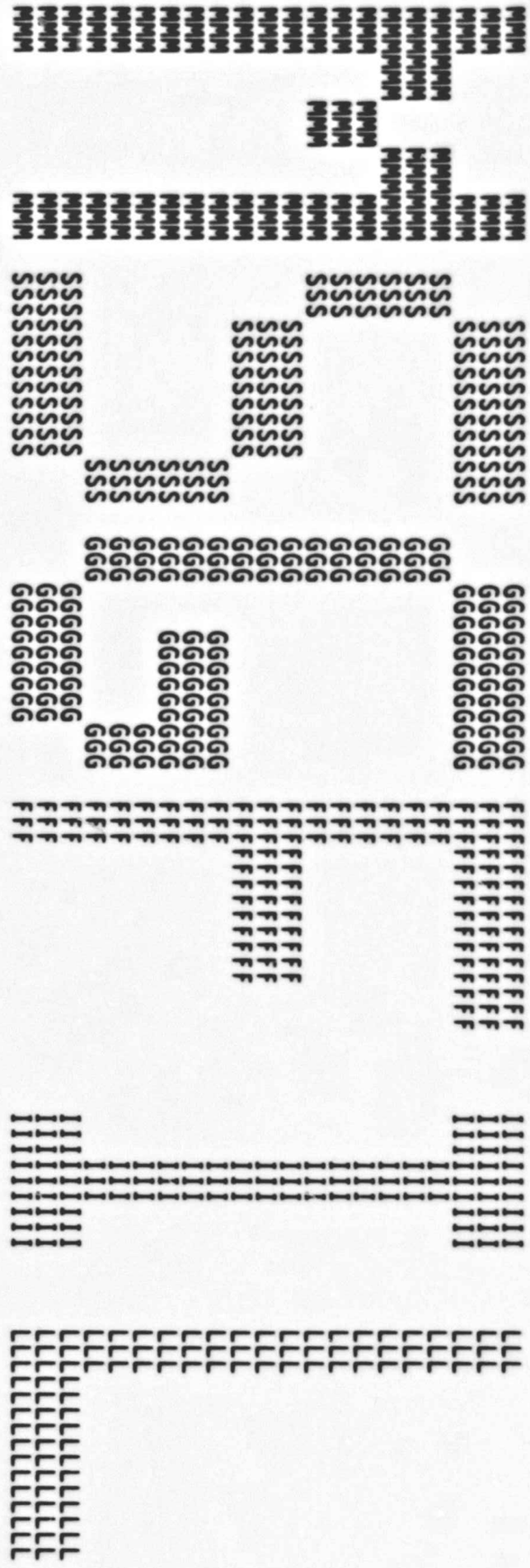

H 5

FILEID**CVTMSG

```
  CCCCCCCC  VV      VV  TTTTTTTTTT  MM      MM   SSSSSSSS   GGGGGGGG
  CCCCCCCC  VV      VV  TTTTTTTTTT  MM      MM   SSSSSSSS   GGGGGGGG
CC          VV      VV      TT      MMMM  MMMM  SS         GG
CC          VV      VV      TT      MMMM  MMMM  SS         GG
CC          VV      VV      TT      MM  MM  MM  SS         GG
CC          VV      VV      TT      MM  MM  MM  SS         GG
CC          VV      VV      TT      MM      MM    SSSSSS   GG
CC          VV      VV      TT      MM      MM    SSSSSS   GG
CC          VV      VV      TT      MM      MM          SS GG  GGGGGG
CC          VV      VV      TT      MM      MM          SS GG  GGGGGG
CC            VV  VV        TT      MM      MM          SS GG      GG      ....
CC            VV  VV        TT      MM      MM          SS GG      GG      ....
  CCCCCCCC      VV          TT      MM      MM  SSSSSSSS     GGGGGG        ....
  CCCCCCCC      VV          TT      MM      MM  SSSSSSSS     GGGGGG        ....

LL              IIIIII      SSSSSSSS
LL              IIIIII      SSSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL      IIIIII    SSSSSSSS
LLLLLLLLLL      IIIIII    SSSSSSSS
```

NEX

PRO

ENT

VAR

ARR

LAB

```
0001          PROGRAM CVTMSG
0002    C
0003    C Version:      'V04-000'
0004    C
0005    C*****************************************************************************
0006    C*                                                                           *
0007    C*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
0008    C*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                   *
0009    C*  ALL RIGHTS RESERVED.                                                     *
0010    C*                                                                           *
0011    C*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED    *
0012    C*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE   *
0013    C*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER    *
0014    C*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY    *
0015    C*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY    *
0016    C*  TRANSFERRED.                                                             *
0017    C*                                                                           *
0018    C*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE    *
0019    C*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT    *
0020    C*  CORPORATION.                                                             *
0021    C*                                                                           *
0022    C*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS    *
0023    C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0024    C*                                                                           *
0025    C*                                                                           *
0026    C*****************************************************************************
0027
0028    C---
0029    C
0030    C Abstract:
0031    C
0032    C The following is a mutation of SYSMSG.FOR for the purpose of translating
0033    C MDL message file data into syntax appropriate for the Message File Compiler
0034    C
0035    C Author: Tim Halvorsen, Dec 1980
0036    C
0037    C Modified by:
0038    C
0039    C       V004    TMH0004         Tim Halvorsen   20-Jan-1981
0040    C               Output /MACRO whenever the macro suffix is non-null
0041    C               as well as when the macro name is different.
0042    C               Use macro name prefix on single C constructs with $C_
0043    C               infix rather than no prefix at all, which is incorrect.
0044    C
0045    C       V003    TMH0003         Tim Halvorsen   19-Jan-1981
0046    C               Accept macro name suffixes and output them correctly
0047    C               when generating a /MACRO=macnam construct.
0048    C
0049    C       V002    TMH0002         Tim Halvorsen   22-Oct-1980
0050    C               Fix OPEN_OUTPUT to extract file name portion of output
0051    C               filespec correctly when no directory portion is present.
0052    C
0053    C       001     TMH0001         Tim Halvorsen   10-Mar-1980
0054    C               Generate .LITERAL statement for MDL C constructs
0055    C---
0056
0057    C
```

```
0058     C BASIC VARIABLES USED:
0059     C
0060     C        FACILITIES = ARRAY OF FACILITY NAME STRINGS (INDEXED BY FACNUM)
0061     C        MACRO_NAME = MACRO NAME STRING
0062     C        MACRO_SUFFIX = MACRO SUFFIX STRING
0063     C        PREFIX = SYMBOL PREFIX STRING
0064     C        NAME = NAME RETURNED BY GETIDENT (CURRENT TOKEN)
0065     C        COL = CURRENT COLUMN NUMBER
0066     C        LINE = CURRENT LINE
0067     C        SYMBOL_NAME = MESSAGE GLOBAL SYMBOL NAME
0068     C        NUM = VALUE RETURNED BY GETNUM
0069     C        OUTLINE = OUTPUT LINE (NEW FORMAT)
0070     C        OUTCOL = OUTPUT COLUMN
0071     C
0072              INCLUDE 'SRC$:CVTMSGCOM'
0116              LOGICAL*1 GETNUM,GETIDENT,GENCMP,UNBLNK,GETLIN,NEXTFILE
0117     C
0118     C        READ THE FACILITY NAME TABLE (SUBSYSIDS.DAT)
0119     C
0120              CALL MAKSUBS
0121     C
0122     C        OPEN THE LIST OF FILE SPECIFICATIONS AND OUTPUT FILE
0123     C
0124              CALL SETUPFILE
0125              ERRCNT=0
0126     C
0127     C        OPEN THE NEXT MDL FILE TO PROCESS
0128     C
0129     60       IF (NEXTFILE().EQ..FALSE.) GOTO 2000
0130              CALL OPEN_OUTPUT
0131     70       MACRO_NAME(1)=0
0132              LASTPREFIX(1)=0
0133              LASTFACNUM=-1
0134     C
0135     C        EXAMINE THE NEXT LINE IN THE MDL FILE
0136     C
0137     100      IF (GETLIN().EQ..FALSE.) GOTO 60
0138              IF (UNBLNK().EQ.';') GOTO 100
0139              IF (UNBLNK().EQ.0) GOTO 100
0140              IF (GETIDENT().EQ..FALSE.) GOTO 90
0141              IF (GENCMP(%REF('$STRUCT'),NAME)) GOTO 200
0142              IF (GENCMP(%REF('C'),NAME)) GOTO 300
0143              IF (GENCMP(%REF('K'),NAME)) GOTO 300
0144              IF (GENCMP(%REF('V'),NAME)) GOTO 400
0145              IF (GENCMP(%REF('F'),NAME)) GOTO 100
0146              IF (GENCMP(%REF('S'),NAME)) GOTO 100
0147              IF (GENCMP(%REF('L'),NAME)) GOTO 100
0148              IF (GENCMP(%REF('M'),NAME)) GOTO 100
0149              IF (GENCMP(%REF('P'),NAME)) GOTO 100
0150     90       CALL ERROR(1,SYNTAX)
0151              GOTO 100
0152
0153     200      CALL STRUCT
0154              GOTO 70
0155
0156     300      CALL EVALC
0157              GOTO 100
```

```
0158
0159     400      CALL SKIPV
0160              GOTO 100
0161
0162     2000     CLOSE (UNIT=3)
0163              IF (ERRCNT.NE.0) THEN
0164                      TYPE 2299,ERRCNT
0165              END IF
0166              CALL EXIT
0167
0168     2299     FORMAT(' Errors detected:',I5)
0169              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	329	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	50	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	144	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	65071	

ENTRY POINTS

Address	Type	Name
0-00000000		CVTMSG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	L*1	GETNUM	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000004	I*4	SYNTAX									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000001D	60	0-00000033	70	0-000000E0	90	0-00000046	100	0-000000EB	200	0-000000F5	300
0-000000FF	400	0-00000109	2000	1-0000001C	2299'						

GET

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	ERROR		EVALC		FOR$CLOSE		FOR$EXIT	L*1	GENCMP	L*1	GETIDENT
L*1	GETLIN		MAKSUBS	L*1	NEXTFILE		OPEN_OUTPUT		SETUPFILE		SKIPV
	STRUCT	L*1	UNBLNK								

GET

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```
0001     C
0002     C       CONSTRUCT THE FACILITIES ARRAY BY READING THE
0003     C       FILE 'SUBSYSIDS'
0004     C
0005             SUBROUTINE MAKSUBS
0006             INCLUDE 'SRC$:CVTMSGCOM'
0050             LOGICAL*1 FACNAM(MAXSYMSIZ)
0051
0052             DO 10 I=1,MAXFAC+1
0053     10      FACILITIES(1,I)=0
0054
0055             OPEN (UNIT=1,NAME='SUBSYSIDS',TYPE='OLD',READONLY,ERR=900)
0056
0057     100     READ(1,99,END=400) FACNUM,FACLEN,(FACNAM(I),I=1,FACLEN)
0058     99      FORMAT(I5,Q,120A1)
0059             IF(FACLEN.GT.MAXSYMSIZ-1) THEN
0060                     FACNAM(MAXSYMSIZ)=0
0061                     CALL ERROR(14,SUBNAMLONG)
0062             END IF
0063             FACNAM(FACLEN+1)=0
0064             CALL MOVNAM(FACNAM,FACILITIES(1,FACNUM+1))
0065             GOTO 100
0066
0067     400     CLOSE(UNIT=1)
0068             RETURN
0069
0070     900     CALL ERROR(15,FILNOTFND)
0071             RETURN
0072             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	190	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	26	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	136	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64900	

ENTRY POINTS

Address	Type	Name
0-00000000		MAKSUBS

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000028	I*4	FACLEN	2-00000024	I*4	FACNUM
2-00000030	I*4	FILNOTFND	2-00000020	I*4	I	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-0000002C	I*4	SUBNAMLONG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
2-00000000	L*1	FACNAM	32	(32)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	10	1-00000012	99'	0-00000030	100	0-000000AC	400	0-000000B5	900

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name
	ERROR		FOR$CLOSE		FOR$OPEN		MOVNAM

```
0001     C
0002     C       OPEN THE FILE CONTAINING THE LIST OF FILES
0003     C
0004             SUBROUTINE SETUPFILE
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             OPEN (UNIT=3,NAME='FILES',TYPE='OLD',READONLY,ERR=100)
0050             RETURN
0051     100     CALL ERROR(9,FILNOTFND)
0052             RETURN
0053             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	30	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	10	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	56	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64644	

ENTRY POINTS

Address	Type	Name
0-00000000		SETUPFILE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	I*4	FILNOTFND	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
0-00000015	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR		FOR$OPEN

000
000
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005
005

```
0001     C
0002     C       OPEN THE NEXT FILE IN THE LIST OF FILES TO PROCESS
0003     C
0004             LOGICAL FUNCTION NEXTFILE*1
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049     50      CLOSE (UNIT=1)
0050             NEXTFILE=.FALSE.
0051             READ(3,99,END=300) I,FSPEC
0052     99      FORMAT(Q,80A1)
0053             FSPEC(I+1)=0
0054             OPEN (UNIT=1,NAME=FSPEC,TYPE='OLD',READONLY,ERR=100)
0055             NEXTFILE=.TRUE.
0056     300     RETURN
0057     100     CALL ERROR(10,FILNOTFND)
0058             GOTO 50
0059             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	109	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	10	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	80	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64747	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	NEXTFILE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000008	I*4	FILNOTFND	2-00000004	I*4	I
4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label
0-00000009	50	1-00000004	99'	0-00000063	100	0-0000005E	300

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	ERROR		FOR$CLOSE		FOR$OPEN

```
0001     C
0002     C       PROCESS MESSAGE DEFINITION LINE
0003     C
C004             SUBROUTINE GETMSG
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 TEXT(128)
0050             LOGICAL*1 GETNUM,GETIDENT,GENCMP,UNBLNK,IDENT
0051             LOGICAL*1 IDSTR(20)
0052             LOGICAL*1 VECT(7)
0053             LOGICAL*1 NEED_BLANK
0054             LOGICAL*1 FACNAM(MAXSYMSIZ)
0055             LOGICAL*1 LITERAL_NAME(MAXSYMSIZ)
0056     C
0057     C       OUTPUT .LITERAL IF ";MSG" NOT FOUND TO SIGNIFY MESSAGE DEFINITION
0058     C
0059             CALL CONCAT(PREFIX,SYMBOL_NAME,LITERAL_NAME)
0060             COL=COL+1
0061             IF (.NOT.GETIDENT().OR..NOT.GENCMP(NAME,%REF('MSG'))) THEN
0062                     CALL CONCAT(PREFIX,%REF('FACILITY'),NAME)
0063                     IF(IDENT(NAME,LITERAL_NAME)) RETURN
0064                     CALL BUFFER(%REF('       .LITERAL        '))
0065                     CALL BUFFER(LITERAL_NAME)
0066                     CALL BUFFER(%REF('='))
0067                     CALL BUFNUM(CODE)
0068                     CALL OUTPUT_LINE
0069                     RETURN
0070             END IF
0071     C
0072     C       IF THE FACILITY LINE HAS NOT YET BEEN OUTPUT, THEN
0073     C       OUTPUT IT NOW.
0074     C
0075             NEED_BLANK=.FALSE.
0076             FACNUM=(CODE.AND.'0FFF0000'X)/2**16
0077             CALL MOVNAM(FACILITIES(1,FACNUM+1),FACNAM)
0078             IF(FACNUM.EQ.LASTFACNUM.AND.IDENT(PREFIX,LASTPREFIX)) GOTO 20
0079             IF(IDENT(MACRO_NAME,%REF('SHR'))) CALL MOVNAM(MACRO_NAME,FACNAM)
0080             CALL BUFFER(%REF('       .FACILITY       '))
0081             CALL BUFFER(FACNAM)
0082             CALL BUFFER(%REF(','))
0083             CALL BUFNUM(FACNUM)
0084             IF ((CODE.AND.'8000'X).EQ.0) CALL BUFFER(%REF(' /SHARED'))
0085             IF (CODE.GE.0) CALL BUFFER(%REF(' /SYSTEM'))
0086             CALL CONCAT(FACNAM,%REF('$_'),NAME)
0087             IF (.NOT.IDENT(NAME,PREFIX)) THEN
0088                     CALL BUFFER(%REF(' /PREFIX='))
0089                     CALL BUFFER(PREFIX)
0090             END IF
0091             IF (.NOT.IDENT(FACNAM,MACRO_NAME).OR.LENGTH(MACRO_SUFFIX).NE.0) THEN
0092                     CALL BUFFER(%REF(' /MACRO='))
0093                     CALL BUFFER(%REF('$'))
0094                     CALL BUFFER(MACRO_NAME)
0095                     IF (LENGTH(MACRO_SUFFIX).NE.0) THEN
0096                             CALL BUFFER(MACRO_SUFFIX)
0097                     ELSE
0098                             CALL BUFFER(%REF('DEF'))
0099                     END IF
0100             END IF
```

```
0101            CALL OUTPUT_LINE
0102            CALL MOVNAM(PREFIX,LASTPREFIX)
0103            LASTFACNUM=FACNUM
0104            CURNUM=1
0105            CURSEV=7
0106            NEED_BLANK=.TRUE.
0107    20      CONTINUE
0108    C
0109    C       IF THE SEVERITY HAS CHANGED, OUTPUT A SEVERITY STATEMENT
0110    C
0111            IF ((CODE.AND.7).NE.CURSEV) THEN
0112                    CURSEV=CODE.AND.7
0113                    IF (.NOT.NEED_BLANK) CALL OUTPUT_LINE
0114                    CALL BUFFER(%REF('      .SEVERITY       '))
0115                    IF (CURSEV.EQ.0) CALL BUFFER(%REF('WARNING'))
0116                    IF (CURSEV.EQ.1) CALL BUFFER(%REF('SUCCESS'))
0117                    IF (CURSEV.EQ.2) CALL BUFFER(%REF('ERROR'))
0118                    IF (CURSEV.EQ.3) CALL BUFFER(%REF('INFORMATIONAL'))
0119                    IF (CURSEV.EQ.4) CALL BUFFER(%REF('FATAL'))
0120                    IF (CURSEV.GE.5 .AND. CURSEV.LE.7) CALL BUFFER(%REF('?UNKNOWN?'))
0121                    CALL OUTPUT_LINE
0122                    NEED_BLANK=.TRUE.
0123            END IF
0124    C
0125    C       IF THE MESSAGE NUMBER IS NOT PREV+1, THEN OUTPUT A .BASE STATEMENT
0126    C
0127            IF ((CODE.AND.'7FF8'X)/2**3.NE.CURNUM) THEN
0128                    CURNUM = (CODE.AND.'7FF8'X)/2**3
0129                    IF (.NOT.NEED_BLANK) CALL OUTPUT_LINE
0130                    CALL BUFFER(%REF('      .BASE           '))
0131                    CALL BUFNUM(CURNUM)
0132                    CALL OUTPUT_LINE
0133                    NEED_BLANK=.TRUE.
0134            END IF
0135            CURNUM = CURNUM + 1
0136
0137            IF(NEED_BLANK) CALL OUTPUT_LINE
0138
0139            DO 50 I=1,7
0140    50      VECT(I)=0
0141            GOTO 200
0142    150     IF (UNBLNK().NE.',') GOTO 1000
0143            COL=COL+1
0144    200     IF (UNBLNK().EQ.'<') GOTO 800
0145            IF (GETIDENT()) GOTO 300
0146    250     CALL ERROR(11,BADMSGSYNTAX)
0147            GOTO 2000
0148    300     IF (GENCMP(NAME,%REF('IDENT'))) GOTO 500
0149    C       IF (GENCMP(NAME,%REF('DETAIL'))) GOTO 550
0150    C       IF (GENCMP(NAME,%REF('USERVAL'))) GOTO 600
0151            IF (GENCMP(NAME,%REF('FAOCNT'))) GOTO 650
0152    C       IF (GENCMP(NAME,%REF('LANG'))) GOTO 700
0153            GOTO 250
0154    500     IF (UNBLNK().NE.'=') GOTO 250
0155            COL=COL+1
0156            IF (GETIDENT().EQ..FALSE.) GOTO 250
0157            VECT(7)=LENGTH(NAME)
```

```
0158            CALL MOVNAM(NAME,IDSTR)
0159            GOTO 150
0160    550     ASSIGN 570 TO RETURN
0161            GOTO 750
0162    570     VECT(1)=NUM
0163            GOTO 150
0164    600     ASSIGN 620 TO RETURN
0165            GOTO 750
0166    620     VECT(3)=NUM
0167            GOTO 150
0168    650     ASSIGN 670 TO RETURN
0169            GOTO 750
0170    670     VECT(2)=NUM
0171            GOTO 150
0172    700     ASSIGN 720 TO RETURN
0173            GOTO 750
0174    720     VECT(5)=NUM
0175            GOTO 150
0176
0177    750     IF (UNBLNK().NE.'=') GOTO 250
0178            COL=COL+1
0179            IF (GETNUM().EQ..FALSE.) GOTO 250
0180            GOTO RETURN
0181
0182    800     COL=COL+1
0183            IF (IDFLAG.EQ..FALSE..OR.VECT(7).NE.0) GOTO 830
0184            VECT(7)=LENGTH(SYMBOL_NAME)
0185            DO 820 I=1,MAXSYMSIZ
0186            IDSTR(I)=SYMBOL_NAME(I)
0187            IF (IDSTR(I).EQ.0) GOTO 830
0188    820     CONTINUE
0189            CALL ERROR(12,IDTOOLONG)
0190    830     TMPPTR=1
0191    845     IF (LINE(COL).EQ.'>') GOTO 900
0192    850     TEXT(TMPPTR)=LINE(COL)
0193            TMPPTR=TMPPTR+1
0194            COL=COL+1
0195            IF (COL.LE.120) GOTO 845
0196            GOTO 250
0197    900     COL=COL+1
0198            IF (LINE(COL).EQ.'>') GOTO 850
0199            TEXT(TMPPTR)=0
0200            GOTO 150
0201
0202    1000    IF (UNBLNK().NE.';'.AND.UNBLNK().NE.0) GOTO 250
0203            CALL BUFFER(%REF('      '))
0204            CALL BUFFER(SYMBOL_NAME)
0205            IF (OUTCOL.LT.9) THEN
0206                    CALL BUFFER(%REF('               '))
0207            ELSE
0208                    CALL BUFFER(%REF('      '))
0209            END IF
0210            DO 1010 I=1,LENGTH(TEXT)
0211            IF (TEXT(I).EQ.'>'.OR.TEXT(I).EQ.'<') GOTO 1020
0212    1010    CONTINUE
0213            CALL BUFFER(%REF('<'))
0214            CALL BUFFER(TEXT)
```

```
0215              CALL BUFFER(%REF('>'))
0216              GOTO 1030
0217      1020    CALL BUFFER(%REF('"'))
0218              CALL BUFFER(TEXT)
0219              CALL BUFFER(%REF('"'))
0220      1030    IF (VECT(2).NE.0) THEN
0221                      CALL BUFFER(%REF(' /FAO='))
0222                      CALL BUFNUM(VECT(2))
0223              END IF
0224              IF (VECT(7).NE.0) THEN
0225                      CALL BUFFER(%REF(' /IDENT='))
0226                      CALL BUFFER(IDSTR)
0227              END IF
0228              CALL OUTPUT_LINE
0229
0230      2000    RETURN
0231              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	1323	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	211	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	764	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	66846	

ENTRY POINTS

Address	Type	Name
0-00000000		GETMSG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-000000E4	I*4	BADMSGSYNTAX	4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL
6-00000088	I*4	CURNUM	6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-000000DC	I*4	FACNUM
2-000000E0	I*4	I	2-000000EC	I*4	IDFLAG	2-000000F0	I*4	IDTOOLONG	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-000000DB	L*1	NEED_BLANK	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG	2-000000E8	I*4	RETURN	2-000000F4	I*4	TMPPTR			

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
2-0000009B	L*1	FACNAM	32	(32)
3-000000E4	L*1	FSPEC	80	(80)
2-00000080	L*1	IDSTR	20	(20)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
2-000000BB	L*1	LITERAL_NAME	32	(32)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)
2-00000000	L*1	TEXT	128	(128)
2-00000094	L*1	VECT	7	(7)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000001AB	20	**	50	0-000002A8	150	0-000002BE	200	0-000002D9	250	0-000002E5	300
0-000002FF	500	**	550	0-00000337	570	**	600	0-00000342	620	0-0000034D	650
0-00000357	670	**	700	0-00000362	720	0-0000036D	750	0-0000039D	800	**	820
0-000003DC	830	0-000003E0	845	0-000003F1	850	0-00000420	900	0-00000443	1000	**	1010
0-000004DA	1020	0-000004F5	1030	0-0000052A	2000						

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BUFFER		BUFNUM		CONCAT		ERROR	L*1	GENCMP	L*1	GETIDENT
L*1	GETNUM	L*1	IDENT	I*4	LENGTH		MOVNAM		OUTPUT_LINE	L*1	UNBLNK

```
0001    C
0002    C       PROCESS MDL $STRUCT STATEMENT
0003    C
0004            SUBROUTINE STRUCT
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 GETIDENT,UNBLNK,GETNUM,GETLIN
0050            IF (GETIDENT().EQ..FALSE.) GOTO 100
0051            CALL MOVNAM(NAME,MACRO_NAME)
0052            MACRO_SUFFIX(1)=0
0053    100     IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 300
0054            IF (UNBLNK().NE.',') GOTO 200
0055            COL=COL+1
0056            IF (GETIDENT().EQ..FALSE.) GOTO 200
0057            CALL MOVNAM(NAME,MACRO_SUFFIX)
0058            IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 300
0059    200     CALL ERROR(1,SYNTAX)
0060    300     IF (GETLIN().EQ..FALSE.) GOTO 800
0061            IF (UNBLNK().EQ.';') GOTO 300
0062            IF (UNBLNK().EQ.0) GOTO 300
0063            IF (UNBLNK().EQ.'E') GOTO 900
0064            IF (UNBLNK().EQ.'C') GOTO 500
0065            IF (UNBLNK().EQ.'K') GOTO 500
0066            IF (UNBLNK().EQ.'V') GOTO 600
0067            IF (UNBLNK().EQ.'F') GOTO 300
0068            IF (UNBLNK().EQ.'S') GOTO 300
0069            IF (UNBLNK().EQ.'L') GOTO 300
0070            IF (UNBLNK().EQ.'M') GOTO 300
0071            IF (UNBLNK().EQ.'P') GOTO 300
0072            CALL ERROR(7,UNRECOGNIZE)
0073            GOTO 300
0074
0075    500     COL=COL+1
0076            CALL EVALC
0077            GOTO 300
0078
0079    600     CALL SKIPV
0080            GOTO 300
0081
0082    800     CALL ERROR(8,MISSINGEND)
0083            RETURN
0084
0085    900     CALL BUFFER(%REF('       .END'))
0086            CALL OUTPUT_LINE
0087            RETURN
0088            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	372	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	18	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	92	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	65030	

ENTRY POINTS

Address	Type	Name
0-00000000		STRUCT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	L*1	GETNUM	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-0000000C	I*4	MISSINGEND	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG	2-00000004	I*4	SYNTAX	2-00000008	I*4	UNRECOGNIZE			

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000023	100	0-0000007C	200	0-00000084	300	0-00000141	500	0-00000151	600	0-0000015B	800
0-00000164	900										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BUFFER		ERROR		EVALC	L*1	GETIDENT	L*1	GETLIN		MOVNAM
	OUTPUT_LINE		SKIPV	L*1	UNBLNK						

```
0001     C
0002     C       EVALUATE MDL C STATEMENT
0003     C
0004             SUBROUTINE EVALC
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 GENCMP,UNBLNK
0050             IF (UNBLNK().EQ.'<') GOTO 100
0051             CALL GETCVAL
0052             RETURN
0053     100     COL=COL+1
0054             CALL GETCLST
0055             RETURN
0056             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	43	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	12	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64603	

ENTRY POINTS

Address	Type	Name
0-00000000		EVALC

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	L*1	GENCMP	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
0-0000001D	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	GETCLST		GETCVAL	L*1	UNBLNK

```
0001     C
0002     C       ROUTINE TO HANDLE MDL C<[NAME][,[CON][,[BASE][,INCR]]] SYNTAX
0003     C
0004             SUBROUTINE GETCLST
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 GETIDENT,UNBLNK,GETNUM,GETLIN
0050             BASE=0
0051             INCR=1
0052             CALL MOVNAM(MACRO_NAME,PREFIX)
0053             IF (GETIDENT().EQ..FALSE.) GOTO 100
0054             CALL MOVNAM(NAME,PREFIX)
0055     100     IF (UNBLNK().NE.',') GOTO 200
0056             COL=COL+1
0057             IF (GETIDENT().EQ..FALSE.) GOTO 200
0058             IF (LENGTH(PREFIX)+LENGTH(NAME).GE.MAXSYMSIZ) THEN
0059                     CALL ERROR(2,NAMTOOLONG)
0060                     PREFIX(1)=0
0061             END IF
0062             CALL CONCAT(PREFIX,NAME,PREFIX)
0063             GOTO 250
0064     200     CALL CONCAT(PREFIX,%REF('$C_'),PREFIX)
0065     250     IF (UNBLNK().NE.',') GOTO 400
0066             COL=COL+1
0067             IF (GETNUM()) BASE=NUM
0068             IF (UNBLNK().NE.',') GOTO 400
0069             COL=COL+1
0070             IF (GETNUM().EQ..FALSE.) GOTO 500
0071             INCR=NUM
0072     400     IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 700
0073     500     CALL ERROR(1,SYNTAX)
0074     700     IF (GETLIN().NE..TRUE.) GOTO 1500
0075             IF (UNBLNK().EQ.'>') GOTO 1600
0076     C       IF (GETIDENT().NE..TRUE.) GOTO 900
0077             IF (.NOT.GETIDENT()) GOTO 700
0078             CALL MOVNAM(NAME,SYMBOL_NAME)
0079             IF (UNBLNK().EQ.',') GOTO 800
0080             CODE=BASE
0081             BASE=BASE+INCR
0082             GOTO 850
0083     800     IF (BASE.NE.0.OR.INCR.NE.1) CALL ERROR(5,BASE)
0084             COL=COL+1
0085             IF (GETNUM()) GOTO 820
0086             CALL ERROR(3,NONUMBER)
0087     820     CODE=NUM
0088     850     CONTINUE
0089     900     IF (UNBLNK().NE.';'.AND.UNBLNK().NE.0) GOTO 500
0090             CALL GETMSG
0091             GOTO 700
0092     1500    CALL ERROR(6,NOCLOSEANGLE)
0093     1600    RETURN
0094             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	422	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	24	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	176	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	65170	

ENTRY POINTS

Address	Type	Name
0-00000000		GETCLST

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000000	I*4	BASE	4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL
6-00000088	I*4	CURNUM	6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000004	I*4	INCR
4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM	2-00000008	I*4	NAMTOOLONG	2-00000014	I*4	NOCLOSEANGLE
2-00000010	I*4	NONUMBER	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-0000000C	I*4	SYNTAX									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002B	100	0-0000007C	200	0-00000084	250	0-000000D0	400	0-000000E9	500	0-000000F1	700
0-0000013E	800	0-0000016B	820	0-00000176	850	**	900	0-0000019C	1500	0-000001A5	1600

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CONCAT		ERROR	L*1	GETIDENT	L*1	GETLIN		GETMSG	L*1	GETNUM
I*4	LENGTH		MOVNAM	L*1	UNBLNK						

```
0001     C
0002     C       ROUTINE TO HANDLE MDL "C SYMBOL,VALUE" SYNTAX
0003     C
0004             SUBROUTINE GETCVAL
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 GETIDENT,UNBLNK,GETNUM
0050             CALL CONCAT(MACRO_NAME,%REF('$C_'),PREFIX)
0051             IF (GETIDENT().EQ..FALSE.) GOTO 100
0052             CALL MOVNAM(NAME,SYMBOL_NAME)
0053             IF (UNBLNK().NE.',') GOTO 100
0054             COL=COL+1
0055             IF (GETNUM().EQ..FALSE.) GOTO 100
0056             CODE=NUM
0057             IF (UNBLNK().NE.';'.AND.UNBLNK().NE.0) GOTO 100
0058             CALL GETMSG
0059             RETURN
0060     100     CALL ERROR(1,SYNTAX)
0061             RETURN
0062             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	121	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	52	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64729	

ENTRY POINTS

Address	Type	Name
0-00000000		GETCVAL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-00000000	I*4	SYNTAX

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
0-00000070	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CONCAT		ERROR	L*1	GETIDENT		GETMSG	L*1	GETNUM		MOVNAM
L*1	UNBLNK										

```
0001     C
0002     C       SKIP ALL LINES WHICH ARE PART OF THE MDL V STATEMENT
0003     C
0004             SUBROUTINE SKIPV
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 GETLIN,UNBLNK
0050     100     IF (GETLIN().NE.TRUE.) GOTO 300
0051             IF (UNBLNK().EQ.'>') RETURN
0052             GOTO 100
0053     300     CALL ERROR(6,NOCLOSEANGLE)
0054             RETURN
0055             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	46	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	24	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64622	

ENTRY POINTS

Address	Type	Name
0-00000000		SKIPV

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
2-00000000	I*4	NOCLOSEANGLE	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
0-00000009	100	0-00000025	300

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	ERROR	L*1	GETLIN	L*1	UNBLNK

```
0001    C
0002    C       OUTPUT AN ERROR MESSAGE
0003    C
0004            SUBROUTINE ERROR(MSGID)
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049    C OUTPUT CONTENTS OF 'LINE' VIA PRINT
0050    C AND ERROR MESSAGE
0051            TYPE 99
0052    99      FORMAT('$%SYSMSG-E-')
0053            GOTO (1,2,3,4,5,6,7,8,9,10,11,12,13,14,15),MSGID
0054            TYPE 1000
0055            GOTO 200
0056    1000    FORMAT('+error in error processing')
0057    1       TYPE 101
0058            GOTO 200
0059    101     FORMAT('+syntax error')
0060    2       TYPE 102
0061            GOTO 200
0062    102     FORMAT('+symbol or string too long')
0063    3       TYPE 103
0064            GOTO 200
0065    103     FORMAT('+missing value')
0066    4       TYPE 104
0067            GOTO 200
0068    104     FORMAT('+line too long')
0069    5       TYPE 105
0070            GOTO 200
0071    105     FORMAT('+start or increment value error')
0072    6       TYPE 106
0073            GOTO 200
0074    106     FORMAT('+missing close angle bracket')
0075    7       TYPE 107
0076            GOTO 200
0077    107     FORMAT('+unrecognizable statement type')
0078    8       TYPE 108
0079            GOTO 200
0080    108     FORMAT('+missing end statement')
0081    9       TYPE 109
0082            GOTO 210
0083    109     FORMAT('+can''t open FILES.DAT')
0084    10      TYPE 110,FSPEC
0085            GOTO 210
0086    110     FORMAT('+can''t open ',80A1)
0087    11      TYPE 111
0088            GOTO 200
0089    111     FORMAT('+syntax error in message definition')
0090    12      TYPE 112
0091            GOTO 200
0092    112     FORMAT('+message identifier too long')
0093    13      TYPE 113
0094            GOTO 200
0095    113     FORMAT('+message identified by value is already in use')
0096    14      TYPE 114
0097            GOTO 200
0098    114     FORMAT('+facility name too long')
0099    15      TYPE 115
0100            GOTO 210
```

```
0101     115       FORMAT('+can''t open SRCD$:[1,2]SUBSYSIDS.DAT')
0102     200       TYPE 97,FSPEC
0103     97        FORMAT(11x,'in file ',80a1)
0104               TYPE 98,(LINE(K),K=1,LENGTH(LINE))
0105     98        FORMAT(11x,120A1)
0106     210       ERRCNT=ERRCNT+1
0107               END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	591	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	495	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	65662	

ENTRY POINTS

Address	Type	Name
0-00000000		ERROR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	2-00000000	I*4	K
6-00000090	I*4	LASTFACNUM	AP-0000004a	I*4	MSGID	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000005D	1	0-00000077	2	0-00000091	3	0-000000AB	4	0-000000C5	5	0-000000DF	6
0-000000F9	7	0-00000113	8	0-0000012D	9	0-00000147	10	0-0000016B	11	0-00000184	12
0-0000019D	13	0-000001B6	14	0-000001CF	15	1-000001D7	97'	1-000001E8	98'	1-00000000	99'
1-0000002B	101'	1-0000003B	102'	1-00000058	103'	1-00000069	104'	1-0000007A	105'	1-0000009C	106'

```
 1-000000BB  107'      1-000000DC  108'      1-000000F5  109'      1-0000010D  110'      1-00000120  111'      1-00000146  112'
 1-00000165  113'      1-00000196  114'      1-000001B0  115'      0-000001E8  200       0-00000248  210       1-0000000E  1000'
```

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
I*4	LENGTH

```
0001     C
0002     C       EVALUATE A CONSTANT EXPRESSION
0003     C
0004             LOGICAL FUNCTION GETNUM*1
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 GETVAL
0050             LOGICAL*1 BINOPS(8)
0051             DATA BINOPS/'+','-','*','/','&','!','\','@'/
0052             GETNUM=.FALSE.
0053             NUM=0
0054             IF (GETVAL().EQ..FALSE.) GOTO 300
0055             GETNUM=.TRUE.
0056             NUM=BINVAL
0057     100     DO 200 I=1,8
0058             IF (LINE(COL).EQ.BINOPS(I)) GOTO 400
0059     200     CONTINUE
0060     300     RETURN
0061     400     COL=COL+1
0062             IF (GETVAL().EQ..TRUE.) GOTO 500
0063             CALL ERROR(3,MISSINGVALUE)
0064             GOTO 300
0065     500     GOTO (610,620,630,640,650,660,670,680),I
0066     610     NUM=NUM+BINVAL
0067             GOTO 100
0068     620     NUM=NUM-BINVAL
0069             GOTO 100
0070     630     NUM=NUM*BINVAL
0071             GOTO 100
0072     640     NUM=NUM/BINVAL
0073             GOTO 100
0074     650     NUM=NUM.AND.BINVAL
0075             GOTO 100
0076     660     NUM=NUM.OR.BINVAL
0077             GOTO 100
0078     670     NUM=NUM.XOR.BINVAL
0079             GOTO 100
0080     680     NUM=NUM*2**BINVAL
0081             GOTO 100
0082             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	246	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64838	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETNUM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-0000000C	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-00000010	I*4	MISSINGVALUE	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	L*1	BINOPS	8	(8)
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002D	100	**	200	0-0000004A	300	0-0000004F	400	0-0000006B	500	0-0000007F	610
0-0000008C	620	0-00000099	630	0-000000A6	640	0-000000B4	650	0-000000C5	660	0-000000D3	670
0-000000E1	680										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR	L*1	GETVAL

```
0001    C
0002    C       GET A TERM VALUE (USED BY GETNUM)
0003    C
0004            LOGICAL FUNCTION GETVAL*1
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 UNBLNK,TMP
0050            SIGN=0
0051            BINVAL=0
0052            GETVAL=.FALSE.
0053            IF (UNBLNK().NE.'-') GOTO 100
0054            SIGN=1
0055            COL=COL+1
0056    100     IF (LINE(COL).NE.'^') GOTO 180
0057            IF (LINE(COL+1).NE.'X') GOTO 180
0058            DO 150 COL=COL+2,120
0059            TMP=LINE(COL)
0060            IF ((TMP.LE.'9').AND.(TMP.GE.'0')) GOTO 130
0061            IF ((TMP.GT.'F').OR.(TMP.LT.'A')) GOTO 400
0062            TMP=TMP-'A'+'9'+1
0063    130     GETVAL=.TRUE.
0064            BINVAL=BINVAL*16+(TMP-'0')
0065    150     CONTINUE
0066            GOTO 300
0067    180     DO 200 COL=COL,120
0068            IF (LINE(COL).LT.'0') GOTO 400
0069            IF (LINE(COL).GT.'9') GOTO 400
0070            GETVAL=.TRUE.
0071            BINVAL=BINVAL*10+(LINE(COL)-'0')
0072    200     CONTINUE
0073    300     CALL ERROR(4,TOOLONG)
0074            GETVAL=.FALSE.
0075    400     IF (SIGN.EQ.1) BINVAL=-BINVAL
0076            RETURN
0077            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	283	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	32	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64867	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETVAL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-00000004	I*4	SIGN
2-00000000	L*1	TMP	2-00000008	I*4	TOOLONG						

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002B	100	0-0000008E	130	**	150	0-000000AF	180	**	200	0-000000FB	300
0-00000106	400										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR	L*1	UNBLNK

```
0001     C
0002     C       GET THE NEXT STRING TOKEN IN THE LINE, FALSE IF NONE
0003     C
0004             LOGICAL FUNCTION GETIDENT*1
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 UNBLNK
0050             I=1
0051             GETIDENT=.FALSE.
0052             IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 400
0053             DO 200 COL=COL,120
0054             IF (LINE(COL).EQ.'$') GOTO 100
0055             IF (LINE(COL).EQ.' ') GOTO 100
0056             IF ((LINE(COL).GE.'A').AND.(LINE(COL).LE.'Z')) GOTO 100
0057             IF (GETIDENT.EQ..FALSE.) GOTO 400
0058             IF ((LINE(COL).LT.'0').OR.(LINE(COL).GT.'9')) GOTO 400
0059     100     GETIDENT=.TRUE.
0060     C       TRUNCATE ANY TOKENS GREATER THAN MAXTOKSIZ
0061             IF (I.GE.MAXTOKSIZ) GOTO 200
0062             NAME(I)=LINE(COL)
0063             I=I+1
0064     200     CONTINUE
0065             CALL ERROR(4,TOOLONG)
0066     400     NAME(I)=0
0067             RETURN
0068             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	199	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	32	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64783	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETIDENT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000004	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000008	I*4	TOOLONG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label
0-0000007F	100	0-000000A1	200	0-000000B8	400

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR	L*1	UNBLNK

```
0001     C
0002     C       FUNCTION TO COMPARE 2 STRINGS GENERICALLY
0003     C
0004             LOGICAL FUNCTION GENCMP*1(STRNG1,STRNG2)
0005             LOGICAL*1 STRNG1(100),STRNG2(100)
0006             GENCMP=.FALSE.
0007             IF (STRNG1(1).EQ.0.OR.STRNG2(1).EQ.0) GOTO 300
0008             DO 100 I=1,100
0009             IF (STRNG1(I).EQ.0.OR.STRNG2(I).EQ.0) GOTO 200
0010             IF (STRNG1(I).NE.STRNG2(I)) GOTO 300
0011     100     CONTINUE
0012     200     GENCMP=.TRUE.
0013     300     RETURN
0014             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	92	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	48	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	140	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GENCMP

VARIABLES

Address	Type	Name
2-00000004	I*4	I

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-0000004@	L*1	STRNG1	100	(100)
AP-0000008@	L*1	STRNG2	100	(100)

LABELS

Address	Label	Address	Label	Address	Label
**	100	0-00000053	200	0-00000057	300

```
0001      C
0002      C       FUNCTION TO COMPARE 2 STRINGS EXACTLY
0003      C
0004              LOGICAL FUNCTION IDENT*1(STRNG1,STRNG2)
0005              LOGICAL*1 STRNG1(100),STRNG2(100)
0006              IDENT=.FALSE.
0007              DO 100 I=1,100
0008              IF (STRNG1(I).NE.STRNG2(I)) GOTO 300
0009              IF (STRNG1(I).EQ.0.AND.STRNG2(I).EQ.0) GOTO 200
0010              IF (STRNG1(I).EQ.0.OR.STRNG2(I).EQ.0) GOTO 300
0011      100     CONTINUE
0012      200     IDENT=.TRUE.
0013      300     RETURN
0014              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	92	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	48	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	140	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	IDENT

VARIABLES

Address	Type	Name
2-00000004	I*4	I

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-00000004@	L*1	STRNG1	100	(100)
AP-00000008@	L*1	STRNG2	100	(100)

LABELS

Address	Label	Address	Label	Address	Label
**	100	0-00000053	200	0-00000057	300

```
0001     C
0002     C       CONCATINATE 2 STRINGS TOGETHER, OUTPUT IN THIRD ARGUMENT
0003     C
0004             SUBROUTINE CONCAT(STRNG1,STRNG2,STRNG3)
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 STRNG1(100),STRNG2(100),STRNG3(100),STRNG4(100)
0050             DO 100 I=1,99
0051             STRNG4(I)=STRNG2(I)
0052             IF (STRNG4(I).EQ.0) GOTO 200
0053     100     CONTINUE
0054             CALL ERROR(2,TOOLONG)
0055             GOTO 600
0056     200     DO 300 I=1,99
0057             STRNG3(I)=STRNG1(I)
0058             IF (STRNG3(I).EQ.0) GOTO 400
0059     300     CONTINUE
0060             CALL ERROR(2,TOOLONG)
0061             GOTO 600
0062     400     DO 500 J=1,99
0063             STRNG3(I-1+J)=STRNG4(J)
0064             IF (STRNG3(I-1+J).EQ.0) GOTO 600
0065     500     CONTINUE
0066             CALL ERROR(2,TOOLONG)
0067     600     RETURN
0068             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	164	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	184	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64900	

ENTRY POINTS

Address	Type	Name
0-00000000		CONCAT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000064	I*4	I	4-00000008	I*4	INDEX
2-0000006C	I*4	J	6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG	2-00000068	I*4	TOOLONG						

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-0000004@	L*1	STRNG1	100	(100)
AP-0000008@	L*1	STRNG2	100	(100)
AP-0000000C@	L*1	STRNG3	100	(100)
2-00000000	L*1	STRNG4	100	(100)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	100	0-0000004E	200	**	300	0-00000075	400	**	500	0-000000A3	600

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERROR

```
0001     C
0002     C       RETURN THE LENGTH OF AN ASCIZ STRING
0003     C
0004             INTEGER FUNCTION LENGTH(STRNG)
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 STRNG(100)
0050             DO 100 LENGTH=1,100
0051             IF (STRNG(LENGTH).EQ.0) GOTO 200
0052     100     CONTINUE
0053             CALL ERROR(2,TOOLONG)
0054     200     LENGTH=LENGTH-1
0055             RETURN
0056             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	62	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64654	

ENTRY POINTS

Address	Type	Name
0-00000000	I*4	LENGTH

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-00000004	I*4	TOOLONG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-0000004@	L*1	STRNG	100	(100)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
**	100	0-00000036	200

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERROR

```
0001     C
0002     C       MOVE AN ASCIZ STRING TO ANOTHER BUFFER
0003     C
0004             SUBROUTINE MOVNAM(STRNG1,STRNG2)
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 STRNG1(100),STRNG2(100)
0050             DO 100 I=1,100
0051             STRNG2(I)=STRNG1(I)
0052             IF (STRNG2(I).EQ.0) GOTO 200
0053     100     CONTINUE
0054             CALL ERROR(2,TOOLONG)
0055     200     RETURN
0056             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	69	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	60	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64681	

ENTRY POINTS

Address	Type	Name
0-00000000		MOVNAM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000004	I*4	TOOLONG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-0000004@	L*1	STRNG1	100	(100)
AP-0000008@	L*1	STRNG2	100	(100)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
**	100	0-00000044	200

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERROR

```
0001     C
0002     C       SEARCH FOR THE NEXT NONBLANK CHARACTER
0003     C
0004             LOGICAL FUNCTION UNBLNK*1
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             IF (COL.GT.120) GOTO 150
0050             DO 100 COL=COL,120
0051             IF (LINE(COL).GE.'11.AND.LINE(COL).LE.'14) GOTO 100
0052             IF (LINE(COL).NE.' ') GOTO 200
0053     100     CONTINUE
0054     150     COL=121
0055     200     UNBLNK=LINE(COL)
0056             RETURN
0057             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	92	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64644	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	UNBLNK

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG			

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label
0-0000003E	100	0-00000047	150	0-0000004C	200

```
0001     C
0002     C       GET THE NEXT LINE FROM THE INPUT FILE
0003     C
0004             LOGICAL*1 FUNCTION GETLIN
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 UNBLNK
0050             READ(1,99,END=100) LEN,(LINE(K),K=1,LEN)
0051     99      FORMAT(Q,120A1)
0052             LINE(LEN+1)=0
0053             COL=1
0054             GETLIN=.TRUE.
0055     C
0056     C       OUTPUT THE LINE IF COMMENT OR NULL LINE
0057     C
0058             IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) THEN
0059                     BIAS=OUTCOL+1-COL
0060                     CALL BUFFER(LINE)
0061                     IF (UNBLNK().EQ.';') OUTLINE(BIAS+COL) = '!'
0062                     CALL OUTPUT_LINE
0063             END IF
0064             RETURN
0065
0066     100     GETLIN=.FALSE.
0067             RETURN
0068             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	195	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	6	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	32	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64781	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETLIN

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-0000000C	I*4	BIAS	4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL
6-00000088	I*4	CURNUM	6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX
2-00000008	I*4	K	6-00000090	I*4	LASTFACNUM	2-00000004	I*4	LEN	4-00000000	I*4	NUM
6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG						

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
1-00000000	99'	0-000000C0	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	BUFFER		OUTPUT_LINE	L*1	UNBLNK

```
0001     C
0002     C       OUTPUT AN ASCIZ STRING TO THE OUTPUT LINE BUFFER
0003     C
0004             SUBROUTINE BUFFER(STRING)
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 STRING(128)
0050             DO 10 I=1,128
0051             IF (STRING(I).EQ.0) GOTO 100
0052             IF (OUTCOL.GT.132) GOTO 200
0053             OUTCOL = OUTCOL+1
0054             OUTLINE(OUTCOL)=STRING(I)
0055     10      CONTINUE
0056     100     RETURN
0057     200     CALL ERROR(4,LINE_OVERFLOW)
0058             RETURN
0059             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	88	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64680	

ENTRY POINTS

Address	Type	Name
0-00000000		BUFFER

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-00000004	I*4	LINE_OVERFLOW	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-0000004@	L*1	STRING	128	(128)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label
**	10	0-0000004E	100	0-0000004F	200

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERROR

```
0001     C
0002     C       OUTPUT A DECIMAL NUMBER TO THE OUTPUT LINE BUFFER
0003     C
0004             SUBROUTINE BUFNUM(NUMBER)
0005             LOGICAL*1 CHARS(9)
0006             CHARACTER*8 STRING
0007             EQUIVALENCE (STRING(1:1),CHARS)
0008             CALL FOR$CNV_OUT_I(%VAL(NUMBER),STRING)
0009             CHARS(9)=0
0010             DO 10 I=1,8
0011             IF (CHARS(I).NE.' ') GOTO 20
0012     10      CONTINUE
0013     20      CALL BUFFER(%REF(CHARS(I)))
0014             RETURN
0015             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	60	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	44	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	104	

ENTRY POINTS

Address	Type	Name
0-00000000		BUFNUM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name
2-0000000C	I*4	I	AP-00000004@	I*4	NUMBER	2-00000000	CHAR	STRING

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	L*1	CHARS	9	(9)

LABELS

Address	Label	Address	Label
**	10	0-0000002A	20

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	BUFFER		FOR$CNV_OUT_I

```
0001     C
0002     C       OUTPUT THE CURRENT OUTPUT LINE BUFFER TO THE OUTPUT FILE
0003     C
0004             SUBROUTINE OUTPUT_LINE
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             WRITE(2,100)(OUTLINE(K),K=1,OUTCOL)
0050     100     FORMAT(128A1)
0051             OUTCOL=0
0052             RETURN
0053             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	75	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	6	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64633	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTPUT_LINE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	2-00000000	I*4	K
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
1-00000000	100'

```
0001     C
0002     C       OPEN THE OUTPUT FILE
0003     C
0004             SUBROUTINE OPEN_OUTPUT
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 STRING(128)
0050             CLOSE (UNIT=2)
0051             CALL MOVNAM(FSPEC,STRING)
0052             DO 10 POS=LENGTH(STRING),1,-1
0053             IF (STRING(POS).EQ.'.') GOTO 20
0054     10      CONTINUE
0055     20      IF(STRING(POS).EQ.'.') CALL MOVNAM(%REF('.MSG'),STRING(POS))
0056             DO 30 POS=POS,1,-1
0057             IF (STRING(POS).EQ.']'.OR.STRING(POS).EQ.'>'
0058             1       .OR.STRING(POS).EQ.':') GOTO 40
0059     30      CONTINUE
0060     40      POS=POS+1
0061     C       THE OUTPUT FILE WILL BE PUT IN THE DEFAULT DIRECTORY, SAME NAME, .MSG
0062             OPEN(UNIT=2,NAME=STRING(POS),TYPE='NEW',CARRIAGECONTROL='LIST',ERR=100)
0063             OUTCOL=0
0064             RETURN
0065     100     CALL ERROR(9,FILNOTFND)
0066             RETURN
0067             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	158	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	9	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	220	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64935	

ENTRY POINTS

Address	Type	Name
0-00000000		OPEN_OUTPUT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000084	I*4	FILNOTFND	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000080	I*4	POS									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
2-00000000	L*1	STRING	128	(128)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	10	0-00000036	20	**	30	0-00000077	40	0-00000095	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	ERROR		FOR$CLOSE		FOR$OPEN	I*4	LENGTH		MOVNAM

COMMAND QUALIFIERS

```
FORTRAN /LIS=LIS$:CVTMSG/OBJ=OBJ$:CVTMSG MSRC$:CVTMSG

/CHECK=(NOBOUNDS,OVERFLOW,NOUNDERFLOW)
/DEBUG=(NOSYMBOLS,TRACEBACK)
/STANDARD=(NOSYNTAX,NOSOURCE_FORM)
/SHOW=(NOPREPROCESSOR,NOINCLUDE,MAP)
/F77  /NOG_FLOATING  /I4  /OPTIMIZE  /WARNINGS  /NOD_LINES  /NOCROSS_REFERENCE  /NOMACHINE_CODE  /CONTINUATIONS=19
```

COMPILATION STATISTICS

Run Time:	24.98 seconds
Elapsed Time:	88.10 seconds
Page Faults:	238
Dynamic Memory:	212 pages

MSGINT
MDL

SDLGENREQ
REQ

MSGDEF
SDL

MAIN
LIS

CVTMSGCOM
FOR

LISTING
LIS

CVTMSG
LIS

MSG
REQ