitted, or a CONFIRM verb was issued when the synchronization level of the conversation was "none."

Bytes 2 and 3 following the sense code may contain a 15-bit binary count that indicates the location of the first byte in the RU chain detected to be causing the error. The count (origin 0) begins at the start of the first RU and continues until the error byte is detected. When the count is present, the high-order bit in byte 2 is set to 1.

Note: If the X'1001' error occurs during Local Format Storage processing, the *8xxx* qualifier in bytes 2 and 3 does not represent an accurate offset value and should be ignored.

If the data stream ends without containing sufficient data to process an SBA, SFE, RA, EUA, MF, or SA order, the value of B3B4 will be set to 8001.

A value of all 0's in bytes 2 and 3 indicates that no additional information is specified.

X'1001'—RU Data Error

Data is not acceptable to the receiving transaction program. For example, a logical record was truncated, a logical record had an incorrect length field, or a CONFIRM verb was issued by the remote transaction program.

Associated Status Code: 410-05, 410-09, 410-14, 411-01, 411-02, 411-03, 411-05, 411-06, 411-07

X'1001'—Encrypted RU Problem

There is an Encrypted RU problem.

Associated Status Code: 410-05

X'1001'—Isolated Pacing Message (IPM) Format Error (LU 6.2)

LU 6.2 RU data error.

Associated Status Code: 410-14

X'1001 0000'—RU Data Error

The GDS variable that DLUR De-Encapsulation TP received is not X'1500'.

Associated Status Code: 854-20

| **X'1001'-3174 Failure**

| There is a 3174 failure.

| Associated Status Code: 315-01, 315-02, 315-03, 315-04, 381-21

X'1001 0003'-Isolated Pacing Message (IPM) Format Error

An incorrectly formatted IPM was received.

X'1002'-RU Length Error

- An RU was received that was greater than 4096 bytes in length (3174 Models 1L and 11L only).
- An RU was received that exceeded the maximum allowable length specified in the Bind.
- For LU Type 6.2 – An RU was received that was less than the minimum required length. For example, a DFC request with an RU length of 0, or a negative FMD response with an RU length < 4 bytes.

Associated Status Code: 410-01, 410-02, 410-10, 410-11, 410-12, 854-08

X'1002 0000'

- Incorrect RU length
- The Topology Database Update (TDU) has an incorrect length.

Associated Status Code: 851-06, 854-08

X'1003'-Function Not Supported

- Unsupported Session Control Request
- Unsupported Data Flow Control Request
- For LU Types 1, 2, and 3 – Signal Code is not X'00010000'
- For LU Type 3 – Any Read, RM, or RMA command.

Associated Status Code: 410-04, 410-06, 410-08, 422-01, 422-08

X'1003 0001'-Function Not Supported

- RTM Request and host RTM are not customized.
- A Network Services header was not NMVT or REQMS.

Associated Status Codes: 410-06, 410-08

X'1003 000D'

The TDU General Data Stream (GDS) variable was not received by the TP program.

Associated Status Code: 854-08

X'1003 000E'

through

X'1003 0017'-General Data Stream Error

X'1005'-Parameter Error

- For LU Type 1 – An incorrect SCS parameter was received.
- For LU Type 6.2:
 - A SIGNAL request did not have an extension value of X'0001'.
 - An LUSTAT request did not have a status value of X'0006'.

Associated Status Code: 422-06

X'1005 0001'-SNA Address List Incorrect

The Type Address field in the SNA Address List subvector is not equal to 0.

X'1005 0007'-General Data Stream Error

X'1007'—Category Not Supported

- A Network Control request or response was received.
- For LU Types 1 and 3 — An FMD request from the SSCP was directed to a printer.
- For LU Types 1, 2, and 3 — An unsupported FMD request was received.
- For LU Type 6.2 — A request was received from the SSCP.

Associated Status Code: 410-07, 422-02, 422-07

X'1007 0001'—Incorrect NS Header

An unsupported network service message was received.

X'1008'—Incorrect FM Header (FMH)

- For LU Type 1 — An incorrect FMH-1 was received.
- For LU Type 6.2:
 - An FMH with a type other than 5, 7, or 12 was received.
 - An incorrect FMH-5 or FMH-7 was received.

Associated Status Code: 422-09

X'1009'—Format Group Not Selected

- A Present Absolute Format or Present Relative Format structured field was received before a Select Group structured field that activates a particular Group Name.
- A Present Absolute Format or Present Relative Format structured field was processed, but the selected Group Name was either not found or was in error.

X'100B 0001'

through

X'1019 0003'—General Data Stream Error

The following sense codes that are included in this range have specific definitions:

X'1010 0000'

- Unrecoverable error on CP-CP session supported
- CPCAPS length error.

Associated Status Code: 854-04

X'1010 0001'

Extra reply on search.

Associated Status Code: 855-10

X'1010 0004'

Unrecoverable error.

Associated Status Code: 854-12

X'1010 1002'

An incorrect General Data Stream (GDS) was received.

Associated Status Code: 854-04

X'1010 4004'

- Incomplete negative or neutral reply
- Reservation on broadcast
- Search All on directed.

Associated Status Code: 855-06

- X'1010 5002'**
A LOCATE request was received without cross domain initiate (CDINIT).
Associated Status Code: 854-03
- X'1010 5006'**
Session polarity or initiate type is not supported.
Associated Status Code: 854-06
- X'1010 A002'**
No FIND on search request.
Associated Status Code: 855-06
- X'1010 B080'**
No Control Vector X'80' on FOUND.
Associated Status Code: 855-06
- X'1014 003C'**
Missing Control Vector X'3C'.
Associated Status Code: 855-06
- X'1014 003D'**
Missing Control Vector X'3D'.
Associated Status Code: 855-06
- X'1014 0080'**
Incorrect Control Vector.
Associated Status Code: 855-07
- X'1014 023C'**
Conflicting directory entry.
Associated Status Code: 855-08, 855-09
- X'1014 5046'**
A cross domain initiate (CDINIT) was received from an end node without TG vectors.
Associated Status Code: 854-03
- X'1014 A082'**
Missing FIND Control Vector X'82'.
Associated Status Code: 855-06
- X'1014 B280'**
A wild card was received from ENCP.
Associated Status Code: 855-06
- X'1015 0000'**
The length of the XID exceeds 255 bytes.
Associated Status Code: 851-01
- X'1015 0001'**
The length of the XID is less than 29 bytes.
Associated Status Code: 851-01

X'1015 0002'

The number of bytes in the length field of the XID3 is not the same as the actual length of the received XID3.

Associated Status Code: 851-01

X'1016 0000'

The XID received was incorrect or for a non-SNA link.

Associated Status Code: 851-01

X'1016 0001'

The "MAX number of I-frames the sender can receive" is zero or greater than 128 (incorrect window size).

Associated Status Code: 851-01

X'1016 0002'

A non-activation XID3 was received with a different ACTPU request than the original XID3.

Associated Status Code: 851-01

X'1016 0003'

The maximum BTU that the sender can receive is less than 265.

Associated Status Code: 851-01

X'1016 0004'

The XID received was not XID3, although XID3 was expected.

Associated Status Code: 851-01

X'1016 0007'

The XID indicates it is a Network Node, it does not support Bind segmenting, and its Maximum I-Frame BTU is less than 521 bytes.

Associated Status Code: 851-01

X'1016 0009'

The adjacent node supports CP-CP sessions, but does not provide CP-CP sessions.

Associated Status Code: 851-01

X'1016 000B'

The adjacent node is the TG number negotiation winner and designates a TG number that the 3174 cannot allocate to this connection, such as 0.

Associated Status Code: 851-01

X'1016 000D'

Different CP names were in the last two XIDs received or the received CP name was not the same as the CP name in the LSB.

Associated Status Code: 851-01

X'1016 000F'

Both the sender and the receiver are primary/secondary.

Associated Status Code: 851-01

X'1016 0011'

An attempt was made to establish parallel sessions, but the adjacent node does not support parallel sessions.

Associated Status Code: 851-01

X'1016 0013'

The DLC type in the XID is not correct.

Associated Status Code: 851-01

X'1016 0015'

Incorrect support of Bind pacing.

Associated Status Code: 851-01

X'1016 001B'

The adjacent node provides CP-CP sessions, but does not support CP-CP sessions.

Associated Status Code: 851-01

X'1016 001C'

An XID was received whose LINK STATION ROLE is reserved. The name is not the same as the CP name in the LSB.

Associated Status Code: 851-01

X'101A nmmm'

Incorrect Control Vector ordering in the Topology Database Update (TDU), where:

nn = **Key of last Control Vector.**

mm = **Key of current Control Vector that is out of order.**

Associated Status Code: 854-08

X'0000'

3174 hardware error.

Associated Status Code: 315-05, 315-06, 315-07, 315-55, 315-58

X'0102'

Channel data streaming error.

Associated Status Code: 540-04

Request Reject X'08'**X'0801'—Resource Not Available**

- For LU Type 1 – The outbound pacing algorithm is overrun.
- For LU Type 2 – A printer is not allowed by the authorization matrix.
- For LU Types 1 and 3 – Bind reject because the printer is authorized for local mode only.

Associated Status Code: 418-01

X'0801 0012'

TG number is not in the range 0—239 or no TGs are available.

X'0802'—Intervention Required (on principal device)

- For LU Type 2 – The security keylock is turned off.
- For LU Types 1 and 3 – A printer condition such as end of form, paper jam, printer cover up, or hold timeout occurred.

X'0805'—Session Limit Exceeded

A Bind was received for an SLU that was already bound.

Associated Status Code: 417-01, 417-02

X'0806 0000'--Resource Unknown

The GDS variable that DLUR De-Encapsulation TP received contains an unknown resource to 3174.

Associated Status Code: 854-15

X'0806 0002'

CN or CP name error.

Associated Status Code: 851-01

X'0806 002B'

The 3174 received a Bind with an RSCV specifying a CPNAME and TG that are incorrect because of SSCP takeover. The Bind sender should retry.

X'0806 002C'

- The 3174 received an XID that had a CP name that was the same as the 3174.
- The 3174 received an XID identified as a Network Node, but the 3174 recognized it as an End Node.
- The 3174 received an XID identified as an End Node, but the 3174 recognized it as a Network Node.

Associated Status Code: 851-01

X'0807'--Subsidiary Device Temporarily Not Available

For LU Type 2 – No printer is available to service a host-initiated local copy request, or an operator has pressed the DEV CNCL key.

X'0807 9003'

Incorrect Routing flags.

Associated Status Code: 850-04

X'0809'--Requested Function Cannot Be Performed in the Current State of the Receiver

CRV received when a CRV had already been received.

Associated Status Code: 420-10

X'0809 0039'

CPCAP protocol error.

Associated Status Code: 854-01

X'0809 003C'

Out of sequence error.

Associated Status Code: 851-02

X'0809 0040'

A mode setting command (SABME, SNRM, etc.) was incorrect for the receiving node or was received, but not expected.

Associated Status Code: 851-03

X'0809 0041'

Both the sender and the receiver support or do not support ABM.

Associated Status Code: 851-02

X'0809 0049'

The received XID3 had a Control Vector X'22' appended.

Associated Status Code: 851-04

X'0809 004B'--Function Out of Sequence

The requested function was out of sequence. For example, an Initiate Session request was received before the previous session was terminated.

X'0809 004C'--Mandatory Major Vector Out of Sequence**X'0809 004D'--Incorrect Multiple Occurrence of Subvector****X'080A'--Permission Rejected**

Display or printer power is off. The SSCP will not be notified when the device is switched on.

X'080C'--Procedure Not Supported

An unsupported REQMS type request was received.

Associated Status Code: 422-04, 850-02

X'080C 0002'

Incorrect Major Vector length.

Associated Status Code: 850-02

X'080C 0005'--Major Vector Not Supported

- NMVT major vector was not X'8080' (RTM) or X'8090' (Request PSID).
- Major Vector does not equal MS capabilities.

Associated Status Code: 850-01

X'080C 0006'--Mandatory Subvector Not Included

A mandatory subvector was not included in the NMVT (X'92' for RTM, X'81' or X'83' for PSID).

X'080C 0006'

Control vector missing or not supported. 3174 management services capabilities supports receiving the X'61' (Focal Point Authorization Request) or X'64' (Entry Point Authorization Reply) subvectors.

Associated Status Code: 850-01

X'080C 000A'--Address List Subvector Incorrect

The number of LTs in the SNA address list subvector was not equal to one.

X'080C 000B'

through

X'080C 0011'--Function Not Supported

Refer to "Appendix C" in the *3174 Central Site Customizing User's Guide* for more information.

X'080C 0161'

Required subfields missing from X'61' (Focal Point Authorization Request) subvector.

Associated Status Code: 850-01

X'080C 0164'

Required subfields missing X'64' (Entry Point Authorization Reply) subvector.

Associated Status Code: 850-01

X'080F'--End User Not Authorized

- An FMH-12 was received.
- Random Data and/or Enciphered Data User Data subfields were present in the Bind request.
- A Bind request specified that the Access Security Information field will not be accepted on incoming FMH-5s and that the Already Verified Indicator will be accepted on incoming FMH-5s.

Associated Status Code: 434-01

X'0811'—Break

Sent on LU Type 1 when the operator presses the printer Hold Print key followed by Cancel key, if a chain has not completed printing. (Not sent when LU Type 1 data stream is IPDS.)

X'0812 0000'—Insufficient Resources

- The 3174 has temporarily run out of resources.
- The 3174 canonical name directory is full. Refer to “Appendix C” in the *3174 Central Site Customizing User’s Guide* for more information.

Associated Status Code: 419-01, 854-14

X'0812 0007'

The LFSID table space in the 3174 is depleted. There may be a design error in the system initialization code that calculates the needed space, or a failure in the ASM code that deallocates empty tables.

Associated Status Code: 853-03

X'0812 000D'—Link Buffer Space Depleted

- The 3174 has no space to receive unpaced Binds. If a Bind gets as far as the Address Space Manager (ASM), however, it is already in a link buffer. If this sense code is issued by ASM, it indicates failure of the microcode which logically transfer the Bind buffer into a reserved pacing pool. The error will be in ASM or NBM components.
- If this sense code is present and the Bind request came from an adjacent node that paces Bind requests, it indicates that the adaptive pacing mechanism has been successful in controlling a large number of Bind requests. The “overcommit” limit in NBM may need to be adjusted. This sense code and status code may, however, be a reasonable response to a large number of Bind requests received from nodes that are not adaptively pacing Bind requests.

Associated Status Code: 853-03, 857-03

X'0812 0010'

- There are no resources to handle LOCATEs.
- Directory Services (DS) is out of resources.

Associated Status Code: 854-07, 855-01, 855-02, 855-03, 855-04, 855-05

X'0812 0014'

A Bind has been rejected due to an ISR resource depletion (session connector blocks). You have attempted to establish more concurrent ISR sessions than are allowable for the customized session support level (question 610).

Associated Status Code: 853-03

X'0812 0016'

- The NETID table is out of entries.
- There are no resources for the new NETID during CP session activation.

Associated Status Code: 855-02, 855-03

X'0812 0018'

A Bind request cannot be forwarded to an adjacent node because 64,767 architected LFSIDs are already in use. The 3174 is probably not handling that many concurrent sessions on one link. Instead, a microcode failure probably occurred in the Address Space Manager (ASM) code, which frees and reassigns LFSIDs, or in the Session Connector Manager (SCM) or Session Manager (SM) components, which request LFSIDs to be freed.

Associated Status Code: 853-03

X'0812 001A'

There is not enough storage to activate the link.

Associated Status Code: 851-05

X'0813'–Bracket Bid Reject—(No RTR)

- Returned by LU Types 1 and 2 to a BID or Begin Bracket if the device has won contention and started a bracket.
- Returned by all LU types when a BID or Begin Bracket was received and INB state already exists. This may be a protocol error.

Associated Status Code: 418-02

X'0814'–Bracket Bid Reject—(RTR to Follow)

- For LU Types 1 and 3 – The printer is busy doing local copy from a display. RTR will be returned when the printer becomes not busy with local copy.
- For LU Type 6.2 – Session is already in use. An RTR request will be returned when the session becomes available.

Associated Status Code: 418-03, 418-10

X'0815'–Function Already Active

A Bind request was received while the 3174 was waiting to receive an UnBind response.

Associated Status Code: 418-09, 422-03

X'0815 0003'–Insufficient Resource

- The queue of unprocessed RTM, PSID, REQMS, and CSCF requests has exceeded its limit.
- No SSCP-PU buffer available.
- No Presentation Space available.

X'0815 0007'

A CP-CP session is already enabled.

Associated Status Code: 854-01

X'0819'

An RTR was received, but the 3174 has nothing to send.

Associated Status Code: 416-20

X'081B'–Receiver in Transmit Mode

- The SLU is between brackets, but a data key has been pressed.
- An FMD message was received from the SSCP while the display was owned by the PLU-SLU session or is in test mode.
- An SSCP FMD message is rejected if local copy is taking place while the SSCP-SLU session owns the display.

Associated Status Code: 418-04

X'081C'–Request Not Executable

The 3174 has a nonrecoverable error.

Associated Status Code: 418-05

X'081D 0001'–Network/LUNAME Mismatch

Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for more information.

X'081D 0003'

A Duplicate CP name was detected.

Associated Status Code: 854-10

X'0820' (Non-SNA)

3174 initiated Command Retry.

Associated Status Code: 540-51

X'0821'–Incorrect Session Parameters

Required cryptography verification was incorrect.

Associated Status Code: 420-09, 854-10

X'0821'–Encrypt/Decrypt Error

Encrypt/Decrypt error.

Associated Status Code: 420-09

X'0821 0002'

Mode not known.

Associated Status Code: 856-03

X'0829'–Change Direction Required

A 3270 read-type command was received without a Change Direction or with an End Bracket.

Associated Status Code: 418-06

X'082B'–Presentation Space Integrity Lost

- A temporary error has occurred; for example, parity check in device.
- An operator has cleared the display by switching to SSCP-SLU session or test mode and has returned to PLU-SLU session.

X'082C 0002'–Invalid Request

The specified PU has already received an ACTPU and is therefore under the control of another SSCP. This ACTPU would exceed the share limit (=1).

Associated Status Code: 854-18

X'082D'–SLU Busy

- For LU Type 2 – A display is owned by SSCP-SLU session or is in test mode.
- For LU Type 2 – A display is busy doing an operator-initiated local copy.

Associated Status Code: 418-08

X'082E'–Intervention Required at Subsidiary Device

For LU Type 2 – A printer being copied to, from a host-initiated print, has an intervention-required type error. See X'0802'. A printer switched off or not attached to the controller is included in this category.

X'082F'–Request Not Executable Because of LU Subsidiary Device

For LU Type 2 – A printer being copied to has a nonrecoverable error.

X'0831'–LU Component Disconnected

This response is returned if the device attached to the 3174 cannot be contacted by a device poll. This is due to device power off, cable detached from the controller port, or a broken connecting cable.

| **X'0835'–Bind Reject or Bind Command Error (with Index)**

| Bind reject or command error. A Bind request contained parameters that are incorrect or not
| supported by the 3174. Bytes 2 and 3 contain a 2-byte binary count that indexes (zero origin) the
| first byte of the request found to have incorrect contents.

| Associated Status Code: 420-01, 420-02, 420-03, 420-04, 420-05, 420-06, 420-07, 420-08,
| 420-11, 420-12, 420-13, 420-14, 420-20, 420-22, 420-24, 420-26, 420-27

| **X'0835 0005'–Incorrect PRID Value**

| The NMVT request from the host contained an incorrect PRID value of X'0000'.

| **X'0838 0000'**

| through

| **X'0838 0016'**

| Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for CSCM-related codes.
| Refer to the *SNA Formats Reference Summary* for architecture-related codes.

| **X'083B 0002' Incorrect Fully Qualified Procedure ID (FQPCID)**

| A Bind was received with an FQPCID that duplicated the FQPCID assigned to another session.
| The FQPCID, which is used as a PU identifier on the DLUR-DLUS session, has been used by
| another DLUR-DLUS session.

| Associated Status Code: 420-19, 854-16

| **X'083E 0004'**

| The Implementation retry limit was exceeded.

| Associated Status Code: 854-11

| **X'0840 0007'**

| Resource not found.

| Associated Status Code: 855-11

| **X'0843'–Required Function Manager Synchronization Not Supplied**

| For LU Types 2 and 3 – Chains having the print bit on in the Write Control Character (WCC), must
| be definite response or exception response with CD.

| Associated Status Code: 418-07

| **X'0845'–Permission Rejected**

| Display or printer power is off. The SSCP will be notified when the device is switched on.

| **X'0846'–ERP Message Forthcoming**

| The received request was rejected. The reason will be specified in a forthcoming FMH-7.

| **X'0848'–3174 Encrypt/Decrypt Adapter Failure.**

| Encrypt/Decrypt adapter failure.

| Associated Status Code: 335-01, 335-02, 335-51, 335-52, 336-01, 421-01

| **X'084B'–Requested Resources Not Available–Transaction Program (TP) Not Available, Retry Allowed**

- The requested TP is already in conversation. Retry user action.
- The requested TP has been temporarily disabled by the 3174 pending completion of a SNA Distribution Services (SNADS) transaction. Retry user action.

| Associated Status Code: 411-04

| **X'084B 6031'–LU temporarily disabled**

| LU temporarily disabled.

| Associated Status Code: 430-51

| **X'084C 0000'—LU Permanently Disabled**

| LU permanently disabled.

| Associated Status Code: 430-01

| **X'084C'—Permanent Insufficient Resource**

- For LU Type 6.2 – 3174 hardware or microcode failure.
- For LU Types 1, 2, and 3 – The 3174 cannot act on the request because resources required to honor the request are permanently unavailable. The sender should not retry immediately because the situation is not transient. Bytes 2 and 3 following the sense code may contain a 15-bit binary count that indicates the location of the first byte in the chain detected to be causing the error. The count (origin 0) is begun at the start of the first RU and continues through concatenated RUs until the error byte is detected. When the count is present, the high-order bit in byte 2 is set to 1. A value of all 0's in bytes 2 and 3 indicates that no additional information is specified or that the resource was not explicitly defined in the request.

| **X'084C 0002'**

| through

| **X'0851'**

Refer to "Appendix C" in the *3174 Central Site Customizing User's Guide* for CSCM-related codes. Refer to the *SNA Formats Reference Summary* for architecture-related codes.

| **X'0852'—Duplicate Session Activation Request**

A Bind was received that contained a session ID that duplicated the session ID assigned to another session.

Associated Status Code: 420-21

| **X'0852 0001'**

| through

| **X'085D 0005'**

Refer to "Appendix C" in the *3174 Central Site Customizing User's Guide* for CSCM-related codes. Refer to the *SNA Formats Reference Summary* for architecture-related codes.

| **X'0857 0003'—Invalid Request**

| Response sent back to SLU when SSCP data has been input and the DLUS SSCP-SLU session is inactive.

| **X'0861 0002'**

Incorrect Class of Service (COS) name.

Associated Status Code: 854-09

| **X'0863'—Referenced Local Character Set Identifier (LCID) Not Found**

The character set referred to does not exist. Bytes 2 and 3 following the sense code will contain a 15-bit binary count that indexes (zero origin) the first byte of the RU chain identifying the character set. The high-order bit in byte 2 is set to 1.

| **X'0864'—Function Abort**

A Transaction Program detected an error and has issued a DEALLOCATE_ABEND verb.

| **X'0868'—No Formats Loaded**

The 3174 has received a Present Absolute Format or Present Relative Format structured field, but no formats have been loaded into controller storage.

| **X'0869'—Format Not Found**

A Present Absolute Format or Present Relative Format structured field has been received requesting a format name that was not previously loaded into controller storage.

X'086C nn00'–Subvector nn Not Included

Subvector nn was specified as being present in this request but was not included.

X'086C 0100'–Incorrect Subvector

The first subvector was not a function-type subvector.

X'086C 2100'

X'21' (Focal Point Identification) Subvector is not present.

Associated Status Code: 850-01

X'086C 2B00'

Bind without Route Selection Control Vector (RSCV) from network node.

Associated Status Code: 854-03

X'086C 2C00'

Bind without COS/TPF vector.

Associated Status Code: 854-03

| **X'086C 4600'**

| Required control vector missing: X'46' TG Descriptor Control vector.

| Associated Status Code: 854-17

| **X'086C 5100'**

| Required control vector missing: X'51' DLUS Capabilities control vector.

| Associated Status Code: 854-17

| **X'086C 6000'**

| Required control vector missing: X'60' Fully Qualified PCID control vector.

| Associated Status Code: 854-17

| **X'086C 8100'**

| Required subvector missing: X'81' (Origin Location Name) subvector.

| Associated Status Code: 850-05

| **X'086C 8200'**

| Required subvector missing: X'82' (Origin Location Name) subvector.

| Associated Status Code: 850-05

X'086C 9000'

Required subvector missing: Routing flags.

Associated Status Code: 850-05

X'086D nnmm'–Required Subfield Missing

Subfield mm was missing from subvector nn.

X'086D 4680'

The Route Selection Control Vector (RSCV) contains Control Vector X'46' without a Control Vector X'80'.

X'086D 8101'

Required Subfield missing: Origin NETID.

Associated Status Code: 850-05

X'086D 8102'

Required Subfield missing: Origin NAU.

Associated Status Code: 850-05

X'086D 8103'

Required Subfield missing: Origin Application.

Associated Status Code: 850-05

X'086D 8201'

Required Subfield missing: Destination NETID.

Associated Status Code: 850-05

X'086D 8202'

Required Subfield missing: Destination NAU.

Associated Status Code: 850-05

X'086D 8203'

Required Subfield missing: Destination Application.

Associated Status Code: 850-05

X'086F 0001'—Length Error

The length of the NMVT major vector was incorrect for the RU length.

X'086F 0002'—Length Error

- The length of the NMVT request subvector was less than the minimum required for this subvector.
- Incorrect Routing Length.

Associated Status Code: 850-02

X'086F nn05'—Length Error

The length of NMVT subvector nn was incorrect or contained an incorrect range.

X'086F nn06'—Subfield Length Error

The length of subfield nn was incorrect.

X'086F 8103'

Incorrect Subvector length: X'81' (Origin Location Name) subvector.

Associated Status Code: 850-02

X'086F 8106'

Incorrect Subfield Length: X'81' (Origin Location Name) subvector.

Associated Status Code: 850-02

X'086F 8203'

Incorrect Subvector length: X'82' (Destination Location Name) subvector.

Associated Status Code: 850-02

X'086F 8206'

Incorrect Subfield Length: X'82' (Destination Location Name) subvector.

Associated Status Code: 850-02

X'0870 9002'

Unknown MDS message type

Associated Status Code: 850-03

X'0870 9003'

Unknown MDS message type.

Associated Status Code: 850-03

X'0870 9404'—Boundary Not Included

Change of boundaries was specified but the boundaries were not included in the request.

Associated Status Code: 850-04

X'0870 9408'—New Definition Incorrect

The new definition was outside the valid range (1–4).

X'0870 9409'—Time Measurement Not Zero (100 ms)**X'0870 9410'—Number of Boundaries Incorrect**

The number of boundaries specified was not within the valid range (1–4).

X'0870 94nn'—Boundaries Out of Sequence

nn is the displacement of the boundary that was not in ascending order.

X'0870 nnnx'—Incorrect Panel ID

Subvector *nn* contained an incorrect Panel ID. *xx* represents the one-byte binary count that indexes the first byte in which the incorrect value falls. Indexing is zero origin from the beginning of the subvector.

X'0871'—Read State Error**X'0872 0001'—Parameter Not Set**

Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for more information.

X'0879 0001'—Disk Error

Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for more information.

X'0879 0002'—Disk Error

Refer to “Appendix C” in the *3174 Central Site Customizing User's Guide* for more information.

X'087A'—Format Processing Error

An error occurred during the processing of a Present Absolute Format or Present Relative Format structured field.

X'0889'—Transaction Program Processing Error

A Transaction Program detected an error and has issued a SEND_ERROR verb.

X'088C 0E00'

Control Vector X'0E' was missing when it was required.

Associated Status Code: 851-01

X'088C 4400'

Control Vector X'44' was not received in correct order on the Topology Database Update (TDU).

Associated Status Code: 854-08

X'088C 4580'

Control Vector X'4580' was not received in the Topology Database Update (TDU).

Associated Status Code: 854-08

X'088C 4680'

Control Vector X'4680' was not received in the Topology Database Update (TDU).

Associated Status Code: 854-08

X'088C 8000'

Control Vector X'80' was not received in the correct order on the Topology Database Update (TDU).

Associated Status Code: 854-08

X'088E 0008'

The session could not be established because the Dependent LU Requester (DLUR) detected from the capabilities control vector that a DLUR is trying to establish the session with this DLUR.

Associated Status Code: 854-19

X'088E 0009'

The session could not be established because the Dependent LU Requester detected an incompatibility between its capabilities and those of its Dependent LU Server.

Associated Status Code: 854-19

X'0890 0010'

Routing error during directed.

Associated Status Code: 855-13

X'0890 0022'

Incorrect Control Vector X'0E'.

X'0890 0048'

Neutral reply from ENCP.

Associated Status Code: 855-06

X'0890 0080'

Duplicate Fully Qualified Procedure Correlation Identifier (FQPCID) on search.

Associated Status Code: 855-06

X'0891 0000'

The Netid.CP Name is not fully qualified.

Associated Status Code: 851-01

X'0891 0004'

- An incorrect resource name was received during CP session activation.
- The NETID is greater than 8 characters.

Associated Status Code: 851-01, 855-06, 855-07

X'0891 0005'

The CP name is greater than 8 characters.

Associated Status Code: 851-01

X'0895 0000'—Control Vector Length Error:

- The Control Vector X'0E' length is 0.
- The Control Vector X'11' length is less than 1.
- An incorrect Control Vector length was received on the CP session.

Associated Status Code: 851-01, 855-06, 855-07

X'0897 0000'

The link is defined as Type 2.1 and Type 2.0, but has come up 2.0 only.

Associated Status Code: 851-01

X'0897 000D'

Incorrect resource type

Associated Status Code: 855-08, 855-09

X'0897 0011'

- The End Node does not support LOCATE.
- A CP session was requested by an End Node that does not support the LOCATE function.

Associated Status Code: 855-07

X'089A 0001'

through

X'08A0 0003'

Refer to "Appendix C" in the *3174 Central Site Customizing User's Guide* for CSCM-related codes.
Refer to the *SNA Formats Reference Summary* for architecture-related codes.

X'08A0 0004'

Reversed FRSN values in Topology Database Update (TDU).

Associated Status Code: 854-08

X'08A0 0005'

The Topology Database Update (TDU) was sent out of order.

Associated Status Code: 854-08

X'08A0 0006'

FRSN error on CPCAPS exchange.

Associated Status Code: 854-08

X'08A0 0007'

through

X'08A4 0002'

Refer to "Appendix C" in the *3174 Central Site Customizing User's Guide* for CSCM-related codes.
Refer to the *SNA Formats Reference Summary* for architecture-related codes.

X'08A0 0007'

LU-LU sessions for DLUR supported dependent LUs should be reset.

X'08A8 0001'

Unknown Destination name.

Associated Status Code: 850-07

X'08A8 0003'

Unknown Management Services Application name.

Associated Status Code: 850-07

X'08A8 0004'

The Mode name does not equal SNASCVMG.

Associated Status Code: 850-01 (Release C5 and lower), 850-07 (Release C5 and higher)

X'08A8 0005'

Function not supported by end node destination. The end node destination does not support receipt of MDS-MUs.

Associated Status Code: 850-07

X'08A8 0009'

Destination not supported. The 3174 has received an MDS-MU from another network node that cannot be routed because the destination is not a served end node (or the end node is not active).

Associated Status Code: 850-07

X'08A8 000A'

Unrecoverable session failure when attempting to transmit management services data.

X'08A8 000B'

Unrecoverable conversation failure when transmitting management services data (remote transaction program failed).

| **X'08A8 000E'**

| Correlation error when attempting to route management services data. An MDS-MU was received
| that was not the first of a transaction, but there was no matching UOW recorded, or an MDS-MU
| was received that was the first of a transaction, but the UOW matches another active transaction.

| Associated Status Code: 850-07

| **X'08A8 000F'**

| MDS router congestion. The MDS-MU could not be routed because the 3174 is already
| supporting the maximum number of concurrent transactions.

| Associated Status Code: 850-07

| **X'08A9 0001'**

| Management services routing error caused by failure of CPSVCMG session to destination.

| Associated Status Code: 850-07

| **X'08A9 0002'**

| Management services routing error caused by failure of SNASVCMG session to destination.

| Associated Status Code: 850-07

| **X'08AA 1310'**

| The General Data Stream (GDS) is not a MDS_MU.

| Associated Status Code: 850-05

| **X'08AA 1311'**

| Missing Routing Information General Data Stream (GDS).

| Associated Status Code: 850-05

| **X'08AA 1549'**

| Missing UOW General Data Stream (GDS).

| Associated Status Code: 850-05

| **X'FFFF 0006'**

| Cannot delete entry for node.

| Associated Status Code: 855-07

DFT Device Program Error Codes

The following list is a summary of error status codes. When these errors occur, you should perform the following actions:

1. Press the **Reset** key and try again.
2. If the problem persists, follow local procedures for reporting problems. Because this list is only a summary, consult the specific device documentation as a final authority.

Table 2-25 (Page 1 of 4). Program Error Codes

| Error Code | Probable Cause | SNA Sense Code or Non SNA OP-Check |
|------------|--|------------------------------------|
| 701 | Category not supported | 1007 |
| 702 | RU > 1536 bytes received (SNA buffer overrun condition) | 1007 |
| 703 | Function not supported: <ul style="list-style-type: none"> • Unsupported Session Control Request • Unsupported Data Flow Control Request • Incorrect Signal Request code (not 0001XXXX) | 1003 OP-Check |
| 704 | Format indicator (FI) bit not allowed | 400F |
| 705 | Sequence number error | 2001 |
| 706 | Chaining error | 2002 |
| 707 | Bracket state error | 2003 |
| 708 | Data traffic reset state | 2005 |
| 709 | HDX error | 2004 |
| 711 | Session limit exceeded | 0805 |
| 712 | Bracket bid reject | 0813 |
| 713 | Session already bound | 0815 |
| 714 | No LU-LU session | 8005 |
| 715 | LU not active | 8009 |
| 716 | Not enough bytes in the Bind RU | 0821 |
| 717 | Incorrect support level (bytes 1–3) | 0821 |
| 718 | Incorrect PLU protocol (byte 4) | 0821 |
| 719 | Incorrect SLU protocol (byte 5) | 0821 |
| 720 | Incorrect common protocol (bytes 6–7) | 0821 |
| 721 | Less than 64-byte RU length specified (byte 10) | 0821 |
| 722 | Incorrect combination of outbound pacing count and maximum outbound RU size | 0821 |
| 723 | Incorrect LU type (byte 14) | 0821 |
| 724 | Incorrect screen size (bytes 20–24) | 0821 |
| 725 | Cryptography not supported (byte 26) | 0821 |
| 726 | Negative SNA response from the host | |
| 727 | SNA Exception Request received | |
| 728 | An RM, RMA, or RB command, or a Read Partition SF type received with EB and/or CD | 0829 |

Table 2-25 (Page 2 of 4). Program Error Codes

| Error Code | Probable Cause | SNA Sense Code or Non SNA OP-Check |
|-------------------|---|---|
| 729 | Read Partition SF received in retry state | 0871 OP-Check |
| 730 | A read buffer command was received in normal state and partition 0 does not exist. | 1005 |
| 750 | Incorrect command received | 1003 CMD-REJECT |
| 751 | SFE, MF, or SA order with incorrect character set value in the range X'01' – X'FE' | 0863 OP-Check |
| 752 | <ul style="list-style-type: none"> • Incorrect address received following an SBA, RA, or EUA order • MF order addressed to a notified attribute location | 1005 OP-Check |
| 753 | <ul style="list-style-type: none"> • Data follows an RM, RMA RB, or EAU command • GE or RA order received with incorrect character • SFE, MF, or SA order with incorrect attribute value for highlight or color or a character set value of X'FF' | 1003 OP-Check |
| 754 | Data Stream ended before all required bytes for an SBA, RA, EUA, SF, SFE, MF, SA, or GE order were received | 1005 OP-Check |
| 755 | Incorrect order received (EBCDIC value less than X'40' not recognized) | 1003 OP-Check |
| 756 | <ul style="list-style-type: none"> • Incorrect, structured field type • Structured field type not supported for current configuration | 1003 OP-Check |
| 757 | <ul style="list-style-type: none"> • Load PS SF with incorrect PS alias • Load PS SF load type not supported | 1003 OP-Check |
| 758 | Set reply mode SF received with incorrect mode | 1003 OP-Check |
| 759 | <ul style="list-style-type: none"> • Read Partition SF not last SF • SF type incomplete • SF length incorrect • Set Reply Mode SF with field/ext field mode and data following SF • Length 0000 but not last SF • Load PS SF length error | 1005 OP-Check |
| 760 | <ul style="list-style-type: none"> • Erase/Reset SF reserved fields not zero • Set Reply Mode SF attribute type reserved | 1003 OP-Check |
| 761 | <ul style="list-style-type: none"> • Structured field type PID incorrect • Query PID is not X'FF' | 1005 OP-Check |
| 762 | Create Partition structured field: parameter error | 1005 OP-Check |
| 763 | <ul style="list-style-type: none"> • Create partition SF caused a viewport overlap • Create partition SF was rejected due to insufficient resources • Modify partition SF caused a viewport overlap | 1005 OP-Check |
| 764 | <ul style="list-style-type: none"> • Load PS SF addressed PS incorrect • Load PS SF extension incorrect color bits | 084C OP-Check |
| 765 | <ul style="list-style-type: none"> • Load PS SF with incorrect load start point • Load PS SF with incorrect code point of X'FF' • Load PS SF contains too many symbol definitions | 1005 OP-Check |
| 766 | <ul style="list-style-type: none"> • Load PS SF with incomplete PS cell data • Load PS SF with incorrect end flag for type 2 PS • Load PS SF with incorrect type 2 header (end flag encountered and not end of data) | 1005 OP-Check |

Table 2-25 (Page 3 of 4). Program Error Codes

| Error Code | Probable Cause | SNA Sense Code or Non SNA OP-Check |
|------------|---|--|
| 767 | <ul style="list-style-type: none"> • Create Partition structured field with incorrect address mode • Create Partition structured field with bits 0–3 of byte 4 not zero | 1003 OP-Check |
| 768 | <ul style="list-style-type: none"> • Load PS SF extension <ul style="list-style-type: none"> – Incorrect x units – Incorrect y units – Incorrect extended – Parameter length or extended parameter length if missing • Ending code point less than start point • Cell dimensions: incompatible with existing definitions | 1005 OP-Check |
| 769 | <ul style="list-style-type: none"> • Load PS SF extension incorrect byte 8 (Reserved bits 3 to 7 not zero) • Byte 11 not zero • Byte 12 bits 5 to 7 not zero | 1003 OP-Check |
| 770 | Outbound 3270DS SF with start print in WCC, but not last structured field | 1001 OP-Check |
| 771 | Incorrect command in structured field | 1003 OP-Check |
| 772 | <ul style="list-style-type: none"> • Resource requested temporarily unavailable • Set attribute; Modify Field; Start Field Extended | 084B OP-Check |
| 773 | Incorrect structured Field following Destination/Origin Structured Field | 1005 OP-Check |
| 780 | <ul style="list-style-type: none"> • Miscellaneous Graphics Program Check • OEM Data, Object Data, Picture, Control SF, or spanning SF inconsistency | 1003/1005 OP-Check |
| 781 | <ul style="list-style-type: none"> • Graphic Drawing Processor Check • Drawing Order error | 1003/1005 OP-Check |
| 782 | <ul style="list-style-type: none"> • Graphic Procedure Processor Check • Procedural Instruction error | 1003/1005 OP-Check |
| 790 | OCSF/OPSF parameter error: <ul style="list-style-type: none"> • Spanning error • Interpretation mode not immediate • Reserved bits not zero • Object type not image | OP-Check 1005 1003 1005 1005 |
| 791 | Procedure syntax error: <ul style="list-style-type: none"> • Code field has unsupported code • Length field is incorrect • Not enough bytes in parameter field • Parameter field has incorrect value • IOCB (Control) data is incorrect • Incorrect sequence of instruction • Procedure is not closed | OP-Check 1003 1005 1005 1005 1005 1005 1005 |
| 792 | Scanner operation error: <ul style="list-style-type: none"> • Incorrect transmission of I/O instruction • Incorrect protocol of scanner operation • OSCF/OPSF was received while in I/O instruction pending • OSCF (that carries instruction except Transfer or Halt I/O) was received while in scan pending • OPSF was received while in scan pending • I/O instruction is received without CD or EB | OP-Check 1005 0801 0801 0801 0801 0801 0829 |

Table 2-25 (Page 4 of 4). Program Error Codes

| Error Code | Probable Cause | SNA Sense Code or Non SNA OP-Check |
|------------|---|--|
| 793 | Segment syntax error: <ul style="list-style-type: none"> • Code field has unsupported code • Length field is incorrect • Not enough bytes in parameter field • Parameter field has incorrect value • Incorrect sequence of order or IDP • Segment is not closed • More than four rectangles are defined | OP-Check 1003 1005 1005 1005 1005 1005 1005 |
| 794 | Error detected in image data: <ul style="list-style-type: none"> • MMR data includes incorrect code • Uncompressed data is inconsistent with IDP | OP-Check 1005 1005 |
| 795 | WCC with Error | OP-Check |
| 799 | Image parameter error: <ul style="list-style-type: none"> • Unsupported resolution • Unsupported threshold • Unsupported contrast control • Unsupported parameter code • Unsupported compression algorithm • Incorrect width • Incorrect scan area Program syntax error: <ul style="list-style-type: none"> • Command sequence error • Incorrect length error • Incorrect command | N/A |

Glossary of Terms and Abbreviations

This glossary defines terms and abbreviations used in this manual. It includes terms and definitions from the *IBM Dictionary of Computing* (New York; McGraw-Hill, Inc., 1994).

- The symbol (A) identifies definitions from the *American National Standard Dictionary for Information Systems*, ANSI X3.172-1990, copyright 1990 by the American National Standards Institute (ANSI). Copies can be purchased from the American National Standards Institute, 1430 Broadway, New York, New York 10018.
- The symbol (E) identifies definitions from the *ANSI/EIA Standard - 440A: Fiber Optic Terminology*, copyright 1989 by the Electronics Industries Association (EIA). Copies can be purchased from the Electronic Industries Association, 2001 Pennsylvania Avenue N.W., Washington, DC 20006.
- The symbol (I) identifies definitions from the *Information Technology Vocabulary*, developed by Subcommittee 1, Joint Technical Committee 1, of the International Organization for Standardization and the International Electrotechnical Commission (ISO/IEC JTC1/SC1).
- The symbol (T) identifies definitions from draft international standards, committee drafts, and working papers being developed by ISO/IEC JTC1/SC1.

The following cross-references are used in this glossary:

Contrast with. This refers to a term that has an opposed or substantively different meaning.

See. This refers the reader to multiple-word terms in which this term appears.

See also. This refers the reader to terms that have a related, but not synonymous, meaning.

Synonym for. This indicates that the term has the same meaning as a preferred term, which is defined in the glossary.

A

abort. To terminate, in a controlled manner, a processing activity in a computer system because it is impossible or undesirable for the activity to proceed. (T)

access method. A technique for moving data between main storage and input/output devices.

access priority. The maximum priority that a token can have for the adapter to use it for transmission.

access unit. A unit that allows multiple attaching devices access to a token-ring network at a central point such as a wiring closet or in an open work area.

ACK. Acknowledge.

acknowledgment. The transmission, by a receiver, of acknowledge characters as an affirmative response to a sender.

active. (1) Able to communicate on the network. A token-ring network adapter is active if it is able to transmit and receive on the network. (2) Operational. (3) Pertaining to a node or device that is connected or is available for connection to another node or device. (4) Currently transmitting or receiving.

ACTLU. Activate Logical Unit.

ACTPU. Activate Physical Unit.

adapter. (1) A general term for a device that provides some transitional function between two or more devices. (2) In a local area network, within a communicating device, a circuit card with its associated software that enables the device to communicate over the network.

adapter address. Twelve hexadecimal digits that identify a LAN adapter.

address. (1) In data communication, the IEEE-assigned unique code or the unique locally administered code assigned to each device or workstation connected to a network. (2) A character, group of characters, or a value that identifies a register, a particular part of storage, a data source, or a data sink. The value is represented by one or more characters. (T) (3) To refer to a device or an item of data by its address. (A) (4) The location in the storage of a computer where data is stored. (5) In word processing, the location, identified by the address code, of a specific section of the recording medium or storage. (T)

address space. A set of addresses used to uniquely identify network accessible units, sessions, adjacent link stations, and links in a node for each network in which the node participates. A type 2.1 node has one address space for intranode routing and one for each transmission group on which it can send message units.

address space manager (ASM). A component in a type 2.1 node that assigns and frees session addresses.

advanced peer-to-peer networking (APPN). An extension to SNA featuring (a) greater distributed network control that avoids critical hierarchical dependencies, thereby isolating the effects of single points of failure; (b) dynamic exchange of network topology information to foster ease of connection and reconfiguration, adaptive route selection, and simplified network definition; and (c) automated resource registration and directory lookup. APPN extends the LU 6.2 peer orientation for end-user services to network control; APPN also uses LU 6.2 protocols on its own control point sessions that provide the network control.

advanced peer-to-peer networking (APPN) end node. A type 2.1 end node that provides full SNA end-user services and supports sessions between its local control point (CP) and the CP in an adjacent network node, to dynamically register its resources with the adjacent CP (its network node server), to send and receive directory search requests, and to obtain management services; it can also attach to a subarea network as a peripheral node.

Advanced peer-to-peer networking (APPN) network. A type 2.1 network having at least one APPN node.

Advanced peer-to-peer networking (APPN) network node. A type 2.1 node that besides offering full SNA end-user services, provides intermediate routing services within a T2.1 network, and network services to its local LUs and attached T2.1 end nodes in its domain; it can also attach to a subarea network as a peripheral node.

AEA. Asynchronous Emulation Adapter.

AEA port. A communication connector on the Asynchronous Emulation Adapter (AEA).

AEA port set. (1) One or more 3174 ports that support individual AEA station sets; they must have the same port (connection) type and modem type, but different station types. (2) One or more 3174 station sets that have different station types, but the same port type, modem type, and number of default destinations.

AEA station. A 3270 or ASCII display station, printer, or host that communicates through the Asynchronous Emulation Adapter.

AID. Attention identifier.

alert. (1) For IBM LAN management products, a notification indicating a possible security violation, a persistent error condition, or an interruption or potential interruption in the flow of data around the network. See also *network management vector transport*. (2) In SNA, a record sent to a system problem management focal point to communicate the existence of an alert condition. (3) In the NetView program, a high-priority

event that warrants immediate attention. This data base record is generated for certain event types that are defined by user-constructed filters.

alias. An alternate name by which a named entity can be known on a network. See also *name*.

Alt. Alternate.

alternate 1 initial microcode load (Alt 1 IML). The initiating procedure for running specific adapter tests, starting customizing, or doing a normal IML.

alternate 2 initial microcode load (Alt 2 IML). The initiating procedure for running a general 3174 controller test.

American National Standard Code for Information Interchange (ASCII). The standard code, using a coded character set consisting of 7-bit coded characters (8 bits including parity check), used for information interchange among data processing systems, data communication systems, and associated equipment. The ASCII set consists of control characters and graphics characters. (A)

A/N. Alphanumeric.

analog. Pertaining to data consisting of continuously variable physical quantities. (A) Contrast with *digital*.

APL. A Programming Language.

application. (1) The use to which an information processing system is put, for example, a payroll application, an airline reservation application, or a network application. (2) A collection of software components used to perform specific types of work on a computer.

application program. (1) A program written for or by a user that applies to the user's work. Some application programs receive support and services from a special kind of application program called a network application program. (2) A program used to connect and communicate with stations in a network, enabling users to perform application-oriented activities.

APPN. Advanced peer-to-peer networking.

architecture. A logical structure that encompasses operating principles including services, functions, and protocols. See *computer architecture*, *network architecture*, *Systems Application Architecture (SAA)*, *Systems Network Architecture (SNA)*.

ASCII. American National Standard Code for Information Interchange.

ASCII emulation. The ability of a 3270 display station or printer to communicate with an ASCII host using the

DEC VT100, DEC VT220, Data General D210, or IBM 3101 data stream.

ASM. Address space manager.

asynchronous. (1) Pertaining to two or more processes that do not depend upon the occurrence of a specific event such as a common timing signal. (T)
(2) In Fiber Distributed Data Interface (FDDI) rings, a type of data traffic that does not need bounded access delay to the medium and guaranteed throughput.

Asynchronous Emulation Adapter (AEA). In the 3174, an adapter that enables an ASCII terminal to communicate with a 3270 host using the 3270 data stream, an ASCII terminal to communicate with an ASCII host through the 3174, and a 3270 terminal to communicate with an ASCII host using data streams, such as the DEC VT100, DEC VT220, Data General D210, or IBM 3101 data streams.

attach. To make a device part of a network logically.

attaching device. Any device that is physically connected to a network and can communicate over the network.

attention (ATTN). An occurrence external to an operation that could cause an interruption of the operation.

attention identifier (AID). (1) A code in the inbound 3270 data stream that identifies the source or type of data that follows. (2) A character in a data stream indicating that the user has pressed a key, such as ENTER, that requests an action by the system.

attribute. (1) A characteristic. (2) A terminal display language or transformation definition language (TDL) keyword that specifies a particular quality for the TDL object with which it is associated.

attribute select keyboard. A keyboard that enables the operator, when permitted by the program, to change the character attributes of the keyed-in character.

attribute type. In the 3270 data stream, a code that identifies the properties from which an associated set of attribute values can be selected. See also *extended color*.

attribute value. In the 3270 data stream, a code immediately following the attribute type that specifies a particular property from the set defined by the attribute type.

autobaud. In the 3174 AEA feature, the process of determining the line speed and parity settings of a connecting display station from a specific sequence of

characters (CR . CR) entered from the keyboard. ASCII hosts may also support automatic speed and parity detection, but the character sequence they require may differ.

auto-removal. The removal of a device from data-passing activity without human intervention. This action is accomplished by the adapter in the device, and can be initiated by a network management program.

B

backup diskette. A diskette that contains information copied from another diskette. It is used in case the original information is unintentionally altered or destroyed.

basic information unit (BIU). The unit of data and control information that is passed between half-sessions. It consists of a request/response header followed by a request/response unit.

basic transmission unit (BTU). The unit of data and control information passed between path control components. A BTU can consist of one or more path information units (PIUs).

beacon. (1) A frame sent by an adapter on a ring network indicating a serious ring problem, such as a broken cable. It contains the addresses of the beaconing station and its nearest active upstream neighbor (NAUN). (2) To send beacon frames continuously. An adapter is *beaconing* if it is sending such a frame.

beaconing. An error-indicating function of token-ring adapters that assists in locating a problem causing a hard error on a token-ring network.

BECN. Backward explicit congestion notification.

bidder session. The half-session defined at session activation as having to request and receive permission from the other half-session to begin a bracket. Synonym for *contention-loser session*. Contrast with *first-speaker session*.

binary. (1) Pertaining to a system of numbers to the base two; the binary digits are 0 and 1. (A)
(2) Pertaining to a selection, choice, or condition that has two possible different values or states. (I) (A)

binary synchronous communication (BSC). A form of telecommunication line control that uses a standard set of transmission control characters and control character sequences, for binary synchronous transmission of binary-coded data between stations. Contrast with *synchronous data link control (SDLC)*.

bind command. A command used to start a session and to define the characteristics of that session. Contrast with *unbind command*.

bind pacing. A technique by which the address space manager (ASM) at one node controls the rate of transmission of Bind requests of a sending ASM at another node. Bind pacing can be used to prevent Bind standoff, in which each of two nodes has reserved most of its resources for sessions it is attempting to initiate through the other and thus rejects any Binds received from the other.

BIS. Bracket initiation stopped.

bit. Either of the binary digits: a 0 or 1.

bit error rate (BER). In fiber optics, a comparison of the number of bits received incorrectly to the total number of bits transmitted. The BER is directly related to receiver sensitivity, transmitter power output, and total link attenuation.

BIU. Basic information unit.

bootstrap. (1) A sequence of instructions whose execution causes additional instructions to be loaded and executed until the complete computer program is in storage. (T) (2) A technique or device designed to bring itself into a desired state by means of its own action, for example, a machine routine whose first few instructions are sufficient to bring the rest of itself into the computer from an input device. (A)

bracket. One or more chains of request units and their responses that are exchanged between two session partners and that represent a transaction between them. A bracket must be completed before another bracket can be started. Examples of brackets are data base inquiries/replies, update transactions, and remote job entry output sequences to workstations.

bridge. (1) An attaching device that connects two LAN segments to allow the transfer of information from one LAN segment to the other. A bridge may connect the LAN segments directly by network adapters and software in a single device, or may connect network adapters in two separate devices through software and use of a telecommunications link between the two adapters. (2) A functional unit that connects two LANs that use the same logical link control (LLC) procedures but may use the same or different medium access control (MAC) procedures. (T) Contrast with *gateway* and *router*.

broadcast. Simultaneous transmission of data to more than one destination.

broadcast search. The propagation of a search request, when the location of a resource is unknown to

the requester, to all network nodes in an APPN network. Contrast with *directed Locate search*.

BSC. Binary synchronous communication.

Btu. British thermal unit.

BTU. Basic transmission unit.

buffer. (1) A portion of storage used to hold input or output data temporarily. (2) A routine or storage used to compensate for a difference in data rate or time of occurrence of events, when transferring data from one device to another. (A)

buffer address. The address of a location in the buffer.

burst. In data communication, a sequence of signals counted as one unit in accordance with some specific criterion or measure.

bus. (1) In a processor, a physical facility on which data is transferred to all destinations, but from which only addressed destinations may read in accordance with appropriate conventions. (I) (2) A network configuration in which nodes are interconnected through a bidirectional transmission medium. (3) One or more conductors used for transmitting signals or power. (A)

bypass. To eliminate an attaching device or an access unit from a ring network by allowing the data to flow in a path around it.

byte. (1) A string that consists of a number of bits, treated as a unit, and representing a character. (T) (2) A binary character operated upon as a unit and usually shorter than a computer word. (A) (3) A string that consists of a particular number of bits, usually 8, that is treated as a unit, and that represents a character. (4) A group of 8 adjacent binary digits that represent one extended binary-coded decimal interchange code (EBCDIC) character. (5) See *n-bit byte*.

C

cable loss (optical). The loss in an optical cable equals the attenuation coefficient for the cabled fiber times the cable length.

cable segment. A section of cable between components or devices on a network. A segment may consist of a single patch cable, multiple patch cables connected together, or a combination of building cable and patch cables connected together. See *LAN segment*, *ring segment*.

cache. An optional part of the directory data base, in network nodes where frequently used directory information may be stored to speed directory searches.

canonical name. In CSCM, a name used to identify 3174 data objects. This name is created according to Change Management Architecture rules.

card. In the 3174, a unit of electronic circuitry contained in a plastic casing (or cassette) and providing the controller with a specialized function, for example, a Terminal Adapter or an Encrypt/Decrypt Adapter.

carrier. A wave or pulse train that may be varied by a signal bearing information to be transmitted over a communication system.

carrier sense. In a local area network, an ongoing activity of a data station to detect whether another station is transmitting. (T)

CCA. Concurrent Communication Adapter.

CCITT. International Telegraph and Telephone Consultative Committee.

CCW. Channel command word.

CECP. Country extended code page.

CECP character set. A collection of symbols in Character Set 697 required for CECP languages.

Central site change management (CSCM). A function of the 3174 Establishment Controller microcode that tracks the microcode for each controller in a network and, in conjunction with NetView DM, electronically distributes and retrieves microcode changes for each controller.

Central site control facility (CSCF). A function of the NetView program that allows a network operator to execute the test facilities of the 3174 Establishment Controller remotely from the NetView console.

Central Site Controller. The controller that contains the central site library for all of the controllers in a network.

central site customizing. The process of tailoring the 3174 Licensed Internal Code for each controller in a network, at the central site.

central site library. One or more Library disks that contain customizing data and label information for the controllers in a network.

chain. (1) A group of logically linked user data records processed by LU 6.2. (2) A group of request units delimited by begin-chain and end-chain. Responses are always single-unit chains.

change direction (CD). A data flow control function in which the sending logical unit stops sending requests, signals the receiving logical unit using the change direction indicator (in the request/response header of the last request), and prepares to receive requests.

change-screen key. In MLT, a key or sequence of keys on a display station keyboard used to change sessions, one at a time, with up to five different hosts.

channel. (1) A functional unit, controlled by a host computer, that handles the transfer of data between processor storage and local peripheral equipment. (2) A path along which signals can be sent. (3) The portion of a storage medium that is accessible to a given reading or writing station. (4) In broadband transmission, a designation of a frequency band 6 MHz wide.

channel-attached. Pertaining to attachment of devices directly by data channels (I/O channels) to a computer. Synonym for *local-attached*. Contrast with *link-attached*.

channel command. An instruction that directs a data channel, control unit, or device to perform an operation or set of operations.

character set. (1) A defined collection of characters. (2) A group of characters used for a specific reason, for example, the set of characters a printer can print. (3) The collection of graphic characters required to support a specific language.

CIR. Committed Information Rate.

CID. Connection identifier.

circuit. (1) A logic device. (2) One or more conductors through which an electric current can flow.

Class of service (COS). A designation of the transport network characteristics, such as route security, transmission priority, and bandwidth, needed for a particular session. The class of service is derived from a *mode name* specified in the Bind by the initiator of a session.

class-of-service (COS) database. A database maintained independently by each network node, and optionally by APPN end nodes. It contains one entry per class-of-service name; each database entry contains:

- A definition of the acceptable values for transmission group (TG) and node characteristics for routes described by that class-of-service name and the weight function to be used to compute the weights of nodes and TGs that meet the acceptable values

- The transmission priority to be used for traffic that flows on routes described by that class-of-service name.

Clear to Send (CTS) flow control. A procedure for a communicating device to signal its readiness to receive data by raising the CTS lead on an EIA 232D interface.

cncl. Cancel.

coax. Coaxial (cable).

coaxial (coax) cable. A cable consisting of one conductor, usually a small copper tube or wire, within and insulated from another conductor of a larger diameter, usually copper tubing or copper braid.

code page. An assignment of graphic characters and control function meanings to all code points.

code point. A 1-byte code representing one of 256 potential characters.

collision. (1) An unwanted condition that results from concurrent transmissions on a channel. (T) (2) When a frame from a transmitting adapter encounters any other signal in its path (frame, noise, or another type of signal), the adapter stops transmitting and a collision is registered.

COMM. Communication.

command. (1) A request for performance of an operation or execution of a program. (2) A character string from a source external to a system that represents a request for system action.

command retry. A channel and control unit procedure that causes a command to be retried without requiring an I/O interruption.

communication adapter. (1) A circuit card with associated software that enables a processor, controller, or other device to be connected to a network. (2) See *EIA communication adapter, V.35 communication adapter*, and *X.21 communication adapter*.

communication link. Physical (hardware) link.

completion code. The final return code provided by a program or adapter, as a result of an issued command, to indicate that an operation has ended.

component. (1) Hardware or software that is part of a functional unit. (2) A functional part of an operating system, for example, the scheduler or supervisor. (3) See *terminal component* and *solid state component*.

computer architecture. The organizational structure of a computer system, including hardware and software. (A)

Concurrent Communication Adapter (CCA). In the 3174, a communication adapter that, along with the necessary microcode, provides terminals attached to the 3174 with the ability to concurrently access an additional 3270 host.

configuration. (1) The arrangement of a computer system or network as defined by the nature, number, and chief characteristics of its functional units. More specifically, the term may refer to a hardware configuration or a software configuration. (I) (A) (2) The devices and programs that make up a system, subsystem, or network. (3) See also *system configuration*.

configuration file. The collective set of definitions that describes a configuration.

connect. In a LAN, to physically join a cable from a station to an access unit or network connection point. Contrast with *attach*.

Connection Menu. A menu on the screen of a display station attached to the 3174, from which a user can select an available host.

connector. A means of establishing electrical flow.

contention. (1) In a LAN, a situation in which two or more data stations are allowed by the protocol to start transmitting concurrently and thus risk collision. (T) (2) In a session, a situation in which both NAUs attempt to initiate the same action at the same time, such as when both attempt to send data in a half-duplex protocol (half-duplex contention). At session initiation, one NAU is defined to be the contention winner; its action will take precedence when contention occurs. The contention loser must get explicit or implicit permission from the contention winner to begin its action.

contention-loser session. To a NAU, a session for which it was defined during session initiation to be the contention loser.

contention-winner session. To a NAU, a session for which it was defined during session initiation to be the contention winner.

Control (CTL) disk. A customized diskette or fixed disk containing the microcode that describes a particular controller's attached terminals, and its method of attachment to the host.

Control (CTL) diskette. A customized diskette containing the microcode that describes a particular

controller's attached terminals, and its method of attachment to the host.

control block. (1) A storage area used by a computer program to hold control information. (1) (2) In the IBM Token-Ring Network, a specifically formatted block of information provided from the application program to the Adapter Support Interface to request an operation.

control character. (1) A character whose occurrence in a particular context specifies a control function. (2) A character used to specify that a control unit is to perform a particular operation.

controller. A unit that controls input/output operations for one or more devices.

control point (CP). (1) A component of a node that manages resources of that node and optionally provides services to other nodes in the network. Examples are a system services control point (SSCP) in a type 5 node, a physical unit control point (PUCP) in a type 4 node, a network node control point (NNCP) in a type 2.1 (T2.1) network node, and an end node control point (ENCP) in a T 2.1 end node. An SSCP and an NNCP can provide services to other nodes. (2) A component of a T 2.1 node that manages the resources of that node. If the T2.1 node is an APPN node, the CP is capable of engaging in CP-CP sessions with other APPN nodes. If the T2.1 node is a network node, the CP also provides services to adjacent end nodes in the T2.1 network.

control unit. A general term for any device that provides common functions for other devices or mechanisms. Synonym for controller.

control unit terminal (CUT). A terminal that relies on the 3174 to interpret the data stream. Examples are the 3178, 3179, 3278 Model 2, and 3279 Model S2A.

control unit terminal (CUT) mode. A host-interactive mode that enables an IBM 3270 Personal Computer customized in this mode to run only one session emulating a 3178, 3179, 3278 Model 2, or 3279 Model S2A.

control vector. One of a general class of RU substructures that has variable length, is carried within some enclosing structure, and has a one-byte key used as an identifier.

conversation. A logical connection between two transaction programs using an LU 6.2 session. Conversations are delimited by brackets to gain exclusive use of a session.

conversion. (1) In programming languages, the transformation between values that represent the same data item but belong to different data types. Information may be lost as a result of conversion because accuracy of data representation varies among different data

types. (2) The process of changing from one method of data processing to another or from one data processing system to another. (3) The process of changing from one form of representation to another, for example, to change from decimal representation to binary representation.

copy operation. An operation that copies the contents of the buffer from one terminal to another terminal attached to the same controller.

COS. Class of service.

country extended code page (CECP). A function of the 3174 microcode that provides a code page containing additional code points beyond those available with Table 5A code pages. CECP is supported by a universal character set, Character Set 697, which contains 190 characters.

CP capabilities. The level of network services provided by the control point (CP) in an APPN end node or network node. CP capabilities information is exchanged during the activation of CP-CP sessions between two nodes.

CP-CP sessions. The parallel sessions between two control points, using LU 6.2 protocols and a mode name of CPSVCMG, on which network services requests and replies are exchanged. Each CP of a given pair has one contention-winner session and one contention-loser session with the other.

CP name. A network-qualified name of a control point (CP), consisting of a network ID qualifier identifying the network (or name space) to which the CP's node belongs, and a unique name within the scope of that network ID identifying the CP. Each T2.1 node has one CP name assigned to it at system-definition time. Within an APPN network, all network nodes share a common network ID. End nodes may have distinct network IDs; this allows them to connect into separate APPN networks and to manage their own name spaces independently of the rest of the network.

cps. Characters per second.

CPS. Call Progress Signal.

CP-SVR. Control point-to-server pipe

CP-to-server (CP-SVR) pipe. The two LU 6.2 sessions between a DLUS node and a DLUR node used to carry SSCP-PU and SSCP-LU session flows.

control point management services unit (CP-MSU). The message unit that contains management services data and flows between management services function sets. This message unit is in general data stream (GDS) format. For more information on GDS format refer to *Systems Network Architecture Formats*. See

also *network management vector transport and management services unit*.

CRC. Cyclic redundancy check.

create. In 3174 central site customizing, to create a library member for a network controller, and store the customizing data for that library member on a Library diskette.

crosstalk. The disturbance caused in a circuit by an unwanted transfer of energy from another circuit. (T)

CRS. Configuration reporting server.

CRV. Cryptography Verification.

CSCF. Central Site Control Facility.

CSCM. Central Site Change Management.

CSU. Customer setup.

CTL. Control.

CTS. Clear to Send.

CUG. Closed user group.

cursor. (1) A movable, visible mark used to indicate the position at which the next operation will occur on a display surface. (2) A unique symbol that identifies a character position in a screen display, usually the character position at which the next character to be entered from the keyboard will be displayed.

customer replaceable unit (CRU). An assembly or part that a customer can replace in its entirety when any of its components fail. Contrast with *field replaceable unit (FRU)*.

customization. Procedures that tailor the controller microcode to fit the various types of display stations and printers and the method of host attachment that a particular controller will handle.

CUT. Control unit terminal.

cyclic redundancy check. A system of error checking performed at both the sending station and the receiving station after a block check character sequence has been accumulated.

cyclic redundancy check (CRC). Synonym for *frame check sequence (FCS)*.

D

DAF¹. Destination address field prime.

data. (1) A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by human or automatic means. (I) (A) (2) Any representations such as characters or analog quantities to which meaning is or might be assigned. (A)

data base. A set of data, part or the whole of another set of data, that consists of at least one file, and that is sufficient for a given purpose or for a given data processing system. (I) (A)

data chaining. In synchronous data link control (SDLC) data transmission, the chaining together of scattered segments of storage data to assemble a complete SDLC frame.

data circuit. (1) A pair of associated transmit and receive channels that provide a means of two-way data communication. (I) (2) In SNA, see also *link connection*.

Notes:

1. Between data-switching exchanges, the data circuit may include data circuit-terminating equipment (DCE), depending on the type of interface used at the data-switching exchange.
2. Between a data station and a data-switching exchange or data concentrator, the data circuit includes the data-terminating equipment at the data station end. It may also include equipment similar to a DCE at the data-switching exchange or data-concentrator location.

data circuit-terminating equipment (DCE). In a data station, the equipment that provides the signal conversion and coding between the data terminal equipment (DTE) and the line. (I)

data communication. (1) Transfer of information between functional units by means of data transmission according to a protocol. (T) (2) The transmission, reception, and validation of data. (A)

Data Entry keyboard. A keyboard layout designed for data entry applications.

data flow control (DFC). In SNA, a request/response unit category used for requests and responses exchanged between the data flow control layer in one-half session and the data flow control layer in the session partner.

data flow control (DFC) layer. The layer within a half-session that controls whether the half-session can send, receive, or concurrently send and receive, request

units (RUs); groups related RUs into RU chains; delimits transactions via the bracket protocol; controls the interlocking of requests and responses in accordance with control modes specified at session activation; generates sequence numbers; and correlates requests and responses.

data frame. See *frame*.

data link. (1) Any physical link, such as a wire or a telephone circuit, that connects one or more remote terminals to a communication control unit, or connects one communication control unit with another. (2) The assembly of parts of two data terminal equipment (DTE) devices that are controlled by a link protocol, and the interconnecting data circuit, that enable data to be transferred from a data source to a data sink. (l) (3) In SNA, see also *link*.

Note: A telecommunication line is only the physical medium of transmission. A data link includes the physical medium of transmission, the protocol, and associated devices and programs; it is both physical and logical.

data link connection identifier (DLCI). A numeric identifier that is used in a frame-relay network to identify the next segment of a permanent virtual circuit over which a frame is to be relayed.

data link control (DLC). The process responsible for performing communication over a link using a specific data link control protocol, such as SDLC or token ring.

data link control (DLC) layer. (1) In SNA or Open Systems Interconnection (OSI), the layer that schedules data transfer over a link between two nodes and performs error control for the link. Examples of DLC are synchronous data link control (SDLC) for serial-by-bit connection and DLC for the System/370 channel. (2) See *Systems Network Architecture (SNA)*. (3) See also *logical link control (LLC) sublayer* and *medium access control (MAC) sublayer*.

Note: The DLC layer is usually independent of the physical transport mechanism and ensures the integrity of data that reach the higher layers.

data link control (DLC) protocol. The LAN protocol used to attach a device to and remove a device from the network. The DLC protocol is also used to send information onto and receive information from the network, exchange data, and control information with network higher level protocols and interfaces.

data network. An arrangement of data circuits and switching facilities for establishing connections between data terminal equipment. (l)

data object. In the 3174, a data object is either 3174 microcode or 3174 customization data. In NetView DM, data objects are called resources.

data packet. (1) At the interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE), a data unit used to transmit user data over a virtual circuit. (2) In an Open Systems Interconnection (OSI) network, a data unit passed between transport layer entities.

data rate. See *data transfer rate*, *line data rate*.

data stream. (1) All data transmitted through a data channel in a single read or write operation. (2) A continuous stream of data elements being transmitted, or intended for transmission, in character or binary-digit form, using a defined format. See also *data stream format*.

data stream format. In SNA, the format of the data elements (end-user data) in the request unit (RU). See also *3270 data stream* and *SNA character string (SCS)*.

data streaming. A protocol for transmitting data on a channel. In this protocol, the sender maintains the channel in a transmit state for an extended length of time.

data terminal equipment (DTE). (1) That part of a data station that serves as a data source, data receiver, or both. (l) (A) (2) Equipment that sends or receives data, or both.

Data Terminal Ready (DTR) flow control. A procedure for a communicating device to signal its readiness to receive data by raising the DTR lead on an EIA 232D interface.

data transfer. (1) The result of the transmission of data signals from any data source to a data receiver. (2) The movement, or copying, of data from one location and the storage of the data at another location.

data transfer rate. The average number of bits, characters, or blocks per unit of time passing between equipment in a data-transmission session. (l) The rate is expressed in bits, characters, or blocks per second, minute, or hour.

DCE. Data circuit-terminating equipment.

deactivation. The process of taking any element out of service, rendering it inoperative, or placing it in a state in which it cannot perform the functions for which it was designed.

dec. Decimal.

deconfigure. In the 3174, the ability of the controller to disable functions or features to a partially operating or non-operating state, when the configuration of the control disk requires more 3174 storage than is available.

decrypt. To convert encrypted data into clear data. Contrast with *encrypt*.

default. Pertaining to an attribute, value, or option that is assumed when none is explicitly specified.

default destination. A destination for display stations and printers that is defined in AEA customization.

delimiter. (1) A character used to indicate the beginning or end of a character string. (T) (2) A bit pattern that defines the beginning or end of a frame or token on a LAN.

dependent logical unit requester (DLUR). An optional component in an APPN end node or network node that supports dependent secondary LUs local to its node or in adjacent type 2.0 or 2.1 nodes by obtaining SSCP services for the LUs over an APPN network from the appropriate dependent LU server (DLUS). The support is obtained using SSCP-PU and SSCP-LU sessions whose flows are encapsulated on LU 6.2 session flows between the DLUR node and the DLUS node. See also *CP-to-server (CP-SVR) pipe*.

dependent logical unit requester (DLUR) node. An APPN end node or network node that includes the DLUR component.

dependent logical unit server (DLUS). An optional component in an APPN network node that provides SSCP services over an APPN network to remote secondary dependent LUs by using SSCP-PU and SSCP-LU sessions whose flows are encapsulated on LU 6.2 session flows between the DLUS node and the appropriate dependent LU requester (DLUR) nodes. See also *CP-to-server (CP-SVR) pipe*.

dependent logical unit server (DLUS) node. An APPN network node that includes the DLUS component.

DES. Data Encryption Standard.

destination. Any point or location, such as a node, station, or particular terminal, to which information is to be sent.

destination address. A field in the medium access control (MAC) frame that identifies the physical location to which information is to be sent. Contrast with *source address*.

destination service access point (DSAP). The service access point for which a logical link control protocol data unit (LPDU) is intended.

dev. Device.

Dev Cncl. Device Cancel.

device. (1) A mechanical, electrical, or electronic contrivance with a specific purpose. (2) An input/output unit such as a terminal, display, or printer. See also *attaching device*.

DFC. Data flow control.

DFT. (1) Distributed function terminal. (2) Diagnostic function test.

diagnostics. Modules or tests used by computer users and service personnel to diagnose hardware problems.

digital. (1) Pertaining to data in the form of digits. (A) Contrast with *analog*. (2) Pertaining to data consisting of numerical values or discrete units.

directed Locate search. A search request sent to a specific destination node known to contain a resource, such as a logical unit, to verify the continued presence of the resource at the destination node and to obtain the node's connectivity information for route calculation. Contrast with *broadcast search*.

directory. A database in an APPN node that lists names of resources (in particular, logical units) and records the CP name of the node where each resource is located.

directory services (DS). A component of an APPN node that maintains a directory and manages searches of that directory.

disabled. (1) Pertaining to a state of a processing unit that prevents the occurrence of certain types of interruptions. (2) Pertaining to the state in which a transmission control unit or audio response unit cannot accept incoming calls on a line.

DISC. Disconnect.

disconnect (DISC) character. In data communication, the part of the binary synchronous communication (BSC) transmission control sequence for ending the connection on a switched line.

disconnected mode. (1) In synchronous data link control (SDLC), a response from a secondary station indicating that it is disconnected and wants to be online. (2) Synonym for *disconnected phase*.

disconnected phase. A phase entered by data circuit-terminating equipment (DCE) when it detects error conditions, recovers from a temporary internal malfunction, or receives a disconnect (DISC) command from data terminal equipment (DTE). In the disconnected phase, the DCE may initiate link setup but can transmit only disconnected-mode responses to received frames. Synonymous with *disconnected mode* (2).

disk. A direct-access data storage medium, which may be either flexible (diskette) or hard (fixed disk).

diskette. A flexible magnetic disk enclosed in a protective container.

diskette drive. The mechanism used to seek, read, and write data on diskettes.

disk image. An electronic representation of a disk or diskette containing files and programs. In some applications, the image may be loaded into computer memory and is used by the computer as though it were a physical disk or diskette.

Disk Operating System (DOS). An operating system for computer systems that use disks and diskettes for auxiliary storage of programs and data.

display field. (1) An area in the display buffer that contains a set of characters that can be manipulated or operated upon as a unit. (2) A group of consecutive characters (in the buffer) that starts with an attribute character (defining the characteristics of the field) and contains one or more alphanumeric characters. The field continues to, but does not include, the next attribute character.

distributed function terminal (DFT). A programmable terminal that can perform operations previously performed by the control unit. These terminals can interpret the 3270 data stream themselves. Examples are the IBM 3270 Personal Computer and the 3290 Information Panel.

distributed function terminal (DFT) mode. A host-interactive mode that enables an IBM 3270 Information Display System customized in this mode to run as many as four host sessions. The sessions can emulate a 3178, 3179, 3278 Model 2, or 3279 Model S2A.

distribution panel. A wiring board that provides a patch panel function and mounts in a rack. See also *patch panel*.

DLC. (1) Data link control. (2) Data length check.

DLCI. Data link connection identifier.

DLE. Data link escape.

DLUR. Dependent logical unit requester.

DLUS. Dependent logical unit server.

DOS. Disk Operating System.

downstream. (1) In the direction of data flow or toward the destination of transmission. (2) From the

processor toward an attached unit or end user. (3) Contrast with *upstream*.

downstream. (1) On an IBM Token-Ring Network, the direction of data flow. (2) In the direction of data flow or toward the destination of transmission. Contrast with *upstream*.

downstream load (DSL). The capability of a distributed function terminal to receive its control program from the control unit to which it is attached. A disk containing the terminal's control program is loaded into the control unit.

downstream physical unit (DSPU). A controller or a workstation downstream from a gateway that is attached to a host.

DPPX. Distributed Processing Programming Executive.

drop. A cable that leads from a faceplate to the distribution panel in a wiring closet. When the IBM Cabling System is used with the IBM Token-Ring Network, a drop may form part of a lobe. See also *lobe*.

DSC. Data stream compatibility.

DSE. Data stream emulation.

DSL. (1) Downstream load. (2) Data set label.

DSPU. Downstream physical unit.

DSR. Data set ready.

DTE. Data terminal equipment.

DTR. Data terminal ready.

dump. (1) To write at a particular instant the contents of storage, or part of storage, onto another data medium for the purpose of safeguarding or debugging the data. (T) (2) Data that has been dumped. (I) (A)

duplex. Pertaining to communication in which data can be sent and received at the same time. Synonymous with *full duplex*. Contrast with *half-duplex*.

E

EAB. Extended Attribute Buffer.

Early Token Release (ETR). In token-ring and Fiber Distributed Data Interface (FDDI) networks, a function that allows a transmitting adapter to release a new token as soon as it has completed frame transmission, whether or not the frame header has returned to that adapter.

EAU. Erase All Unprotected.

EBCDIC. Extended Binary-Coded Decimal Interchange Code.

ECSA. Extended Character Set Adapter.

EIA. Electronic Industries Association.

EIA communication adapter. A communication adapter conforming to EIA standards that can combine and send information on two lines at speeds up to 19.2 kbps.

EIA 232D. An electrical interface defined by the Electronics Industries Association for establishing connections and controlling data flow between data terminal equipment and data communication equipment. The interface has been adapted to allow communication between DTEs.

electromagnetic interference (EMI). A disturbance in the transmission of data on a network resulting from the magnetism created by a current of electricity.

element. (1) In a set, an object, entity, or concept having the properties that define a set. (I) (A) (2) A parameter value in a list of parameter values.

ELP. Establish Logical Paths.

EMI. Electromagnetic interference.

emulation. (1) The imitation of all or part of one computer system by another, primarily by hardware, so that the imitating system accepts the same data, executes the same programs, and achieves the same results as the imitated computer system. (I) (A) (2) The use of programming techniques and special machine features to permit a computing system to execute programs written for another system. (3) Imitation; for example, imitation of a computer or device. (4) See *terminal emulation*. (5) Contrast with *simulation*.

enabled. (1) On a LAN, pertaining to an adapter or device that is active, operational, and able to receive frames from the network. (2) Pertaining to a state of a processing unit that allows the occurrence of certain types of interruptions. (3) Pertaining to the state in which a transmission control unit or an audio response unit can accept incoming calls on a line.

ENCP. End node control point.

encrypt. To scramble data or convert it, before transmission, to a secret code that masks the meaning of the data to any unauthorized recipient. Contrast with *decrypt*.

end node. A T2.1 node that supports sessions between its own control point (CP) and the CP in an

adjacent network node, to dynamically register its resources with the adjacent CP, to send and receive directory search requests, and to obtain network services and management services.

ENQ. Enquiry.

enterprise. A business or organization that consists of two or more sites separated by a public right-of-way or a geographical distance. Contrast with *establishment*.

Enterprise Systems Connection Adapter (ESCON Adapter). In the 3174, this adapter allows the controller to communicate with an IBM S/390* host through an Enterprise Systems Connection Channel using optical fiber cable.

EOF. End of field.

EOT. End-of-transmission character.

Erase All Unprotected (EAU) command. A 3270 data stream command that erases all unprotected fields and inserts nulls.

Erase Unprotected to Address (EUA) order. A data stream order that erases all unprotected character positions (inserts nulls) from the current buffer address up to, but not including, the specified stop address.

ERI. Exception response indicator.

ERP. Error recovery procedures.

ESC. Escape.

ESCON. Enterprise Systems Connection.

establishment. A user's premises that do not extend across public rights of way (for example, a single office building, warehouse, or campus). Contrast with *enterprise*.

Ethernet network. A 10-megabit baseband LAN that uses either the Ethernet Version 2 or IEEE 802.3 protocol in which messages are broadcast on a coaxial cable using a carrier sense multiple access/collision detection (CSMA/CD) transmission method.

EUA. Erase Unprotected to Address.

event. (1) An occurrence or happening. (2) An occurrence of significance to a task; for example the completion of an asynchronous operation, such as an input/output operation.

exception. An abnormal condition such as an I/O error encountered in processing a data set or a file. See also *overflow exception* and *underflow exception*.

Exchange Identification (XID). A specific type of basic link unit that is used to convey node and link characteristics between adjacent nodes. XIDs are exchanged between link stations before and during link activation to establish and negotiate link and node characteristics, and after link activation to communicate changes in these characteristics.

execute. To perform the actions specified by a program or a portion of a program. (T)

execution. The process of carrying out an instruction or instructions of a computer program by a computer. (I) (A)

exit. To execute an instruction or statement within a portion of a program in order to terminate the execution of that portion. (T)

Note: Such portions of programs include loops, routines, subroutines, and modules.

extended attribute buffer (EAB). The buffer in which the extended field attributes are stored. Examples of extended field attributes are:

- Extended highlighting
- Color (blue, red, pink, green, turquoise, yellow, white)
- Character sets
- Transparency.

extended binary-coded decimal interchange code (EBCDIC). A coded character set of 256 8-bit characters. (A)

extended color. (1) A capability that allows color terminals to display or print fields or characters in colors using extended field and character attributes. (2) An attribute type in the extended field attribute and character attribute.

F

fault. An accidental condition that causes a functional unit to fail to perform its required function. (I) (A)

fault domain. (1) In IBM LAN problem determination, the portion of a network that is expected to be involved with an indicated error. (2) The segment of a token-ring network between a station and its nearest active upstream neighbor (NAUN).

FCS. Frame check sequence.

feature. A part of an IBM product that may be ordered separately by the customer.

FECN. Forward explicit congestion notification

fiber. See *optical fiber*.

fiber optics. The branch of optical technology concerned with the transmission of radiant power through fibers made of transparent materials such as glass, fused silica, and plastic.

Notes:

1. Telecommunication applications of fiber optics use optical fibers. Either a single discrete fiber or a nonspatially aligned fiber bundle may be used for each information channel. Such fibers are often called *optical fibers* to differentiate them from fibers used in noncommunication applications.
2. Various industrial and medical applications use (typically high-loss) flexible fiber bundles in which individual fibers are spatially aligned, permitting optical relay of an image.
3. Some specialized industrial applications use rigid (fused) aligned fiber bundles for image transfer.

Fiber Optic Terminal Adapter (FTA). In the 3174, this adapter allows a 3299 Model 032 to be attached to the 3174 using optical fiber cable.

FID. Format identification.

field. On a data medium or a storage medium, a specified area used for a particular category of data; for example, a group of character positions used to enter or display wage rates on a panel. (T) See also *display field*.

field attribute. A control character stored in the character buffer in the first character position of a field. For those devices supporting the 3270 data stream, a field attribute defines protected/unprotected, alphanumeric/numeric, detectable/nondetectable, display/nondisplay, intensity, and modified data tag (MDT).

field attribute. A defined characteristic of a field, such as protected or unprotected, alphanumeric or numeric, detectable or nondetectable, displayable or nondisplayable, or intensity.

field replaceable unit (FRU). An assembly that is replaced in its entirety when any one of its components fails. In some cases a FRU may contain other FRUs; for example, a brush and a brush block that can be replaced individually or as a single unit. Contrast with *customer replaceable unit (CRU)*.

file. A named set of records stored or processed as a unit. (T)

file adapter. In the 3174, an adapter that provides input/output support for external storage devices, such as a diskette drive.

file name. (1) A name assigned or declared for a file. (2) The name used by a program to identify a file.

first-speaker session. The half-session defined at session activation as: (a) able to begin a bracket without requesting permission from the other half-session to do so, and (b) winning contention if both half-sessions attempt to begin a bracket simultaneously. Synonym for *contention-winner session*. Contrast with *bidder session*.

fixed disk. A rigid magnetic disk used in a fixed disk drive. Synonymous with *hard disk*.

fixed disk drive. A disk storage device that reads and writes on rigid magnetic disks. Synonymous with *hard disk drive*.

flag. A character or indicator that signals the occurrence of some condition, such as the setting of a switch, or the end of a word. (A)

flow control. (1) In data communication, control of the data transfer rate. (2) In SNA, the process of managing the rate at which data traffic passes between components of the network. The purpose of flow control is to optimize the rate of flow of message units with minimum congestion in the network, that is, neither to overflow the buffers at the receiver or at intermediate routing nodes nor to leave the receiver waiting for more message units. (3) The methods used to control the flow of information across a network.

FMD. (1) Function management data. (2) Field macro diagram.

FMH. Function management header.

focal point. See *management services focal point*.

formatted diskette. A diskette on which track and sector control information has been written and that can be used by the computer to store data.

Note: A diskette must be formatted before it can receive data.

FQPCID. Fully qualified procedure correlator identifier.

FRMR. Frame reject response.

frame. (1) The unit of transmission in some LANs, including the IBM Token-Ring Network and the IBM PC Network. It includes delimiters, control characters, information, and checking characters. On a token-ring network, a frame is created from a token when the token has data appended to it. On a token bus network (IBM PC Network), all frames including the token frame contain a preamble, start delimiter, control address, optional data and checking characters, end delimiter, and are followed by a minimum silence period. (2) A

housing for machine elements. (3) In synchronous data link control (SDLC), the vehicle for every command, every response, and all information that is transmitted using SDLC procedures. Each frame begins and ends with a flag.

frame check sequence (FCS). (1) A system of error checking performed at both the sending and receiving station after a block check character has been accumulated. (2) A numeric value derived from the bits in a message that is used to check for any bit errors in transmission. (3) A redundancy check in which the check key is generated by a cyclic algorithm. (T) Synonymous with *cyclic redundancy check (CRC)*.

frame relay. (1) An interface standard describing the boundary between a user's equipment and a fast-packet network. In frame-relay systems, flawed frames are discarded; recovery comes end-to-end rather than hop-by-hop. (2) A technique derived from the integrated services digital network (ISDN) D channel standard. It assumes that connections are reliable and dispenses with the overhead of error detection and control within the network.

frame-relay network. A network that consists of frame-relay frame handlers (FRFH) and in which frames are passed from one frame-relay terminal equipment (FRTE) station to another through a series of one or more FRFHs.

frequency. The rate of signal oscillation, expressed in hertz (cycles per second).

FRMR. Frame reject response.

from diskette. The diskette that provides the data to be transferred.

from drive. The drive that provides the data to be transferred.

FRU. Field-replaceable unit.

FTA. Fiber Optic Terminal Adapter.

full-duplex. Synonym for *duplex*.

fully qualified procedure correlator identifier (FQPCID). A network-unique identifier that is used for:

- Correlating messages sent between nodes, such as correlating a Locate search request with its replies.
- Identifying a session for problem determination and resolution.
- Identifying a session for accounting, auditing, and performance monitoring purposes.

It is normally assigned at the node that contains the LU for which a procedure or session is initiated, but may be assigned by the network node that is providing network

services to that end node. The FQPCID consists of a fixed-length correlator concatenated with the network-qualified name of the control point that generated the correlator.

function. (1) A specific purpose of an entity, or its characteristic action. (A) (2) In data communications, a machine action such as carriage return or line feed. (3) In NetView DM, a function is the specification of a transmission activity on a resource or group of resources. Functions are grouped into phases. In CSCM, resources are known as data objects.

function key. A key that can signal or initiate the performance of various actions or functions that are selected by the user or determined by an application program.

function management data (FMD). An RU category used for end-user data exchanged between logical units (LUs) and for requests and responses exchanged between network services components of LUs, PUs, and control points.

function management header (FMH). One or more headers, optionally present in the leading request units (RUs) of an RU chain, that allow one half-session to: (a) select a destination at the session partner and control the way in which the end-user data it sends is handled at the destination, (b) change the destination or the characteristics of the data during the session, and (c) transmit between session partners status or user information about the destination (for example, a program or device). Function management headers can be used with LU type 1, 4, and 6.2 protocols.

G

gateway. A device and its associated software that interconnect networks or systems of different architectures. The connection is usually made above the reference model network layer. For example, a gateway allows LANs access to System/370 host computers. Contrast with *bridge* and *router*.

GDS. General data stream.

general data stream (GDS) variable. A type of RU substructure that is preceded by an identifier and a length field and includes either application data, user control data, or SNA-defined control data.

generate. In 3174 central site customizing, to write a Control diskette containing the customizing data for a particular controller. Also, to print a mailing address label and a diskette label for a particular controller.

get. In 3174 central site customizing, to select the type of data you want and store it in working copy.

GFI. General format identifier.

graphic escape. In the 3270 data stream, a control code used to introduce a graphic character (hex 40 through hex FE) from an alternate character set.

group. (1) A set of related records that have the same value for a particular field in all records. (2) A collection of users who can share access authorities for protected resources. (3) A list of names that are known together by a single name.

group address. In a LAN, a locally administered address assigned to two or more adapters to allow the adapters to copy the same frame. Contrast *locally administered address* with *universally administered address*.

group SAP. A single address assigned to a group of service access points (SAPs). See also *group address*.

H

half-duplex. In data communication, pertaining to transmission in only one direction at a time. Contrast with *duplex*.

half-session. A session-layer component consisting of the combination of data flow control and transmission control components comprising one end of a session.

hard error. An error condition on a network that requires that the source of the error be removed or that the network be reconfigured before the network can resume reliable operation. See also *beaconing*. Contrast with *soft error*.

hardware. Physical equipment as opposed to programs, procedures, rules, and associated documentation. (I) (A)

HDLC. High-level data link control.

header. The portion of a message that contains control information for the message such as one or more destination fields, name of the originating station, input sequence number, character string indicating the type of message, and priority level for the message.

hex. Hexadecimal.

hexadecimal. (1) Pertaining to a selection, choice, or condition that has 16 possible values or states. (2) Pertaining to a fixed-radix numeration system, with radix of 16. (3) Pertaining to a numbering system with base of 16; valid numbers use the digits 0 through 9 and characters A through F, where A represents 10 and F represents 15.

host access method. The access method that controls communication with a domain.

host addressable printer (HAP). A workstation-attached printer that a host can communicate with and to which other devices can local copy.

host application program. An application program processed in the host computer.

host attachment. A mode of SNA communication in which the processor acts as a secondary SNA device.

host system. (1) A data processing system used to prepare programs and operating environments for use on another computer or controller. (2) The data processing system to which a network is connected and with which the system can communicate. (3) The controlling or highest-level system in a data communication configuration; for example, a System/38 is the host system for the workstations connected to it.

IBM Personal Computer Disk Operating System (DOS). A disk operating system based on MS-DOS.

IEEE. Institute of Electrical and Electronic Engineers.

IEEE 802.2 interface. An interface adhering to the 802.2 Logical Link Control (LLC) Standard of the Institute of Electrical and Electronics Engineers. This standard is one of several standards for local area networks approved by the IEEE.

IML. Initial microcode load.

inactive. (1) Not operational. (2) Pertaining to a node or device not connected or not available for connection to another node or device. (3) Pertaining to a station that is only repeating frames or tokens, or both.

initialize. In a LAN, to prepare the adapter (and adapter support code, if used) for use by an application program.

initial microcode load (IML). In the 3174, the action of loading the operational microcode.

input/output (I/O). (1) Pertaining to a device whose parts can perform an input process and an output process at the same time. (2) Pertaining to a functional unit or channel involved in an input process, output process, or both, concurrently or not, and to the data involved in such a process.

insert. To make an attaching device an active part of a LAN.

integrated services digital network (ISDN). A digital end-to-end telecommunication network that supports multiple services including, but not limited to, voice and data.

Note: ISDNs are used in public and private network architectures.

interaction. A basic unit used to record system activity, consisting of the acceptance of a line of terminal input, processing of the line, and a response, if any.

interface. (1) A shared boundary between two functional units, defined by functional characteristics, common physical interconnection characteristics, signal characteristics, and other characteristics as appropriate. (2) A shared boundary. An interface may be a hardware component to link two devices or a portion of storage or registers accessed by two or more computer programs. (3) Hardware, software, or both, that links systems, programs, or devices.

interference. (1) The prevention of clear reception of broadcast signals. (2) The distorted portion of a received signal.

intermediate session routing (ISR). A type of intermediate routing function provided by an APPN network node that provides session-level outage reporting and flow control for all routes passing through it.

International Organization for Standardization (ISO). An organization of national standards bodies from various countries established to promote development of standards to facilitate international exchange of goods and services, and develop cooperation in intellectual, scientific, technological, and economic activity.

interrupt. (1) A suspension of a process, such as execution of a computer program, caused by an external event and performed in such a way that the process can be resumed. (2) To stop a process in such a way that it can be resumed. (3) In data communication, to take an action at a receiving station that causes the sending station to end a transmission. (4) A means of passing processing control from one software or microcode module or routine to another, or of requesting a particular software, microcode, or hardware function.

interrupt level. The means of identifying the source of an interrupt, the function requested by an interrupt, or the code or feature that provides a function or service.

I/O. Input/output.

IPDS. Intelligent Printer Data Stream.

IPM. Isolated pacing message.

ISDN. Integrated Services Digital Network.

ISO. International Organization for Standardization.

ISR. Intermediate session routing.

J

jumper. A connector between two pins on a network adapter that enables or disables an adapter option, feature, or parameter value.

K

KDU. Keyboard Definition Utility.

keyboard definition. A customizing procedure for defining a maximum of four modified keyboard layouts for modifiable keyboards only. Most characters, symbols, and functions can be relocated, duplicated, or deleted from almost any keyboard position. Synonym for *modify keyboard*.

L

LAN. Local area network.

LAN adapter. The circuit card within a communicating device (such as a personal computer) that, together with its associated software, enables the device to be attached to a LAN.

LAN segment. (1) Any portion of a LAN (for example, a single bus or ring) that can operate independently but is connected to other parts of the establishment network via bridges. (2) An entire ring or bus network without bridges. See *cable segment* and *ring segment*.

LAN Segment Number. The identifier that uniquely distinguishes a LAN segment in a multi-segment LAN.

layer. (1) One of the seven levels of the Open Systems Interconnection reference model. (2) In open systems architecture, a collection of related functions that comprise one level of hierarchy of functions. Each layer specifies its own functions and assumes that lower level functions are provided. (3) In SNA, a grouping of related functions that are logically separate from the functions of other layers. Implementation of the functions in one layer can be changed without affecting functions in other layers.

LCID. Logical channel identifier.

leased line. Synonym for *nonswitched line*.

LEN. Low-entry networking.

LEN end node. See *low-entry networking (LEN)*.

LFS. Local Format Storage.

LFSID. Local-form session identifier.

LFU. Limited Function Utility.

LIB. Library.

Library (LIB) diskette. A diskette that contains customizing data for some or all of the controllers in a network.

Library disk. A diskette or fixed disk that contains customizing data for some or all of the controllers in a network.

library member. A file located on a Library disk that contains customizing information for a controller in a network.

LIC. (1) Licensed Internal Code (2) Last in chain.

Licensed Internal Code (LIC). (1) Microcode that IBM does not sell as part of a machine but licenses to the customer, as designated in the Supplement to Agreement for Purchase of IBM Machines. (2) Licensed Internal Code is implemented in a part of storage that is not addressable by user programs. It is used in a product to implement functions as an alternative to hard-wired circuitry. LIC is provided in accordance with the terms and conditions of the applicable written agreement between a customer and IBM. See also *microcode*

light pen. A light-sensitive pick device that is used by pointing it at the display surface.

Limited Function Utility (LFU) diskette. A diskette that contains the microcode to run only a limited number of utilities. These are: Diagnostics, Copy Files, Encrypt/Decrypt Master Key, Identify Customizing Keyboard, and Media Management. The Limited Function Utility diskette is used mainly in networks that are under central site control.

line data rate. The rate of data transmission over a telecommunications link.

line noise. Noise originating in a telecommunication line.

line speed. (1) The rate at which data is transmitted from one point to another over a telecommunication line. (2) The number of binary digits that can be sent over a telecommunication line in 1 second, expressed in bits per second (bps).

link. (1) The logical connection between nodes including the end-to-end link control procedures. (2) The combination of physical media, protocols, and programming that connects devices on a network. (3) In computer programming, the part of a program, in some cases a single instruction or an address, that passes control and parameters between separate portions of the computer program. (I) (A) (4) To interconnect items of data or portions of one or more computer programs. (5) In SNA, the combination of the link connection and link stations joining network nodes.

link-attached. Pertaining to the attachment of devices to a central computer through a communication control unit. Contrast with *channel-attached*. Deprecated term for *telecommunication-attached*.

link connection. (1) All physical components and protocol machines that lie between the communicating link stations of a link. The link connection may include a switched or leased physical data circuit, a LAN, or an X.25 virtual circuit. (2) In SNA, the physical equipment providing two-way communication and error correction and detection between one link station and one or more other link stations.

link station. (1) A specific place in a service access point (SAP) that enables an adapter to communicate with another adapter. (2) A protocol machine in a node that manages the elements of procedure required for the exchange of data traffic with another communicating link station. (3) A logical point within a SAP that enables an adapter to establish connection-oriented communication with another adapter. (4) In SNA, the combination of hardware and software that allows a node to attach to and provide control for a link.

LIV. link integrity verification.

LLC. Logical link control.

LMI. Local management interface.

lobe. In the IBM Token-Ring Network, the section of cable (which may consist of several cable segments) that connects an attaching device to an access unit.

local. Pertaining to a device accessed directly without use of a telecommunication line. Synonym for *channel-attached*. Contrast with *remote*.

local area network (LAN). A computer network located on a user's premises within a limited geographical area.

Note: Communication within a local area network is not subject to external regulations; however, communication across the LAN boundary may be subject to some form of regulation. (T)

local busy. A state that may occur on a network for a given link station during which information-frame reception is suspended. This condition may occur because of an application program request, or a lack of buffers in the service access point (SAP) buffer pool.

local format storage. In the 3174, this function allows the controller to store pre-defined formatted screens and subsequently be viewed by a terminal user. The formatted screens are downloaded from the host into the 3174.

local-form session identifier (LFSID). A dynamically assigned value used by a type 2.1 node to identify traffic for a particular session using a given transmission group (TG). The LFSID is encoded in the ODAI, OAF', and DAF' fields of the transmission headers that accompany session messages exchanged over the TG.

locally administered address. An adapter address that the user can assign to override the universally administered address. Contrast with *universally administered address*.

location. With reference to the 3174, a place within the 3174 chassis where a particular card or adapter is inserted.

logical link control (LLC) sublayer. One of two sublayers of the ISO Open Systems Interconnection data link layer (which corresponds to the SNA data link control layer), proposed for LANs by the IEEE Project 802 Committee on Local Area Networks and the European Computer Manufacturers Association (ECMA). It includes those functions unique to the particular link control procedures that are associated with the attached node and are independent of the medium; this allows different logical link protocols to coexist on the same network without interfering with each other. The LLC sublayer uses services provided by the medium access control (MAC) sublayer and provides services to the network layer.

logical link control protocol (LLC protocol). In a local area network, the protocol that governs the exchange of frames between data stations independently of how the transmission medium is shared. (T)

logical link control protocol data unit (LPDU). The unit of information exchanged between network layer entities in different nodes. The LPDU consists of the destination service access point (DSAP) and source service access point (SSAP) address fields, the control field, and the information field (if present).

logical terminal (LT). In MLT, one of five sessions available to share one display station.

logical unit (LU). A type of network accessible unit that enables end users to communicate with each other and gain access to network resources.

loop. A closed unidirectional signal path connecting input/output devices to a network.

low-entry networking (LEN). A capability in type 2.1 nodes allowing them to be directly attached to one another using peer-to-peer protocols and allowing them to support multiple and parallel sessions between logical units.

LRM. LAN reporting mechanism.

LSF. Load Structured Field.

LTA. Logical terminal assignment.

LU-LU session. A session between two logical units (LUs) in an SNA network. It provides communication between two end users, or between an end user and an LU services component.

LUSTAT. Logical unit status.

LU type. The classification of an LU in terms of the specific subset of SNA protocols and options it supports for a given session, namely:

- The mandatory and optional values allowed in the session activation request.
- The usage of data stream controls, function management headers (FMHs), request unit parameters, and sense data values.
- Presentation services protocols such as those associated with FMH usage.

LU types 0, 1, 2, 3, 4, 6.1, 6.2, and 7 are defined.

LU type 6.2 (LU 6.2). A type of logical unit that supports general communication between programs in a distributed processing environment. LU 6.2 is characterized by (a) a peer relationship between session partners, (b) efficient utilization of a session for multiple transactions, (c) comprehensive end-to-end error processing, and (d) a generic application program interface consisting of structured verbs that are mapped into a product implementation.

M

MAC. (1) Medium access control. (2) Message authentication code.

MAC frame. Frames used to carry information to maintain the ring protocol and for exchange of management information.

MAC major vector. The medium access control (MAC) frame information field.

main storage. Program-addressable storage from which instructions and other data can be loaded directly into registers for subsequent processing.

maintenance analysis procedure (MAP). A maintenance document that gives an IBM service representative a step-by-step procedure for tracing a symptom to the cause of a failure.

management services (MS). One of the types of network services in control points and physical units. Management services are the services provided to assist in the management of SNA networks, such as problem management, performance and accounting management, configuration management, and change management.

management services focal point (MSFP). For any given management services discipline (for example, problem determination or response time monitoring), the control point that is responsible for that type of network management data for a sphere of control. This responsibility may include storing or displaying the data or both. (For example, a problem determination focal point is a control point that stores and displays problem determination data).

management services unit (MSU). A generic term for major-vector encoded management services data, regardless of the method used to transport the data. Thus, management services unit includes major vectors transported within network management vector transport (NMVT), the control point management services unit (CP-MSU), or the multiple-domain support message unit (MDS-MU).

Manufacturing Automation Protocol (MAP). A broadband LAN with a bus topology that passes tokens from adapter to adapter on a coaxial cable.

MAP. (1) Maintenance analysis procedure. (2) Manufacturing Automation Protocol

mark. A symbol or symbols that indicate the beginning or the end of a field, a word, an item of data or a set of data such as a file, record, or block.

Master Control diskette. In the 3174, a diskette that contains the base microcode, any necessary patches, RPQs, and modified keyboard tables.

max. Maximum.

Mbps. Megabits per second.

MDS. Multiple-domain support.

MDS-MU. multiple-domain support message unit

medium access control (MAC) frame. (1) In a ring network, an address resolution request frame that has the unique part of a destination address and an "all rings" address. A sender issues this request to determine the ring where the destination node is located and whether the node is active. (2) In a ring network, a response from an active destination node to the requesting source node that has its complete address and ring number.

medium access control (MAC) protocol. In a local area network, the part of the protocol that governs communication on the transmission medium without concern for the physical characteristics of the medium, but taking into account the topological aspects of the network, in order to enable the exchange of data between data stations. (T) See also *logical link control protocol*.

medium access control sublayer (MAC sublayer). In a local area network, the part of the data link layer that applies medium access control and supports topology-dependent functions. The MAC sublayer uses the services of the physical layer to provide services to the logical link control sublayer and all higher layers. (T)

memory. Program-addressable storage from which instructions and other data can be loaded directly into registers for subsequent execution or processing. Synonymous with *main storage*.

memory mapped I/O (MMIO). In 3174, a method of accessing certain adapters as if an adapter was a memory location.

merged. In an IBM Token-Ring Network, pertaining to an IBM access control unit that has successfully joined the main ring path. Neither the ring in (RI) nor ring out (RO) data signal of the access control unit has been switched to the backup path.

message. (1) A logical partition of the user device's data stream to and from the adapter. (2) A group of characters and control bits transferred as an entity.

message unit (MU). The unit of data processed by any layer, for example, a basic information unit, a path information unit, or a request/response unit.

microcode. (1) One or more microinstructions. (2) A code, representing the instructions of an instruction set, that is implemented in a part of storage that is not program-addressable. (3) To design, write, and also to test one or more microinstructions. (4) See also *microprogram*.

Note: The term microcode represents microinstructions used in a product as an alternative to hard-wired circuitry to implement functions of a processor or other system component. The term microprogram means a

dynamic arrangement of one or more groups of microinstructions for execution to perform a certain function. (5) See also *licensed internal code (LIC)*.

microprogram. A sequence of microinstructions (T) that when executed performs a preplanned function.

min. (1) Minimum. (2) Minute.

MLT. Multiple Logical Terminals.

MMIO. Memory mapped input/output.

modem. Modulator-demodulator.

modem (modulator/demodulator). A device that converts digital data from a computer to an analog signal that can be transmitted on a telecommunication line, and converts the analog signal received to data for the computer.

mode name. The name used by the initiator of a session to designate the characteristics desired for the session, such as traffic pacing values, message-length limits, sync point and cryptography options, and the class of service within the transport network.

modify keyboard. Synonym for *keyboard definition*.

monitor. (1) A functional unit that observes and records selected activities for analysis within a data processing system. Possible uses are to show significant departures from the norm, or to determine levels of utilization of particular functional units. (I) (A) (2) Software or hardware that observes, supervises, controls, or verifies operations of a system. (A)

multidrop (network). A network configuration in which there are one or more intermediate nodes on the path between a central node and an endpoint node.

multi-host support. In the 3174, the ability of a terminal to access more than one host at a time.

multiple-domain support (MDS). A technique for transporting management services data between management services function sets over LU-LU and CP-CP sessions. See also *multiple-domain support message unit*.

multiple-domain support message unit (MDS-MU). The message unit that contains management services data and flows between management services functions sets over the LU-LU and CP-CP sessions used by multiple-domain support. This message unit, as well as the actual management services data that it contains, is in general data stream (GDS) format. See also *network management vector transport, control point management services unit, and management services unit*.

multiple logical terminal (MLT). In the 3174, a function that provides a CUT-attached, fixed-function display station with the ability to interact with as many as five host sessions. Each session is processed as though it were a separate display station.

multistation access unit. In the IBM Token-Ring Network, a wiring concentrator that can connect up to eight lobes to a ring.

N

NAK. Negative acknowledge.

name. An alphanumeric term that identifies a data set, statement, program, or cataloged procedure.

native mode. A 3179 or 3180 operational mode that uses the full capabilities of those models' display and keyboard.

NAU. (1) Network accessible unit. (2) Network addressable unit.

NAUN. Nearest active upstream neighbor.

n-bit byte. A string that consists of n bits. (T)

NCP. Network Control Program.

nearest active upstream neighbor (NAUN). For any given attaching device on an IBM Token-Ring Network, the attaching device that is sending frames or tokens directly to it.

NETID. Network identifier.

NetView. A host-based IBM licensed program that provides communication network management (CNM) or communications and systems management (C&SM) services.

network. (1) A configuration of data processing devices and software connected for information interchange. (2) An arrangement of nodes and connecting branches. Connections are made between data stations. (T)

network accessible unit (NAU). A logical unit (LU), physical unit (PU), control point (CP), or system services control point (SSCP). It is the origin or the destination of information transmitted by the path control network. Synonymous with *network addressable unit*.

network administrator. A person who manages the use and maintenance of a network.

network architecture. The logical structure and operating principles of a computer network. (T) See also

systems network architecture (SNA) and Open Systems Interconnection (OSI) architecture.

Note: The operating principles of a network include those of services, functions, and protocols.

Network Control Program (NCP) node. In SNA products, a subarea node that contains an ACF/NCP program but not a system services control point (SSCP).

network management vector transport (NMVT). The portion of an alert transport frame that contains the alert message.

network manager. A program or group of programs that is used to monitor, manage, and diagnose the problems of a network.

network node (NN). A node that can define the paths or routes, control route selection, and handle directory services for APPN.

Network Site Controller. In 3174, any 3174 that is configured for central site change management, but does not contain the central site library. Contrast with *central site controller*.

NMVT. Network Management Vector Transport.

node. (1) Any device, attached to a network, that transmits and/or receives data. (2) An endpoint of a link, or a junction common to two or more links in a network. (3) In a network, a point where one or more functional units interconnect transmission lines.

node address. The address of an adapter on a LAN.

node type. A designation of a node according to the protocols it supports and the network accessible units that it can contain. Five types are defined: 1, 2.0, 2.1, 4, and 5. Within a subarea network, type 1, type 2.0, and type 2.1 nodes are peripheral nodes, while type 4 and type 5 nodes are subarea nodes.

noise. (1) A disturbance that affects a signal and that can distort the information carried by the signal. (T) (2) Random variations of one or more characteristics of any entity, such as voltage, current, or data. (A) (3) Loosely, any disturbance tending to interfere with normal operation of a device or system. (A)

nonswitched line. (1) A connection between systems or devices that does not have to be made by dialing. Contrast with *switched line*. (2) A telecommunication line on which connections do not have to be established by dialing. Synonymous with *leased line*.

null modem. A device with two 25-pin D-shell connectors that attaches to the station end of a standard, straight-through, pin-for-pin EIA 232D cable.

The null modem does the crossing-over of the appropriate EIA 232D leads required for the direct connection of a terminal or computer to an AEA port.

NUM. Numeric.

O

OAF'. Origin address field prime.

octet. A byte composed of eight binary elements.

ODAI. Origin-Destination Assignor indicator.

OEM. Original equipment manufacturer.

office. See *work area*.

offline test. In the 3174, a diagnostic test or data collection program that must be run when the 3174 and its connected terminals are not in normal operation.

OIA. Operator information area.

online test. In the 3174, a diagnostic test or data collection program that is run without interrupting the normal operation of the 3174 and its associated terminals.

open. (1) To make an adapter ready for use. (2) A break in an electrical circuit. (3) To make a file ready for use.

Open Systems Interconnection (OSI). (1) The interconnection of open systems in accordance with specific ISO standards. (T) (2) The use of standardized procedures to enable the interconnection of data processing systems.

Note: OSI architecture establishes a framework for coordinating the development of current and future standards for the interconnection of computer systems. Network functions are divided into seven layers. Each layer represents a group of related data processing and communication functions that can be carried out in a standard way to support different applications.

Open Systems Interconnection (OSI) architecture. Network architecture that adheres to a particular set of ISO standards that relates to Open Systems Interconnection. (T)

Open Systems Interconnection (OSI) reference model. A model that represents the hierarchical arrangement of the seven layers described by the Open Systems Interconnection architecture.

operation. (1) A defined action, namely, the act of obtaining a result from one or more operands in accordance with a rule that completely specifies the

result for any permissible combination of operands. (A) (2) A program step undertaken or executed by a computer. (3) An action performed on one or more data items, such as adding, multiplying, comparing, or moving.

operator information area (OIA). The area below the line near the bottom of the display area where graphics and alphanumeric characters are displayed to define the status of the terminal or the system to the operator.

optical cable. A fiber, multiple fibers, or a fiber bundle in a structure built to meet optical, mechanical, and environmental specifications.

optical fiber. Any filament made of dielectric materials that guides light, regardless of its ability to send signals. (E) See also *fiber optics* and *optical waveguide*.

optical fiber cable. Synonym for *optical cable*.

option. (1) A specification in a statement, a selection from a menu, or a setting of a switch, that may be used to influence the execution of a program. (2) A hardware or software function that may be selected or enabled as part of a configuration process. (3) A piece of hardware (such as a network adapter) that can be installed in a device to modify or enhance device function.

origin address. A code that identifies the location from which information is sent. Synonymous with *source address*. Contrast with *destination address*.

original equipment manufacturer (OEM). A manufacturer of equipment that may be marketed by another manufacturer.

Origin-Destination Assignor indicator (ODAI). The ODAI is a bit in a FID2 transmission header used to divide the address space so that an address space manager (ASM) in one node may use all possible combinations of OAF', DAF' with the ODAI having one setting and the ASM in the adjacent node may use all possible combinations of OAF', DAF' with the ODAI having the complementary setting.

overflow exception. A condition caused by the result of an arithmetic operation having a magnitude that exceeds the largest possible number. See also *underflow exception*.

P

padding. (1) A technique by which a receiving station controls the rate of transmission of a sending station to prevent overrun. (2) In SNA, a technique by which a receiving component controls the rate of transmission of a sending component to prevent overrun or congestion.

packet. (1) In data communication, a sequence of binary digits, including data and control signals, that is transmitted and switched as a composite whole. (l) (2) Synonymous with *data frame*. Contrast with *frame*.

page. (1) The portion of a panel that is shown on a display surface at one time. (2) To move back and forth among the pages of a multiple-page panel. See also *scroll*. (3) In a virtual storage system, a fixed-length block that has a virtual address and is transferred as a unit between real storage and virtual storage.

PAM. Printer authorization matrix.

panel. The complete set of formatted information that appears in a single display on a visual display unit.

parallel. (1) Pertaining to a process in which all events occur within the same interval of time, each handled by a separate but similar functional unit; for example, the parallel transmission of the bits of a computer word along the lines of an internal bus. (2) Pertaining to concurrent or simultaneous operation of two or more devices or to concurrent performance of two or more activities in a single device. (3) Pertaining to concurrent or simultaneous occurrence of two or more related activities in multiple devices or channels. (4) Pertaining to the simultaneity of two or more processes. (5) Pertaining to the simultaneous processing of the individual parts of a whole, such as the bits of a character and the characters of a word, using separate facilities for the various parts. (6) Contrast with *serial*.

parallel sessions. Two or more concurrently active sessions between the same two network accessible units using different pairs of network addresses or local-form session identifiers. Each session can have independent session parameters.

parameter. (1) A variable that is given a constant value for a specified application and that may denote the application. (l) (A) (2) An item in a menu or for which the user specifies a value or for which the system provides a value when the menu is interpreted. (3) Data passed between programs or procedures.

parity. (1) A transmission error-checking scheme in which an extra bit is added to some unit of data, usually a byte, in order to make the total number of one bits even or odd. For the AEA feature, odd, even, mark, space, or no-parity coding is supported. No-parity means that no parity bit is sent or expected. Mark and space mean that the parity position is always set to one or zero, respectively, and that received parity is not checked. (2) The state of being either even-numbered or odd-numbered.

parity (even). A condition when the sum of all of the digits in an array of binary digits is even.

parity (odd). A condition when the sum of all of the digits in an array of binary digits is odd.

parity check. (1) A redundancy check by which a recalculated parity bit is compared to the pregiven parity bit. (T) (2) A check that tests whether the number of ones (or zeros) in an array of binary digits is odd or even. (A)

password. In computer security, a string of characters known to the computer system and a user, who must specify it to gain full or limited access to a system and to the data stored within it.

patch panel. A terminating enclosure for connecting cables. See *Distribution Panel*.

path. (1) In a network, any route between any two nodes. (T) (2) The route traversed by the information exchanged between two attaching devices in a network. (3) A command in IBM Personal Computer Disk Operating System (PC DOS) and IBM Operating System/2 (OS/2) that specifies directories to be searched for commands or batch files that are not found by a search of the current directory.

path control. The function that routes message units between network accessible units in the network and provides the paths between them. It converts the BIU's from transmission control into path information units (PIUs) and exchanges basic transmission units containing one or more PIUs with data link control.

path information unit (PIU). A message unit consisting of a transmission header (TH) alone, or of a TH followed by a basic information unit (BIU) or a BIU segment. See also *transmission header*.

permanent virtual circuit (PVC). In X.25 and frame-relay communications, a virtual circuit that has a logical channel permanently assigned to it at each data terminal equipment (DTE). Call-establishment protocols are not required. Contrast with *switched virtual circuit (SVC)*.

personal computer (PC). A desk-top, free-standing, or portable microcomputer that usually consists of a system unit, a display, a monitor, a keyboard, one or more diskette drives, internal fixed-disk storage, and an optional printer. PCs are designed primarily to give independent computing power to a single user and are inexpensively priced for purchase by individuals or small businesses. Examples include the various models of the IBM Personal Computers, and the IBM Personal System/2 computer.

phase. The relative timing (position) of periodic electrical signals.

physical layer. In the Open Systems Interconnection reference model, the layer that provides the mechanical, electrical, functional, and procedural means to establish, maintain, and release physical connections over the transmission medium. (T)

physical unit (PU). The component that manages and monitors the resources (such as attached links and adjacent link stations) associated with a node, as requested by an SSCP via an SSCP-PU session. An SSCP activates a session with the physical unit in order to indirectly manage, through the PU, resources of the node such as attached links. This term applies to type 1, type 2, type 4, and type 5 nodes only.

PID. Product-set ID.

PIO. Programmed input/output.

PIU. Path information unit.

PLU. Primary logical unit.

plug. (1) A connector designed to insert into a receptacle or socket. (2) To insert a connector into a receptacle or socket.

P/N. Part number.

pointer. (1) An identifier that indicates the location of an item of data. (A) (2) A data element that indicates the location of another data element. (T) (3) A physical or symbolic identifier of a unique target.

polling. (1) On a multipoint connection or a point-to-point connection, the process whereby data stations are invited one at a time to transmit. (2) Interrogation of devices for such purposes as to avoid contention, to determine operational status, or to determine readiness to send or receive data.

port. (1) An access point for data entry or exit. (2) A connector on a device to which cables for other devices such as display stations and printers are attached. Synonymous with *socket*.

Port Expansion Feature. In the 3174, an optional feature that allows up to 32 additional 3270 type terminals to be attached. This feature provides a new terminal adapter for specific large-cluster models of the 3174.

PRID. Procedure-related identifier.

primary logical unit (PLU). In SNA, the logical unit (LU) that contains the primary half-session for a

particular LU-LU session. Contrast with *secondary logical unit*.

printer authorization matrix (PAM). A matrix stored in the controller that establishes printer assignment and classification.

procedure. A set of instructions that gives a service representative a step-by-step procedure for tracing a symptom to the cause of failure.

processor. In a computer, a functional unit that interprets and executes instructions. (I) (A)

programmed I/O (PIO). In an IBM personal computer (PC), a method of accessing an input or output port with specific instructions.

programmed symbols (PS). In the 3270 Information Display System, an optional feature that stores up to six user-definable, program-loadable character sets of 190 characters each in terminal read/write storage for display or printing by the terminal.

protocol. (1) A set of semantic and syntactic rules that determines the behavior of functional units in achieving communication. (2) In SNA, the meanings of and the sequencing rules for requests and responses used for managing the network, transferring data, and synchronizing the states of network components. (3) A specification for the format and relative timing of information exchanged between communicating parties.

protocol conversion. For the AEA feature, emulation of one device protocol by a device designed for a different protocol.

PSH. Physical services header.

PSID. Product set identification.

PUIID. Physical unit identification.

put. In 3174 central site customizing, to store data from the working copy into a library member.

PVC. Permanent virtual circuit.

Q

QFRMR. Qualified frame reject response.

QLLC. Qualified logical link control.

QRI. Queued response indicator.

QSM. Qualified set mode.

R

RAM. Random access memory.

random access memory (RAM). A computer's or adapter's volatile storage area into which data may be entered and retrieved in a nonsequential manner.

RDL. Remote Data Link.

receive. To obtain and store information transmitted from a device.

register. (1) A storage area in a computer's memory where specific data is stored. (2) A storage device having a specified storage capacity such as bit, byte, or computer word, and usually intended for a special purpose. (I)

rel. Relative.

REM. Ring error monitor.

remote. Pertaining to a system, program, or device that is accessed through a telecommunication line.

remote partner. In the 3174, (1) the machine communicating with the 3174 at the other side of the frame relay network. (2) In a point-to-point setup, the machine at the other end of the physical line.

remove. (1) To take an attaching device off a network. (2) To stop an adapter from participating in passing data on a network.

REQMS. Request Maintenance Statistics.

request for price quotation (RPQ). An alteration or addition to the functional capabilities that the controller provides.

request header (RH). Control information preceding a request unit. See also *request/response header*.

request/response header (RH). Control information, preceding a request/response unit (RU), that specifies the type of RU (request unit or response unit) and contains control information associated with that RU.

request/response unit (RU). A generic term for a request unit or a response unit. See also *request unit* and *response unit*.

request unit (RU). A message unit that contains control information, end-user data, or both.

reserved name. A name used or assigned by a program or an operating system that cannot be added or deleted by a user.

response field. On a display device, a specified area on the display space where the user can enter, modify, or erase response data.

response header (RH). A header, optionally followed by a response unit, that indicates whether the response is positive or negative and that may contain a pacing response.

Response Time Monitor (RTM). A network management tool that measures and records the transaction times of inbound host attention (AID) operations from display stations that communicate with the host.

response unit (RU). A message unit that acknowledges a request unit; it may contain prefix information received in a request unit. If positive, the response unit may contain additional information (such as session parameters in response to a Bind), or if negative, contains sense data defining the exception condition.

return code. (1) A value (usually hexadecimal) provided by an adapter or a program to indicate the result of an action, command, or operation. (2) A code used to influence the execution of succeeding instructions. (A)

RFS. Ready-For-Sending.

ring error monitor (REM). A function that compiles error statistics reported by adapters on a network, analyzes the statistics to determine probable error cause, sends reports to network manager programs, and updates network status conditions. It assists in fault isolation and correction.

ring in (RI). In the IBM Token-Ring Network, the receive or input receptacle on an access unit or repeater. Contrast with *ring out*.

ring network. A network configuration in which a series of attaching devices is connected by unidirectional transmission links to form a closed path. A ring of an IBM Token-Ring Network is referred to as a LAN segment or as a Token-Ring Network segment.

ring out (RO). In an IBM Token-Ring Network, the transmit or output receptacle on an access unit or repeater.

ring segment. A ring segment is any section of a ring that can be isolated (by unplugging connectors) from the rest of the ring. A segment can consist of a single lobe, the cable between access units, or a combination of cables, lobes, and/or access units. See *cable segment* and *LAN segment*.

ring station. A station that supports the functions necessary for connecting to the LAN and for operating

with the token-ring protocols. These include token handling, transferring copied frames from the ring to the using node's storage, maintaining error counters, observing medium access control (MAC) sublayer protocols (for address acquisition, error reporting, or other duties), and (in the full-function native mode) directing frames to the correct data link control (DLC) link station.

ring status. The condition of the ring.

RNR. (1) Request not ready. (2) receive not ready.

ROS. Read-only storage.

route. An ordered sequence of nodes and transmission groups (TGs) that represent a path from an origin node to a destination node traversed by the traffic exchanged between them.

router. An attaching device that connects two LAN segments, which use similar or different architectures, at the reference model network layer. Contrast with *bridge* and *gateway*.

Route Selection control vector (RSCV). A X'2B' control vector that describes a route in an APPN network. The RSCV consists of an ordered sequence of control vectors — either TG Descriptor (X'46') control vectors (when carried in the Bind RU) or Network-Qualified Name (X'0E') control vectors (when carried in the Locate search message) — that identify the TGs and nodes that make up the path from an origin node to a destination node.

routing. (1) The assignment of the path by which a message will reach its destination. (2) In SNA, the forwarding of a message unit along a particular path through a network, as determined by parameters carried in the message unit, such as the destination network address in a transmission header.

RPOA. Recognized Private Operating Agency.

RPQ. Request for price quotation.

RPS. Ring parameter server.

RSCV. Route selection control vector.

RSP. Response.

RTI. Response type indicator.

RTM. Response Time Monitor.

RTR. Ready to receive.

RTS. Request to send.

S

SAA. Systems Application Architecture.

SABM. Set Asynchronous Balance Mode (command).

SABME. Set Asynchronous Balance Mode Extended (command).

SAP. Service access point.

SBA. Set Buffer Address.

scroll. To move a display image vertically or horizontally to display data that cannot be observed within the boundaries of the display screen.

SCS. SNA character string.

SDLC. Synchronous Data Link Control.

SDT. Start data traffic.

secondary logical unit (SLU). In SNA, the logical unit (LU) that contains the secondary half-session for a particular LU-LU session. Contrast with *primary logical unit*.

segment. A section of cable between components or devices on the network. A segment may consist of a single patch cable, multiple patch cables connected, or a combination of building cable and patch cables connected. See *cable segment*, *LAN segment*, and *ring segment*.

selector pen. A pen-like instrument that can be attached to a display station. When a program using full-screen processing is assigned to the display station, the pen can be used to select items on the screen or to generate an attention. Synonym for *light pen*.

serial. (1) Pertaining to a process in which all events occur one after the other; for example, serial transmission of the bits of a character according to V24 CCITT protocol. (2) Pertaining to the sequential or consecutive occurrence of two or more related activities in a single device or channel. (3) Pertaining to the sequential processing of the individual parts of a whole, such as the bits of a character or the characters of a word, using the same facilities for successive parts. (4) Contrast with *parallel*.

server. (1) A device, program, or code module on a network dedicated to providing a specific service to a network. (2) On a LAN, a data station that provides facilities to other data stations. Examples are a file server, print server, and mail server.

service access point (SAP). (1) A logical point made available by an adapter where information can be

received and transmitted. A single SAP can have many links terminating in it. (2) In Open Systems Interconnection (OSI) architecture, the logical point at which an $n + 1$ -layer entity acquires the services of the n -layer. For LANs, the n -layer is assumed to be data link control (DLC). A single SAP can have many links terminating in it. These link "end-points" are represented in DLC by link stations. (3) A logical address that allows a system to route data between a remote device and the appropriate communications support.

session. (1) A connection between two application programs that allows them to communicate. (2) In SNA, a logical connection between two network addressable units that can be activated, tailored to provide various protocols, and deactivated as requested. (3) The data transport connection resulting from a call or link between two devices. (4) The period of time during which a user of a node can communicate with an interactive system, usually the elapsed time between log on and log off. (5) In network architecture, an association of facilities necessary for establishing, maintaining, and releasing connections for communication between stations. (T)

session connector. A session-layer component in an APPN network node or in a subarea node boundary or gateway function that connects two stages of a session. Session connectors swap addresses from one address space to another for session-level intermediate routing, adaptively pace the session traffic in each direction, and segment message units as needed.

session limit. (1) In SNA, the maximum number of concurrently active LU-LU sessions that a particular logical unit (LU) can support. (2) For the 3174 AEA, the total number of logical terminals or defined AEA default destinations for an AEA port set.

Set Buffer Address (SBA) order. An order that sets the buffer address to a specified location.

SFE. Start Field Extended.

signal. (1) A time-dependent value attached to a physical phenomenon for conveying data. (2) A variation of a physical quantity, used to convey data.

simulation. (1) The representation of selected characteristics of the behavior of one physical or abstract system by another system. In a digital computer system, simulation is done by software; for example, (a) the representation of physical phenomena by means of operations performed by a computer system, and (b) the representation of operations of a computer system by those of another computer system. (2) Contrast with *emulation*.

single link multi-host support. In the 3174, the ability of a terminal to access multiple hosts over a single physical link connected to the IBM Token-Ring Network, an X.25 Network, or an Enterprise Systems Connection Director.

SLU. Secondary logical unit.

SNA. Systems Network Architecture.

SNA character string (SCS). A character string composed of EBCDIC controls, optionally intermixed with end-user data, that is carried within a request/response unit.

SNA distribution services (SNADS). An IBM asynchronous distribution service that defines a set of rules to receive, route, and send electronic mail in a network of systems.

SNADS. Systems Network Architecture Distributed Systems.

SNRM. Set Normal Response Mode.

socket. Synonym for *port* (2).

soft error. An intermittent error on a network that causes data to have to be transmitted more than once to be received. A soft error affects the network's performance but does not, by itself, affect the network's overall reliability. If the number of soft errors becomes excessive, reliability is affected. Contrast with *hard error*.

soft error. An intermittent error on a network that requires retransmission. Contrast with *hard error*.

Note: A soft error by itself does not affect overall reliability of the network, but reliability may be affected if the number of soft errors reaches the ring error limit.

solid state component. A component whose operation depends on control of electric or magnetic phenomena in solids, for example, a transistor, crystal diode, or ferrite core.

source address. Synonym for origin address.

SSCP. System services control point.

Start Field Extended (SFE) order. (1) A data stream order that defines the start of a field that includes extended field attribute type-value pairs. (2) An order that generates an extended field attribute in the EAB and at the current buffer location.

station. (1) An input or output point of a system that uses telecommunication facilities; for example, one or more systems, computers, terminals, devices, and associated programs at a particular location that can

send or receive data over a telecommunication line. (2) A location in a device at which an operation is performed, for example, a read station. (3) In SNA, a link station.

stop bit. Synonym for *stop signal*.

stop signal. In start-stop transmission, a signal at the end of a character that prepares the receiving device for reception of a subsequent character. Synonymous with *stop bit*.

storage. A unit into which recorded text can be entered, in which it can be retained and processed, and from which it can be retrieved. See also *memory*.

structured field. A data stream format that permits variable-length data and controls to be parsed into its components without having to scan every byte.

STX. Start of text.

SUB. Substitute.

subsystem. A secondary or subordinate system, or programming support, usually capable of operating independently of or asynchronously with a controlling system. The 3174 and its attached terminals are an example of a subsystem.

subvector. A subcomponent of the medium access control (MAC) major vector.

SVC. Switched virtual circuit.

switch. On an adapter, a mechanism used to select a value for, enable, or disable a configurable option or feature.

switched line. A telecommunication line in which the connection is established by dialing. Contrast with *nonswitched line*.

synchronous data link control (SDLC). A discipline conforming to subsets of the Advanced Data Communication Control Procedures (ADCCP) of the American National Standards Institute (ANSI) and High-level Data Link Control (HDLC) of the International Organization for Standardization, for managing synchronous, code-transparent, serial-by-bit information transfer over a link connection. Transmission exchanges may be duplex or half-duplex over switched or nonswitched links. The configuration of the link connection may be point-to-point, multipoint, or loop. (I)

system. In data processing, a collection of people, machines, and methods organized to accomplish a set of specific functions. (I) (A)

system configuration. A process that specifies the devices and programs that form a particular data processing system.

Systems Application Architecture (SAA). An architecture developed by IBM that consists of a set of selected software interfaces, conventions, and protocols, and that serves as a common framework for application development, portability, and use across different IBM hardware systems.

system services control point (SSCP). In SNA, the focal point within an SNA network for managing the configuration, coordinating network operator and problem determination requests, and providing directory support and other session services for end users of the network. Multiple SSCPs, cooperating as peers, can divide the network into domains of control, with each SSCP having a hierarchical control relationship to the physical units (PUs) and logical units (LUs) within its domain.

Systems Network Architecture (SNA). The description of the logical structure, formats, protocols, and operational sequences for transmitting information units through, and controlling the configuration and operation of, networks.

Note: The layered structure of SNA allows the ultimate origins and destinations of information, that is, the end users, to be independent of and unaffected by the specific SNA network services and facilities used for information exchange.

T

tailgate. The area of a computer or control unit where I/O cables are connected.

TDU. Topology Data base Update.

telecommunication-attached. Pertaining to the attachment of devices by teleprocessing lines to a host processor. Synonym for *remote*. Contrast with *channel-attached*.

telephone twisted pair. One or more twisted pairs of copper wire in the unshielded voice-grade cable commonly used to connect a telephone to its wall jack. Also referred to as "unshielded twisted pair" (UTP).

terminal. In data communication, a device, usually equipped with a keyboard and display device, capable of sending and receiving information.

terminal adapter (TA). In the 3174, an adapter that provides control for a maximum of 32 terminals per adapter. The maximum number of terminals that can be connected depends on the model of the 3174.

terminal component. A separately addressable part of a terminal that performs an input or output function, such as the display component of a keyboard-display device or a printer component of a keyboard-printer device.

terminal emulation. The capability of a microcomputer, personal computer, 3270 CUT mode display station, 3270 printer, ASCII display station, or ASCII printer to operate as if it were a particular type of terminal linked to a processing unit and to access data.

terminal multiplexer. A device, such as the 3299 Terminal Multiplexer, for interleaving the signals for many devices onto a single cable.

terminal multiplexer adapter (TMA). In the 3174, this adapter is connected to the 3174 terminal adapter (TA) and provides control for a maximum of eight terminals.

terminator. A 75-ohm, resistive connector used on the end of a cable or an unused tap to minimize cable reflections.

threshold. (1) A level, point, or value above which something is true or will take place and below which it is not true or will not take place. (2) In IBM bridge programs, a value set for the maximum number of frames that are not forwarded across a bridge due to errors, before a "threshold exceeded" occurrence is counted and indicated to network management programs. (3) An initial value from which a counter is decremented to zero, or a value to which a counter is incremented or decremented from an initial value. When the counter reaches zero or the threshold value, a decision is made and/or an event occurs.

throughput. (1) A measure of the amount of work performed by a computer system over a given period of time, for example, number of jobs per day. (l) (A) (2) A measure of the amount of information transmitted over a network in a given period of time. For example, a network's data transfer rate is usually measured in bits per second.

time-out. (1) An event that occurs at the end of a predetermined period of time that began at the occurrence of another specified event. (2) A time interval allotted for certain operations to occur; for example, response to polling or addressing before system operation is interrupted and must be restarted. (3) A terminal feature that logs off a user if an entry is not made within a specified period of time.

TMA. Terminal Multiplexer Adapter.

to diskette. The diskette that receives the transferred data.

to drive. The drive that receives the transferred data.

token. A sequence of bits passed from one device to another on the token-ring network that signifies permission to transmit over the network. It consists of a starting delimiter, an access control field, and an end delimiter. The access control field contains a bit that indicates to a receiving device that the token is ready to accept information. If a device has data to send along the network, it appends the data to the token. When data is appended, the token then becomes a frame. See *frame*.

token ring. A network with a ring topology that passes tokens from one attaching device (node) to another. A node that is ready to send can capture a token and insert data for transmission.

token-ring network. (1) A ring network that allows unidirectional data transmission between data stations by a token-passing procedure over one transmission medium so that the transmitted data returns to and is removed by the transmitting station. (T) The IBM Token-Ring Network is a baseband LAN with a star-wired ring topology that passes tokens from network adapter to network adapter. (2) A network that uses a ring topology, in which tokens are passed in a sequence from node to node. A node that is ready to send can capture the token and insert data for transmission. (3) A group of interconnected token rings.

topology. The physical or logical arrangement of nodes in a computer network. Examples include ring topology and bus topology.

topology and routing services (TRS). An APPN control point component that manages the topology data base and computes routes.

topology data base update (TDU). A message broadcast among APPN network nodes to maintain the network topology data base, which is fully replicated in each network node. A TDU contains information to identify the sending node, node and link characteristics about various resources of the network, and update sequence numbers to identify the most recent updates for each of the resources described.

trace. (1) A record of the execution of a computer program. It exhibits the sequences in which the instructions were executed. (2) A record of the frames and bytes transmitted on a network.

transaction. In an SNA network, an exchange between two programs that usually involves a specific set of initial input data that causes the execution of a specific task or job. Examples of transactions include the entry of a customer's deposit that results in the updating of the customer's balance, and the transfer of a message to one or more destination points.

transaction program. A program that processes transactions in or through a logical unit (LU) type 6.2 in an SNA network. Application transaction programs are end users in an SNA network; they process transactions for service transaction programs and for other end users. Service transaction programs are IBM-supplied programs that typically provide utility services to application transaction programs.

transceiver. Any device that can transmit and receive traffic.

translate table. A table that defines the translation of ASCII to EBCDIC and EBCDIC to ASCII and that allows the use of special characters and nonstandard codes.

transmission header (TH). Control information, optionally followed by a basic information unit (BIU) or a BIU segment, that is created and used by path control to route message units and to control their flow within the network. See also *path information unit*.

transmission priority. A rank assigned to a message unit that determines its precedence for being selected by the path control component in each node along a route for forwarding to the next node in the route.

transmit. To send information from one place for reception elsewhere.

transmitter. See *universal receiver-transmitter*.

transmitter. (1) A circuit used in data communication applications to send information from one place for reception elsewhere. (2) The device in which the transmission circuits are housed.

TRS. Topology and routing services.

TTD. Temporary text delay.

twisted pair. A transmission medium that consists of two insulated conductors twisted together to reduce noise. (T)

type. In the 3174, the identifying number of a card. For example, 9150 is a type number of the terminal adapter in the 3174.

type 1 communication adapter. In the 3174, the adapter that provides EIA 232D/CCITT V.24 or CCITT V.35 interfaces for SDLC, BSC, X.25, or frame-relay remote link attachment. The user selects the appropriate interface.

type 2 communication adapter. In the 3174, the adapter that provides CCITT V.11 (X.21) interface for SDLC, X.25, or frame-relay remote link attachment. The user selects the interface.

U

U.S. United States.

UDT. User defined terminal tables.

UDX. User defined translate tables.

unbind. In SNA, to deactivate a session between logical units.

unbind command. A command used to reset the protocols for a session. Contrast with *bind command*.

underflow exception. A condition caused by the result of an arithmetic operation having a magnitude less than the smallest possible nonzero number.

universally administered address. The address permanently encoded in an adapter at the time of manufacture. All universally administered addresses are unique. Contrast with *locally administered address*.

universal receiver-transmitter. A circuit used in asynchronous, synchronous, or synchronous/asynchronous data communication applications to provide all the necessary logic to recover data in a serial-in parallel-out fashion and to transmit data in a parallel-in serial-out fashion. It is usually duplex; that is, it can transmit and receive simultaneously with the option to handle various data word lengths.

unnumbered acknowledgment. A data link control (DLC) command used in establishing a link and in answering receipt of logical link control (LLC) frames.

unnumbered acknowledgment (UA). A data link control (DLC) command used in establishing a link and in answering receipt of logical link control (LLC) frames.

update. In 3174 central site customizing, to tailor a library member's customizing data, in working copy, and put it back to the library disk.

upgrade. In 3174 central site customizing, to select a library member and upgrade its data to the microcode level of the Central Site Customizing Utility disk.

upstream. (1) In the direction opposite to data flow or toward the source of transmission. (2) Toward the processor from an attached unit or end user. (3) Contrast with *downstream*.

Utility (UTL) diskette. In the 3174, a diskette that contains the microcode necessary to run various utilities, for example, to copy portions of a diskette for a backup diskette.

Utility disk. In the 3174, a diskette or fixed disk that contains the microcode necessary to run various utilities, for example, to copy portions of a diskette for a backup diskette.

V

V.35 communication adapter. A communication adapter that can combine and send information on one line at speeds up to 64 kbps, and conforms to the CCITT V.35 standard.

variable. (1) In computer programming, a character or group of characters that refers to a value and, in the execution of a computer program, corresponds to an address. (2) A quantity that can assume any of a given set of values. (A)

vector. One or more related fields of data, in a specified format. A quantity usually characterized by an ordered set of numbers. (I) (A)

version. A separate IBM-licensed program, based on an existing IBM-licensed program, that usually has significant new code or new function.

viewport. In the 3270 Information Display System, an area on the usable area of the display surface through which an operator views all or a portion of the data outlined by the window on the presentation plane.

virtual circuit. (1) In packet switching, the facilities provided by a network that give the appearance to the user of an actual connection. (T) See also *data circuit*. Contrast with *physical circuit* (2) A logical connection established between two DTEs. (3) In a packet-switching data network, a logical end-to-end transmission channel—as opposed to a physical connection—that connects X.25 users. Virtual circuits allow physical transmission facilities to be shared by many users simultaneously. A virtual circuit is a logical connection established between two data terminal equipments (DTEs). See also *permanent virtual circuit (PVC)*.

virtual connection. See *virtual circuit*.

VPD. Vital Product Data.

VTAM. Virtual Telecommunications Access Method.

W

WACK. Wait before transmit positive acknowledgement.

WAN. Wide area network.

WCC. Write control character.

wide area network (WAN). A network that provides communication services to a geographic area larger than that served by a local area network or a metropolitan area network, and that may use or provide public communication facilities. (T) Contrast with *local area network (LAN)*.

wire fault. An error condition caused by a break in the wires or a short between the wires (or shield) in a segment of cable.

WNM. Workstation Networking Module.

work area. An area in which terminal devices (such as displays, keyboards, and printers) are located. Access units may also be located in work areas.

working copy (WC). In 3174 central site customizing, a set of customizing data and label data held in main storage, which is tailored to reflect a network controller's attached terminals, its method of host attachment, and other pertinent information.

workstation. (1) An I/O device that allows either transmission of data or the reception of data (or both) from a host system, as needed to perform a job: for example, a display station or printer. (2) A configuration of I/O equipment at which an operator works. (T) (3) A terminal or microcomputer, usually one connected to a mainframe or network, at which a user can perform tasks.

Workstation Networking Module (WNM). In the 8250 and 8260, a module that provides 3174 Establishment Controller 3270 connectivity and type 1 communication functions.

wrap test. A test that checks attachment or control unit circuitry without checking the mechanism itself by returning the output of the mechanism as input. For example, when unrecoverable communication adapter or machine errors occur, a wrap test can transmit a specific character pattern to or through the modem in a loop and then compare the character pattern received with the pattern transmitted.

write. To make a permanent or transient recording of data in a storage device or on a data medium.

write control character (WCC). A character used in conjunction with a Write command to specify that a particular operation, or combination of operations, is to be performed at a display station or printer.

Write Structured Field (WSF) command. A command used to transmit data in structured field format.

WSF. Write Structured Field.

X

X.21. In data communication, a recommendation of the International Telegraph and Telephone Consultative Committee (CCITT) that defines the interface between data terminal equipment and public data networks for digital leases and circuit switched synchronous services.

X.21 communication adapter. A communication adapter that can combine and send information on one line at speeds up to 64 kbps, and that conforms to CCITT X.21 standards.

X.25. In data communication, a recommendation of the CCITT that defines the interface between data terminal equipment and packet switching networks.

XID. Exchange identification.

3270 data stream. (1) The commands, control codes, orders, attributes, and data or structured fields for 3270 devices, that are transmitted inbound to an application program or outbound to a terminal. (2) Data being transferred from or to an allocated primary or tertiary device, or to the host system, as a continuous stream of data and 3270 Information Display System control elements in character form.

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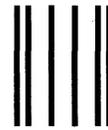
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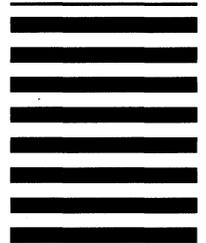
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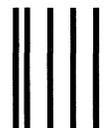
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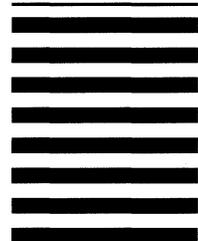
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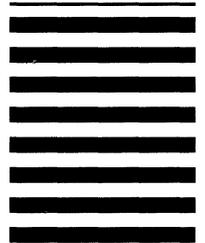
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