Ridge Software Bulletin July 7, 1986

1. Introduction

The primary purpose of this quarterly bulletin is to keep you current on the status of software problem reports you, and others, have submitted to Ridge Computers. Information on maintenance, software commands, and other items of interest are also included in the bulletin.

We have changed our system somewhat since the last bulletin was issued, and the reports are now referred to as *SMRs*, for 'Software Modification Reports'. We are trying to provide more information about the problem itself, the status of the fix, and any work-around solutions that may exist.

When a customer discovers a software or documentation problem, or thinks of an enhancement request, he or she should fill out a Software Problem Report form (a few are attached at the end of this bulletin, or they are available from Ridge Systems Engineers), and then mail it to Ridge. This ensures proper verification and tracking of the report. Once the report is received at Ridge and the problem is verified, an SMR number is assigned for tracking purposes. We do not guarantee that problems not received in written form will be given an SMR number.

2. SMRs

The following pages are an alphabetical index of the open SMR's at the time we changed our system, listing the name of the program, a short description of the problem, and the SMR number that has been assigned to the problem. Following the index is a numerical listing of a longer description of each SMR, the status of the SMR, and possibly an analysis and solution of the problem, if applicable. You may want to keep this listing for reference until you get the next bulletin.

Some of the categories in the longer description of SMR's are described here:

- ROS Version: the version running on the system where the problem was noticed.
- The status and target release columns work together as follows:

Status	Target Release	Meaning
open	blank/date	open, possibly with fix goal
open	unknown	under review
closed	date	problem solved with fix date set

• ROS 3.4 incorporates changes required to support cartridge tape-based systems. Any SMR's closed during the 3.4 development cycle will be added to the ROS 3.5 release, which is intended to support both cartridge tape and floppy-based systems. All service contract customers will receive ROS 3.5 when it is released.

PROGRAM	SMR #	DESCRIPTION
	902	opened fifo for read should hang open until fifo is opened for write
	953	power cycle the UB box causes problems
	972	removing files from /ros
	1168	Signals received by process at higher priority than UM while in system call
	1202	4.2 curses.h is broken on 'ridge'
	1203	port 4.2 libcurses and libtermcap
	1347	files having 339 extents never get more when attempting to append to file
	1587	output of sdiff piped through page never terminates
	1614	update world to ROS 3.4
	1634	added new backup scripts for ros 3.4
	1683	UM hangs while waiting for close to complete. Hangs daemons when LP runs out of
	1689	/usr/include/pas/{a.out.h,stdio.h} use bad path for include files
	1690	blanket smr for ROS 3.4 update #2 changes
/etc/link	1655	do not recursively link directories
/etc/magic	1475	<pre>add 'netnews compressed batch' and 'pack(1) compressed file' magic numbers</pre>
/etc/profile	1110	a line in /etc/profile is incorrect
/etc/rc	1508	inconsistent example in LAN User's Guide
4.2 dump	1553	request the 4.2 dump/restore and rdump/rrestore utilities be ported
4.2 include	884	/usr/4.2/include/utmp.h is bad
4.2 libc	1576	ftruncate missing from the library
4.2 open	1514	open does the opposite of what it would do on a 4.2BSD system
C	451	C optimizer does not handle code gener-

PROGRAM	SMR #	DESCRIPTION
С	1466	ated by asm statement properly C compiler should allow static initialization of unions
DoSignal	877	DoSignal gets called one too many times for each delivered signal
Drll Graphics	1539	DR-11 Graphics are slower on ROS 3.3u3 than they were on ROS 3.3p2
GH compilers	1494	generated asm code should be more readable
Lisp, Prolog	1540	When Lisp and Prolog are in the debugger the entire system is slugish
Record Locking	1185	Added record locking to the system.
SUS	1633	Added modules for CIO
UUCP	1542	UUCP slows down the system when it runs
Volume Mgr	1607	Performance enhancements to volmgr
af	1647	prints an unnecessary error message
all networking	1617	ns runs out of Q-seg pages
apropos	1580	appropriate is misspelled!
apropos	1671	section 2A subjects are listed with apropos, but there are no man pages
ar	1546	o option of ar does not work properly
as	1499	The 'p' suffix to load instructions does
as	1656	not generate code relative loads as should use user's umask setting to modify object file modes
as	1693	converted 'as' to compile and run under rp.
assembler	1552	make # an acceptable comment sign for the assembler

PROGRAM	SMR #	DESCRIPTION
at	1560	manual confusing on how to set-up global usage with at & cron
at/batch	1164	modify at/batch to work with csh scripts
awk	1481	The simple awk action command "{print \$1}" does not work.
awk/strip	1486	stripping 'awk' fixed it!
cal	1208	Sys V rel2 cal should print current mon. w/no arg given, ROS doesn't.
cat	994	terminal hangs with ' cat'
cc	1125	-a option of cc doesn't work
cc	1479	An unsigned mod immediately following an unsigned divide generates bad code.
cc	1480	rc and cc don't generate the same code
cc	1506	parameters that are structures less than 4 bytes long are addressed incorrectly
cc	1534	printf acts strangely when using shared code and data
cd	1198	cd 'pwd' fails
chown	1175	chown system call allows 4.2bsd clients to give away files
cio debugger	1631	first release
cioct	1598	added to system
ciolp	1610	addition of ciolp
ciomem.h	1611	added include file for cio drivers
ciotty	1594	added new CIOTTY driver for ROS 3.4
ciotty	1658	enhanced performance for terminal driver and driver interface library

PROGRAM	SMR #	DESCRIPTION
cpio	1630	request a more graceful exit from cpio upon error
cpio	1659	cpio loops
срр	1685	<pre>rc cannot handle = or > in define statement</pre>
cron	1501	This is a code fix to cron.n suggested by AT&T. Certain job entries won't run.
cron	1547	cron doesn't retain shell environment variables like path or tz
cron	1664	cron vanishes and forgets tasks
crt0.o	1176	Fortran programs always set status to 64
crypt	1190	<pre>crypt < file page puts terminal in an unsane state</pre>
csh	1162	echo should understand backslash escapes of /bin/echo command
csh	1174	csh manual says stty commands can be in .login file, window mgr objects
csh	1467	csh should execute /etc/login file
csh	1672	csh nice & csh nice +number do not work properly
ct	1599	new program
ctcat	1600	added to system
ctcat.h	1601	added to system
ctio.h	1602	added to system
cu	986	typing "n% take filename" and backspace causes every other char. to be erased.
cu	1024	cating executable files during cu resets terminal state
cu	1068	recompile cu with the ddt flag turned off
cu	1520	~b does not generate a long enough break for a cray
cu	1522	need to document lock files in cu(1) man page

PROGRAM	SMR #	DESCRIPTION
cu	1616	please lengthen the cu break
cut.ex	1179	<pre>cut.ex does not convert the termcap entr for the 'bitgraph' correctly</pre>
cxref	1485	cxref has limitations which cause it to fail
cxref	1640	cxref truncates #defines greater than 8 characters
date	1062	setting date backward causes time calculations to break
dbx	785	dbx STEP into a C function from FORTRAN does not work
dbx	787	override dbx range checking for FORTRAN
dbx	937	should be able to print array slices in dbx
dbx	938	would like to be able to set trace on
dbx	1191	several expressions dbx gets confused after it has been sus-
dbx	1478	<pre>pended with ^z enumerated types don't print out</pre>
dbx	1482	properly Striking DEL while using dbx causes
wa	1402	trashed output.
dbx	1545	under dbx, system(3) calls are not executed
dbx	1558	dbx gets an internal error trying to
dbx	1559	print double complex variables dbx may print an integer value for a
dbx	1574	char variable, instead of the character change the way list works
dbx	1575	should be able to save dbx session in
		a file
dbx	1578	prints out exponential value incorrectly
dbx	1579	resetting a value in dbx gives internal alignment error
dbx	1623	dbx sometimes loses track of breakpoints
dbx	1641	dbx prints stored, opcode b8, as an indexed stored. it isn't indexed!
dbx	1675	dbx refuses to recognize fortran source code w/ file extension other than .f
dbx	1694	update dbx to be compatable with stabs generated by the version 1.9 compilers
debug	1099	debug no longer saves terminal modes

PROGRAM	SMR #	DESCRIPTION
debug	1417	provide a 'how did I get here' command in debug
debug	1511	debug should treat INTR and EOF, and use terminate signal as KILL PROCESS
debug	1521	debug of multiple processes confuses
debug	1648	which process a breakpoint is in debug prints opcode b8 (stored) as indexed when it's not indexed
deroff	1555	deroff goes into debug if input contains very long lines
disp	1588	new disp for 3.4
disp	1642	Select and CBREAK are not working
disp driver	815	display driver doesn't properly emulate all BSD 4.2 terminal functions
drl1/display	1589	new drll drivers for ROS 3.4: metheus, rastertech, lexidata
driverMsgs.h	1596	modifications to driverMsgs.h header file for ROS 3.4 libdriver.a
driverconf.h	1595	created driverconf.h header file for use with libdriver.a
drivers/daemon	ns 1697	remote users can get awful performance
dup	1060	<pre>if any error ocurrs, FDLP warning: dup err=XX prints out.</pre>
dwb	1066	desire troff output on a ridge display
emacs	1452	start shell in buffer command doesn't work
emacs	1453	Query replace & search string problem.
emacs	1454	View syntax table output format truncate s the display.
emacs	1455	Keyboard macro does not continue executing after recursive edit.
emacs	1456	Keyboard macros should be expandable to Elisp language.
emacs	1477	emacs seems to not reset the terminal back to the original state

PROGRAM	SMR #	DESCRIPTION
emulex.mt01.h	1605	added to the system
env	1107	env mishandles first (or only) assignment
eqn	1646	veritical motion on subscripts is done incorrectly
exec	1047	<pre>exec system call should recognize the syntax '#! /bin/csh'</pre>
£77	1651	example program gives different results with or without optimizer
fcntl	791	fcntl requests to get modes of file or pipe may not work
fdlp	1009	cat to /dev/clp
fdlp	1018	removing a floppy file
fdlp	1019	removing a floppy file
fdlp	1497	cu intercepts ^0
fdlp	1687	cbreak output mode incorrect
fdlp driver	1637	system slows because fdlp driver cannot handle a lot of data from mouse
file	1695	file doesn't recognize certain magic numbers
floppy	170	should be able to treat floppy like a mounted volume
floppy	1063	if floppy is exactly full and data is catted to it, the data is destroyed
ftp	1660	multi-line replies from apollo cause us
ftp	1696	to get out of sync login prompt is wrong for remote users
ftpd	920	ftpd dies
getpgrp	1518	getpgrp doesn't exist in system V libc
h files	1681	consolidate 4.2 includes and ns includes

PROGRAM	SMR #	DESCRIPTION
include	1628	Need new include files for rp
install.rest	1538	<pre>problems if there is no 'f1' file on floppy</pre>
invert	842	invert should be capable of setting a given value
iodev.h	1613	added new file for ROS3.4
kermit	1170	kermit prints incorrect usage
kermit	1471	Should use same lockfile as 'cu' and 'uucp'
kernel, vmm	1484	Incorporated changes from Bull
ld	549	ld should give error is common declaration length>global dec. length
ld	1158	enhance ld to remove any alout that was not successfully linked
ld	1500	The -e option to ld (specify entry label appears to be ignored.
libF77.a	1526	complex power function fails
libI77	1470	speed up FORTRAN I/O
libI77	1489	FORTRAN does not allow reading of a record larger than 1MB
libI77	1490	There is a conflict between Ridge's
libI77	1585	truly zero extension & fx.y where x=y+1 fputc causes data alignment viol
libI77.a	1557	getfd is a misnomer, and should be renamed getfp
libI77.a	1586	no error message is given when trying to write to file w/out write permission
libU77	1523	fseek returns bad status; libU77 is incompatible with newest libI77
libU77.a	1530	using getcwd in a FORTRAN program causes an undefined symbol from 1d
libU77.a	1564	The tapeio routines for FORTRAN tape i/o

PROGRAM	SMR #	DESCRIPTION
		are not implemented
libc	1544	uname(2) man page missing and return value incorrect
libdriver.a	1593	created libdriver.a for ROS 3.4 CIO drivers
libm.a	1483	<pre>d_atan & r_atn2 loop when the input is infinity</pre>
libpas	1206	eof can only be called once with the new pascal compiler.
libwgraf.a	1592	added GetPenColor, GetPenWidth routines
libwindows.a	1591	added text select/paste support
lint	1200	it uses cc instead of rc
lint	1644	prints error message when there is a comment on an include line
login	1662	telnet doesn't work with hostnames > 16 chars
login	1692	rlogin's automatic login no longer works
lp	1577	printing files with ^B and ^C on laserwriter
lp spooler	1142	manual pages have bogus string at the end of each
lp spooler	1691	Canceling a job on the printer sometimes makes the printer unusable.
lpr	1109	lpr is setuid to root
lprm	1551	a user can remove another user's file with lprm
lpshut	1699	lpshut is flakey at times
ls	980	ls -1 prints uid # instead of username if uid > 2048
ls	1682	lr -1 goes into debug

PROGRAM	SMR #	DESCRIPTION
mail	1006	mail from a telnet user is supposedly from LOGIN
mail	1071	sendmail doesn't notify when user is
mail	1077	unknown after deleting a read message, the next message should be displayed
mail	1150	mail for root prints pathname as //mbox. not normal path for /mbox.
mail	1153	mail from root has ')' in line. Replies generate errors.
mail	1621	mail -e does not work
make	162	directory entries should have modifica- tion/creation dates
make	1503	make mistreats PATH containing a hyphen. It thinks a "-" is like a ":" in PATH.
make/csh	1488	hitting del while using make from csh essentially halts system
makedev	1698	need man page for makedev(1)
makefiles	1597	<pre>changed makefiles in /usr/src/sys/driver s directories</pre>
man	1161	man drand48 changes terminal settings
man	1645	displaying some pages causes terminal to lock up
man	1684	allow man to search additional directories
mknod	1078	We only allow root to mknod a FIFO.
more	1042	s-skip hangs if tried to beyond EOF ctrl-l (redraw) doesn't really work
more	1670	skipping more lines than are in the file causes more to hang
msgs	1528	/usr/bin/msgs does not exist
mt	1667	mt doesn't know about ct drives when status is requested.
ndir.h	1700	<pre>including ndir.h results in 'incompatibl e types' message</pre>
netstat	858	netstat needs to be ported

PROGRAM	SMR #	DESCRIPTION
netstat	1527	customer requesting netstat
newaliases	1473	newaliases sometimes creates a zero length aliases.dir file
newgrp	1373	newgrp doesn't change one's environment
newgrp	1704	changing to a new group that you're not permitted to starts a new shell
nroff	1635	italics mode (underlining) doesn't turn off until a non-space character
ns	1147	network panic
ns	1192	ns gets an ill mem ref in the data
ns	1498	ns hangs system; goes into debug (not
ns	1543	rbug) when switch 0 pressed ns on wonderboard shuts down when enet
ns	1609	cable disconnected, requiring reboot initial 3.4 modifications
ns	1665	IP: bad checksum error
od	1105	od always dumps input in even numbers of bytes
open/ioctl	1513	allow open to specify an extent size for file
param.h (4.2)	1493	too much ifdef'ed out in param.h
pg	1504	pg standout mode is incorrect; it echoes
pg	1505	uninterpreted padded chars when using -s Trash characters follow the message that the "n" (next file) command prints.
pipes	1064	reading an expanding directory may show duplicate entries
ps	1163	desire option in ps to display process by user
pseudo ttys	1663	kermit doesn't work over pseudo ttys
ptty's	854	customer needs more than 4 ptty's

PROGRAM	SMR #	DESCRIPTION
rc	1472	casting an element of an array doesn't work
rc	1495	useless error messages from rc
rc	1509	EOF test of getc() always fails since rc treats chars as unsigned by default
rc	1512	example code runs fine with cc, but generates SIGSEGV with rc
rc	1548	It is impossible to preprocess assembler files with rc
rc	1549	preprocessing generates an empty .s file
rc	1550	preprocessing an assembler file generate lines with # signs.
rc	1584	integer divided by 1 generates bad as code
rc	1625	address constant of struct member is wrong
rc	1654	MPY instructions sometimes generates integer overflow signal
rc	1668	dereference of pointer to bit field may not be done correctly
rc	1673	rc generates code which causes a data alignment violation
rc	1674	rc does not protect source from corruption from bad arg list
rc	1686	cast of unsigned long may cause bad code to be generated
rc 1.9	1524	signed short and unsigned short are not compared correctly
rc, cc, lint	1703	rc, cc, lint do not allow structure/ union references
rccom	1566	struct copy with postincrement fails with rccom
rccom	1583	binary operation on function addresses gives bad code
rccom	1657	bad code generated by a shift by a constant 0.
rcp	830	no error message for rcp when the wrong number of parameters is given
rcp	1041	rcp to the same host trashes file
realdiag	1144	realdiag goes into debug when run on system with waterfall cpu

PROGRAM	SMR #	DESCRIPTION
rebooting	1702	several enhancement requests concerning rebooting
rf	1127	rf's -L flag should check format errors
rf	1516	char variables not printing correctly with dbx
rf	1517	should be able to rename as 'f77'
rf	1519	can't mix Fortran & C sources to rf compiler
rf	1533	problems with external functions and entry points w/in subroutines
rf	1535	char(constant) returns 0
rf	1561	<pre>main.F requiring C pre-proc w/ Fortran includes can't find include files</pre>
rf	1565	compiler error when assigning value to function when using implicit undef.
rf	1568	external statement does not generate proper external reference
rf	1569	external statement gives compiler error when module is implicit undefined
rf	1570	internal list-directed I/O does not work
rf	1571	various enhancement requests
rf	1581	do-loop index gets confused within nested do loops
rf	1582	rf generates illegal instructions that cause as to complain
rf	1626	rf does not accept syntax that f77 does
rf	1666	print and format work incorrectly
rf	1678	bad code is generated from loops
rf	1679	compiler should flag archaic statements
rf	1680	incorrect code in assigning one double complex variable to another
rf/dbx	1653	dbx gets confused with equivalence statements
rfcom	1537	common block elements don't print properly under dbx
rfcom	1572	rfcom goes into debug with segmentation violation or data alignment violation
rfcom	1573	parameter arrays dimensioned by common block element may have bad code generate

PROGRAM	SMR #	DESCRIPTION
ridge/gks	1487	ridge/gks was built with a version of rc that had bugs. Need a few minor fixes
rje programs	1620	added to the system
rlogin	966	backslash typed when rlogin'ed breaks echoing.
rlogin	1154	if .rhosts and hosts.equiv fail, rlogin should not prompt for user name
rlogin	1639	rlogin doesn't always terminate properly
rlogind	1705	2 rloginds can get same pseudo tty
ros/lprio.h	1612	Added printer type bits.
route	856	route command needs to be ported
rp	1458	end of file test fails
rp	1459	reset does not work when several pascal files are connected to same file
rp	1460	when run-time error occurs the results redirected to a file are lost
rp	1461	compiler does not check constant sets
rp	1462	sets containing more than 32 elements an and the use of rp extensions incompatibl
rp	1529	Preprocessor flag names consisting of upper and lower case letters don't work
rp	1606	Compiler does not flag "f(x);" as error where f is a function
rp	1624	rp generates bad as code
rp	1629	Allow Pascal to get at UNIX file pointer
rp	1643	rp has problems with strings of length 8.
rp	1649	when rp is used with error, error messages are insterted into source
rp	1688	problems with pascal type-cast operator
rpcom	1536	<pre>rpcom loaded wrong byte from stack for ch:=char(int)</pre>
rsh	1118	cat doesn't work when input and output are sockets

PROGRAM	SMR #	DESCRIPTION
rsh	1622	rsh's sometimes hang and it is impossible to del out of it
rsh/ftp	1531	ridge does not respond to rsh or ftp from sun nodes on net
ruptime	1189	ruptime doesn't work on 'ridge' with a remote vax at UCSB
sbrk	1608	sbrk should return -1 error condition
scanf	1465	last element of range is not accepted in a scanf scan-set.
sccs	1669	specifying a directory name to get -e causes sccs to loop
script	1676	script needs to be ported
scsi.commands.	h 1603	added to system
scsi.data.h	1604	added to system
sendmail	1491	for local mail, the /bin/mail line should be /bin/binmail
sendmail	1525	sendmail files should be part of ROS
sendmail	1618	starting sendmail with a certain
sendmail	1619	<pre>sequence gives privileged shell sendmail -Cfile allows one to 'look at' a file without read permission</pre>
setwsize	1036	setwsize 3000 3000 hangs display
sh	887	sh's table of signals is too small
sh	1468	sh saves and prints all prompts after command completes
sh/csh	1510	line erase of an excessively long line causes system to temporarily hang
shell	1627	add the Sys V 'shl' utility
shutdaemon	1532	shutdaemon sometimes never exits after killing the daemons

PROGRAM	SMR #	DESCRIPTION
shutdown halt	913	add shutdown, halt, and reboot to 3.3
shutdown(1)	1507	section 1 indicates we have shutdown(1)
signals	792	distribution of signals by process group doesn't always work right.
signals	912	add SIGINTOVER and SIGINTDIVZERO to set of signals
startup	665	could not activate rc UM
startup	1502	customer requests that startup allow booting without checking date
stat/fstat	979	directory sizes reported as 0, inode values for floppy files not unique, etc.
string.h	1492	<pre>several externs are missing from string. string.h,</pre>
strspn	1173	strspn in libc does not work right.
strtok	1636	C string handling routine, strtok, doesn't work as documented
stty	1080	tostop stays set to whatever you set it to when logout then login
stty	1178	stty < /dev/rmt16 causes file mark to be written to tape when write ring on tape
stty	1201	stty parameter name doesn't match doc
stty	1464	XON/XOFF toggle mode doesn't work
systest	1632	Added modules for CIO
tail	1181	cat filename head -2 tail -1
tapedriver	1446	Inaccurate find/tape error message. Terminal locking up when mt'ing.
tapedriver	1463	tapedriver misses end of file mark
tapedriver	1556	second unit on tape controller does not work
tapedriver	1677	terminal locking up with mt

PROGRAM	SMR #	DESCRIPTION
tar	1011	implement the -o option from sysV ver2
tar	1382	tar tb 20 causes tapedriver to read non- existent record & time out
tar	1650	give tar an option to not restore the owner
tar (4.2)	1457	tar should restore mtime
tar dd	283	tar and dd do not know about multiple reel tapes
tbl	1448	tbl modifies and does not reset tab settings
telnet	1149	telnetd does not display the /etc/issue file
telnet	1652	output from more, cat, man is lost
telnet	1661	telnet has problems mapping cr to cr-lf and vice-versa with a UNIVAC
telnetd	1701	telnet to a faster machine, & sometimes /etc/issue file & login prompt are lost
termcap	1075	vi without mousemgr or windowmgr causes bad wrapped lines
timer	1188	<pre>UB/DR11: cannot set timer = 1</pre>
troff	1031	mm operates in verbose mode and then goes into debug
um	28	um should report error of names being passed to drivers
um	86	core dumps desired. SIG should generate message and die
um	544	um should read break ptr and generate SIGSEGV trap
um	933	signal handling of forked process is not correct before a execs b.
um	1106	signal #117 SIGINTDIVZERO is ignored (by default) by user monitor
um	1155	modify UM to only allow 'load enable off' sehll for rcUM
um	1196	the um gets stuck in a loop
um	1554	certain code when run with dbx crashes a user monitor

PROGRAM	SMR #	DESCRIPTION
um	1562	when slow-booting, UM sometimes tries to run getty & login
um	1563	need larger data segments, request
um	1567	completion of set/getrlimit calls starting um's sometimes crashes system
um, TTY drivers	3 984	error: "FDLP cannot notify UM = 65557 Err=1 UM link=18"
um, drivers	1615	O_ASYNC (ATT) and FASYNC (BSD) open modes do not work
unknown	1165	cron and ftp always report time as PST
uucp	880	umin does not work
uucp	1023	hours in logfile are local, PDT, or PST
versatec	1515	versatec seems to drop characters at beginning of line
vi	946	ctrl-v doesn't work on televideo
vi	947	vi doesn't know how to use diagonal
vi	1081	arrow or function keys cf has a problem with ignoring case
vi	1138	expreserve and friends get stuck when
vi	1474	running vi and phone is hung up 'ex:something:' causes a funny error message
vi	1496	vi doesn't handle ^c sometimes
v i	1541	On a busy system vi of a large file
vi	1638	takes much longer than small file vi -r doesn't work properly
vmm	1476	Scanrange, found free page Flip Load Enable to continue
vprint/vplot	1061	simultaneous print/plot mode does not work to versatec
wait	941	status returned by wait only provides for values 1-127
window manager	1469	desire ability to disable mouse cursor

PROGRAM

SMR #

DESCRIPTION

windowmgr

1590 added text select/paste feature

```
SMR Number: [28
                                        ROS Version: (3.3
Status: closed Target Release: ros3.3 Last Reviewed: 04/22/1986
  [/dev/x/name -- if device 'x' is not a directory device (block mode)
  (the remaining portion of sting (i.e. 'name') is passed to driver.
  [um possibly should report error instead. Some drivers do not expect
  ((or handle) names being passed to them.
Solution
                                                   SMR Number: [28
Fix will be included in:
Description:
  With ROS 3.3 (some update) we introduced a fix for this. Each driver now
  specifies a set of capabilities that it is willing to support. Processing
   'trailing names' is one of these.
_____
SMR Number: [86
                                        ROS Version: [3.3
Status: open Target Release: under review Last Reviewed: 04/22/1986
  [It would be nice if
  [1] we could substitute a memory (core) dump rather than entering debugger
  (with option)
  we could specify that a SIG (whatever that causes a coredump/debug)
  [should just generate a message and die.
SMR Number: [162
                                        ROS Version: [3.3
Status: open
                  Target Release: ros3.5
                                               Last Reviewed: 04/22/1986
  [Directory entries do not have modification/creation dates associated
  [with them. This causes make to be unusable with dependencies that are
  [entire directories.
SMR Number: [170
                                        ROS Version: [3.3
Status: closed Target Release: none Last Reviewed: 04/22/1986
  (should be able to treat floppy like a mounted volume
Solution
                                                   SMR Number: [170
Fix will be included in:
Description:
  Since we are phasing out the floppy, this will not be fixed. This SMR is
  now considered closed.
SMR Number: [283
                                        ROS Version: [3.3
Status: open Target Release: unknown
                                            Last Reviewed: 04/22/1986
  [tar and dd do not know about multiple reel tapes
SMR Number: (451
                                        ROS Version: [
Status: closed
                  Target Release:
                                               Last Reviewed: 04/22/1986
  [The C optimier does not handle code generated by asm statement properly: ]
  (1) assembler comments within the asm statement may result in "optimizer:
  [invalid opn field for x" where x is a word in the comment.
  (2) semicolons after assembly code get moved toward the top of the file
  (where the data declarations (eg. for printf statements) are gathered),
  [resulting in commenting out the next dsect statement.
  (3) colons after labels have the same problem as semicolons, but generate
  [a different assembler error.
Solution
                                                   SMR Number: [451
Fix will be included in:
Description:
  c2 is being obsoleted.
______
SMR Number: [544 ]
                                        ROS Version: [3.3
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
  [note... from 3.2
  [On other unix systems the brk pointer for an executable is maintained
  (by the system. When a program goes beyond the brkptr a SIGSEGV trap is
  (generated. The is not the case on the ridge and causes difficulties for
  [programs such as the Bourne shell which use this to manage their stack.
  [Can the um read the break ptr when a program is executed and generate
  [a SIGSEGV trap when the program goes beyond that value??
```

```
ROS Version: [3.3
SMR Number: [549
                  Target Release: 3.5
                                               Last Reviewed: 04/22/1986
Status: open
  [ld should give an error if a common declaration length is greater than
  [the global declaration length for a symbol.
  [note... from 3.2
_____
                                         ROS Version: [3.3
SMR Number: [665
Kevword:
             fre UM
Status: closed
                  Target Release: ros3.4
                                               Last Reviewed: 04/22/1986
  [When upgrading to the 3.2 patch disc, will receive the error message
  from startup:
  [ Startup: Could not activate rc UM
  [The um has been copied from the floppy when prompted
  [during the slow boot with 'move UM from flopov?'
  [This error occurs frequently (but not every time).
                                                   SMR Number: [665
Solution
Fix will be included in:
Description:
   ROS 3.4 Startup fixes this.
SMR Number: [785 ]
                                         ROS Version: [3.3
Status: open Target Release: unknown
                                              Last Reviewed: 04/22/1986
  [Under dbx, STEP into a C function from a FORTRAN program does not work.
                                        ROS Version: [3.3
                                        Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [dbx does range checking on array references before printing. Enhancement ]
  (to override checking is desirable for FORTRAN since a common way of g
  [getting unlimited arrays is to declare DIMENSION x(1) in a procedure
  Ithat gets x as parameter.
 ____
SMR Number: [791
                                         ROS Version: [3.3
                                             Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [fcntl requests to get the modes of file or pipe may not work. If the file/]
  [pipe manager has modified the modes after the open, the UM may not know ]
  of these changes and will report the modes incorrectly.
 ROS Version: [3.3
SMR Number: [792
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [Distribution of signals by process group doesn't always work right.
  [Signals are distributed to any process in the group that is a (ROS) child ]
  [of the UM processing the killpg or DriverKillGroup request and the request ]
  (is forwarded to the UM that is the parent of the process group head (the
  (process whose PID=PGRP). Other processes reporting to other UMs are
  funaffected.
                                         ROS Version: [3.3
SMR Number: [815
Status: open Target Release: unknown
                                            Last Reviewed: 04/22/1986
  [Display driver doesn't properly emulate all BSD 4.2 terminal functions:
  [1. doesn't properly backspace when control char is backspaced if ctrlecho ]
  [ is enabled (removed from buffer, but only 1 char is erased from screen)
  (2. DEL should echo as ^? is ctlecho, even if it is the INTR character.
  [3. If echo immediate, typeahead followed by a ^H is entered, then an
  assumed reprint should happen first before backspacing.
  [4. Typeahead should not be intermingled with program output.
SMR Number: [830
                                        ROS Version: [3.3beta
Status: closed Target Release:
                                             Last Reviewed: 04/22/1986
  [Rcp doesn't give a usage error message if the wrong number of parameters
  is typed.
Solution
                                                   SMR Number: [830
Fix will be included in:
Description:
  This is a problem with the 4.2 BSD version of the code. It would be a nice
  enhancement, but...
```

```
SMR Number: [842 ]
                                  ROS Version: [3.3
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
  [Invert on the ridge display should have an optional parameter (0 or 1,
  [or black/white) to set the video inversion bit to the given value, rather ]
  [than complement what is there.
                                          SMR Number: [842
Solution
Fix will be included in: ROS3.4
Description:
  new version of invert that works with 3.4 display driver, using ioctls.
  Has -1 (invert), -b (black background), -w (white background) options.
_____
SMR Number: [854 ] ROS Version: [3.3 ]
                                 Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [There seem to be only 4 ptty's defined. This customer wants more (~30). ]
ROS Version: [3.3
Status: open Target Release:
                                       Last Reviewed: 04/22/1986
 The 'route' command needs to be ported.
SMR Number: [858 ] ROS Version: [3.3 ]
                                       Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [The netstat command needs to be ported.
ROS Version: [3.3
SMR Number: [877 ]
                                 Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [DoSignal gets called one too many times for each delivered signal. ]
_____
                                  ROS Version: [3.3
                                 Last Reviewed: 04/22/1986
Status: open Target Release:
 [umin (uucp) does not work.
SMR Number: [884 ] ROS Version: [3.3 ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
 [/usr/4.2/include/utmp.h is bad.
                                          SMR Number: [884
Solution
Fix will be included in:
Description:
  The header file has been updated.
SMR Number: [887 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 04/22/1986
 (shell's table of signals is too small; doesn't include ROS signals.
SMR Number: [902 ]
                                  ROS Version: [3.3
Status: open Target Release: patch 2 Last Reviewed: 04/22/1986
  (An open of a fifo for read should hang in the open until the fifo is
  [opened for write. An open nodelay should always return. An open on a
 ffifo with data in it should always return.
SMR Number: [912 ]
                                  ROS Version: [3.3
Status: closed Target Release: rose.4 Last Reviewed: 04/22/1986
 [Add SIGINTOVER and SIGINTDIVZERO to the set of signals manipulated by
Solution
                                          SMR Number: [912
Fix will be included in:
Description:
  This will not be done due to the adverse effect it would have on
  performance. The author of this SMR must have been crazy to suggest such
SMR Number: [913 ] ROS Version: [3.3 ]
Status: closed Target Release: none Last Reviewed: 04/22/1986
 [Add /etc/shutdown, /etc/halt, and /etc/reboot to 3.3
Solution
                                 SMR Number: (913
Fix will be included in:
Description:
```

```
This SMR should be closed. These changes will never be done in ROS 3.3.
  When these changes are implemented they will be done using the standard
  init.
SMR Number: [920
                                  ROS Version: [3.3
Keyword: [ftpd
Status: known bug Target Release:
                                         Last Reviewed: 04/22/1986
  [Apparently, ftpd can die without saying anything on the console.
SMR Number: [933 ]
                                   ROS Version: [3.3
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [If process a forks process b, the signal handling state of process b is ]
  [not correct before a execs b. In particular, if a is killed, b is also ]
 [supposed to get killed, but it is not. Just documenting it here until
 [I get a chance to demonstrate it.
SMR Number: [937 ]
                                  ROS Version: [3.3
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [Arrays in dbx can be printed out either in the entirety, or by naming each ]
  [element separately. It would be nice if there were the facility for
  (printing out the values for a range of indices that is less than the whole )
  [array, i.e. print A[1:3, 1:2, 2]
  [rather than just print A or
 [print A[3,1,2]
SMR Number: [938 ] ROS Version: [3.3
Keyword:
          [trace
Status: open Target Release: unknown
                                        Last Reviewed: 04/22/1986
 [It would be nice if the trace (exp) at (line #) if (cond) were
 [generalized to trace (exp)[,(exp)...] at (line #) if (cond)
 [This would allow the printing of several quantities at trace point.
------
                                  ROS Version: [3.3u2 ]
Status: open Target Release: unknown Last Reviewed: 04/22/1986
 [In section 2 we list signals from 1 through 127 (and higher). The status
 [returned by wait only provides for values 1-127. The value 127 is
 [reserved to mean the process is stopped so that only signals in the range ]
 [1-126 can be used.
------
SMR Number: [946 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 04/22/1986
 [ctrl-v doesn't work in vi on a televideo (it did work on 3.1)
 SMR Number: [947 ]
                                  ROS Version: [3.3
Keyword: [map command
Status: open Target Release: unknown
                                        Last Reviewed: 04/22/1986
 [It appears to be impossible to teach vi to use the diagonal arrow
 [f10-f15 or unlabeled function keys with the map command.
 [Note: it is possible to map function keys with 19" display.
SMR Number: [953 ] ROS Version: [3.3
Keyword:
           [wonderboard ub
Status: known bug Target Release:
                                        Last Reviewed: 04/22/1986
 [In a system with both a wonderboard and a ub box, if the UB box is power ]
 [cycled after ns is started, then the wonderboard can never be used
 [again. (ftp to anybody produces 'Wonderboard: WB Read: received
 [extraneous packet" on console if tracing is turned on)
SMR Number: [966 ]
                                  ROS Version: [3.3
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
 [I was rlogin'd to hood, and said delta filename. I specified the MR #,
 [and started my comments. These took more than 1 line, so I ended the first]
 [line with a '\'. This did not echo. I was required to type two
 [additional characters before all three finally echoed. This happened
 [three times in a row.
Solution
                                            SMR Number: [966
```

```
Fix will be included in: ROS3.4
 Description:
   Problem with backslash during CBREAK mode (rlogin) in display driver
   fixed in 3.4 version of DISP.
 ______
 SMR Number: [972 ] ROS Version: [3.3
 Keyword: [removing files ]
 Status: closed Target Release: 3.4ul
                                         Last Reviewed: 05/08/1986
  [It is possible to remove important files from the /ros directory
  [structure. For example, 'rm kernel' will remove startupcode from the
  [directory structure. (However, it is not removed from the volume).
 Solution
                                             SMR Number: [972
Fix will be included in: 3.4ul
Description:
   Fixed for 3.4 update 1.
 SMR Number: [979 ] ROS Version: [3.3 ]
Status: open Target Release: ros3.5 Last Reviewed: 04/22/1986
  [This smr replaces MR's: 384,790, and 829.
  [The following problems exist with stat/fstat: 1] directory sizes are
  [reported as 0. 2) devices, windows, and files on floppy have 0 a/c/mtime ]
  (values. 3) inode values for floppy files are not unique. 4) stat doesn't
  [work at all for windows or files on floppy. Symptoms for the problems
  (listed include: 1) programs like who and finger that use the mtime of
  [devices don't work right (MR 384). 2) two different files on the same
  [floppy can appear to be the same file (MR 790). 3) no clobber in csh
  [doesn't work right if output is redirected to a floppy file that exists
  [ (MR 829) .
SMR Number: [980 ] ROS Version: [3.3 ]
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [ls -l prints user id number instead of user name if the user id is ]
  [greater than 2048.
SMR Number: [984 ] ROS Version: [3.3 ]
Status: open Target Release: 3.4 Last Reviewed: 04/22/1986
  [Error messages on console (so many that they scroll off top of screen);
  ["FDLP cannot notify UM=65557 Err=1 UM link=18"
_____
SMR Number: [986 ] ROS Version: [3.3 ]
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [In cu, if you type "nt take filename" and then backspace, every other
  [letter is erased from the screen.
-----
SMR Number: [994 ]
                                  ROS Version: [3.3
Keyword: {cat
Status: open Target Release: unknown
                                           Last Reviewed: 04/22/1986
  [If one types:
      $cat file1 > /dev/fl/file1 &
      $cat file2 > /dev/fl/file2
  [You receive:
  [ cat: output error
  [and your terminal is now hung. (UM is hung and no processes accumulate
  (runtime)
SMR Number: [1006 ] ROS Version: [3.3 ]
Status: open Target Release: unknown
Keyword: [from LOGIN
                                          Last Reviewed: 04/22/1986
  [Dave was telnet-ed from ridge to hood, while on hood he sent me mail. ]
  [When I received the mail it said it was from "LOGIN". This is a peculiar
  [user from whom to receive mail!
SMR Number: [1009 ] ROS Version: [3.3 Keyword: [/dev/clp ]
Status: closed Target Release: 3.4 Last Reviewed: 05/09/1986
 [if one 'cat's a file to /dev/clp, any subsequent 'cat' or 'lp' to
```

[/dev/lp will hang.	1
]
SMR Number: [1018] ROS Version: [3.3] Keyword: [floppy] Status: open Target Release: unknown Last Reviewed: 04/22/1986 [If removing a file known to be on a floppy is tried immediately] [after reboot, the user gets the message:] [/dev/fl/file non-existant] [Doing a 'dir' first, the the 'rm' works.]]]]
•••]
SMR Number: [1023] ROS Version: [3.3] Keyword: [logfile] Status: closed Target Release: Last Reviewed: 04/22/1986 [Under uucp, the hours in logfile are local, PDT, or PST. Local when the] [machine is calling, PDT or PST when the machine is called.] Solution SMR Number: [1023] Fix will be included in: Description: This is a known unix bug.	Ì
SMR Number: [1024] ROS Version: [3.3] Status: open Target Release: unknown Last Reviewed: 04/22/1986 [call a remote system via cu. cat an executable file on a televideo.] [out and typing is not echoed. ~. and try to call again. 'cu'] ['CONNECTED' and type. no characters are echoed. ~. type 'stty -ixon <] [/dev/ttyX' where ttyX-outgoing modem port. Then all works fine.] [Tried typing ^Q after catting file, to restart output. This did not work.])
SMR Number: [1031] ROS Version: [3.3] Keyword: [mm macros] Status: open Target Release: unknown Last Reviewed: 04/22/1986 [mm seems to operate in verbose mode. When run with a reasonable argument] [it proceeds to echo itself out (it's a script).] [After a second or two, it goes into debug. Also, troff can't open tables] [for /usr/lib/font/devpsc/DESC.out. As a repercussion of above problems] [other dwb commands don't work.]	}
SMR Number: [1036] ROS Version: [3.3] Keyword: [display hangs] Status: known bug Target Release: Last Reviewed: 04/22/1986 [setwsize 3000 3000 hangs display even after process is killed.] [Other ttys and displays are active.]	
MR Number: [1041] ROS Version: [3.3] Status: open Target Release: unknown Last Reviewed: 04/22/1986 [rcp /tmp/junk host:/tmp/junk (where host is same) causes file to be] [trashed.]	
MR Number: [1042] ROS Version: [3.3] tatus: open Target Release: Last Reviewed: 04/22/1986 [1. the s (skip forward k lines) and f (skip forward k screens) hang [if you try to skip beyond the end of file. Pressing del gets you out.] [2. ctl-1 (redraw screen) only works semi-right. It moves the [more (XX)% label up a line - losing the top line. Also, a <cr>]</cr>	

```
[followed by a ctl-1 moves you ahead almost a page instead of merely
  [redrawing the screen.
______
SMR Number: [1047 ]
                                  ROS Version: [3.3
                                 Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [The exec system call should recognize the syntax '#! /bin/csh' ]
ROS Version: [3.3
SMR Number: [1060 ]
               Target Release: 3.3u2
                                       Last Reviewed: 04/22/1986
Status: open
  [If a dup is performed and any error occurs, FDLP warning: dup err = xx
  (prints out. It is common for programs with open connections to the tty
  [to do dups, if carrier is not present, err=619.
 SMR Number: [1061 ] ROS Version: [3.3
              Target Release: never Last Reviewed: 05/08/1986
Status: closed
  [Simultaneous print/plot mode doesn't work on versatec. In particular,
  [the first line of text put to versated is interpreted as a plot raster,
  [so it comes out as a bunch of dots and dashes at the top of the page.
                                          SMR Number: [1061
Solution
Fix will be included in: never
Description:
  We do not support simultaneous print/plot mode.
SMR Number: [1062 ]
                                  ROS Version: [3.3
                                 Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  (Setting the date backward in time, or booting the system with a 1960
  [date and then setting the time will cause all time calculations to
 (break. The time command will not work until the system is rebooted.
SMR Number: [1063 ]
                                  ROS Version: (3.3
                                        Last Reviewed: 04/22/1986
Status: known bug Target Release:

    Create a large file >1.3 meg

 [2. Use split to create a 1248256 byte file, the max size allowed on floppy.]
 { split -b -1248256 bigfile xx
 [3. cat xxaa > /dev/fl/abc
 [4. cat file1 > /dev/fl/x1 -- destroys dir
 [5. cat file2 > /dev/fl/x2 -- destroys floppy data
SMR Number: [1064 ] ROS Version: [3.3
Status: closed Target Release: 3.4u1 and u5 Last Reviewed: 05/08/1986
 [Given 100 files called junk00, junk01,...junk99, ls junk*|cat>outfile
 (sometimes causes a line in the output file to be duplicated.
 [This occurence of the problem seems to depend on the choice of current
 [directory in which the commands are executed. This problem (&related
 (variants) has been repeatedly observed when running in /tmp and once
 [in home directory. It has never been observed when running in directories ]
 fon priam disk.
                                           SMR Number: [1064
Solution
Fix will be included in: 3.4ul and u5
Description:
  Fix added for 3.3 update 5, and 3.4 update 1.
SMR Number: [1066 ]
                                  ROS Version: [3.3
         [troff/display
Keyword:
Status: open Target Release: unknown
                                        Last Reviewed: 04/22/1986
 [Desire troff to produce output on a Ridge display.
SMR Number: [1068 ]
                                  ROS Version: [3.3
Keyword: [ddt flag
Status: closed Target Release:
                                        Last Reviewed: 04/22/1986
 [Recompile cu with the ddt flag turned off.
Solution.
                                           SMR Number: [1068
Fix will be included in:
Description:
  I took out the "#define ddt" line and recompiled.
```

```
SMR Number:
            [1071
                                      ROS Version: [3.3
Kevword:
            [stty tostop set
Status: open Target Release: unknown
                                            Last Reviewed: 04/22/1986
  [A user running with csh and tostop tty mode set sends mail to an unknonw ]
  [user. When sendmail runs it dies and the mail is not sent. There is no ]
  [error printed. Turning of tostop fixes the problem (an error is printed). ]
SMR Number: [1075 ]
                                     ROS Version: [3.3
Keyword:
            [vi, mouse, windowmgr]
Status: open Target Release: unknown
                                           Last Reviewed: 04/22/1986
  [using vi on a display without mousemer or windowmer fired up causes lines |
  [that wrap onto second line to get messed up. If a tab is in part of line ]
  [that wraps around, doing a 'w' across line causes cursor to get mixed up ]
  (when it goes into that part of the line. (TERM-ridge-ml)
 SMR Number: [1077 ]
                                     ROS Version: [3.3
Status: closed Target Release:
                                           Last Reviewed: 04/22/1986
  [When you have several mail messages and you've read the first one, a 'd'
  [<CR> is typed to delete it, then you should be able to type <CR> and
  [see message #2 (or the next message), but instead you see message #3.
Solution
                                               SMR Number: [1077
Fix will be included in:
Description:
  No changes made. This enhancement is more trouble than its worth since it
  involves messy special cases. The (p) rint command must be used to see the
  next letter after deleting a letter.
-----
SMR Number: [1078
                                     ROS Version: [3.3
Keyword:
           (FIFO
Status: closed Target Release: ros3.4.ul
                                           Last Reviewed: 04/22/1986
 [In system V any user can mknod a FIFO. We only allow root to do so.
Solution
                                               SMR Number: (1078
Fix will be included in: ros3.4.ul
Description:
   Made messages in mknod more meaningful for non superuser
______
SMR Number: [1080
                                     ROS Version: [3.3
Keyword:
            [tostop
Status: closed Target Release: 3.4
                                           Last Reviewed: 05/08/1986
 [tostop stays set to whatever you set it to when you logout then log
 [back in. i.e.
 [stty tostop; logout; login; tostop is set
 [stty -tostop; logout; login; tostop is not set
 (There is no default.
Solution
                                               SMR Number: [1080
Fix will be included in: 3.4
Description:
  The default is now '-tostop'
-----
SMR Number: [1081 ]
                                     ROS Version: [3,3]
Status: open
                Target Release:
                                           Last Reviewed: 04/22/1986
 [Example:
 [vi<CR>
 f:se ic<CR>
 [aABCDEFG<esc>^cfd FLASH!
 [This should probably change the first four characters, but
 [cf doesn't seem to ignore case.
______
SMR Number: [1099 ]
                                     ROS Version: [3.3
Kevword:
           [terminal modes
Status: closed
              Target Release: ros3.4
                                           Last Reviewed: 04/22/1986
 [The ridge debug program used to work properly when debugging other programs]
 [that fiddle with the terminal modes (turning off echo) because it saved
 [terminal modes on entry and restored them on exit. This no longer works; ]
 [I suspect it's related to Sys V/4.2 terminal modes or maybe even process ]
 faroups.
```

```
SMR Number: [1099
Solution
Fix will be included in: ROS3.4
Description:
   All ATT and BSD tty modes are now saved and restored.
                                         ROS Version: [3.3
                                              Last Reviewed: 04/22/1986
Status: closed
                  Target Release:
  (When od is directed to dump its input in byte form (through either the -b
  (or -c flags), it always displays an even number of bytes. If the input
  [contains an odd number of bytes, the last byte displayed is usually a
  (null. But when the following conditions hold: a)od compresses its output
  [at some point by replacing one or more identical lines of output with a
  (single line containing a '*'; b) the last line of output is not such an
  [identical line (so that the last bytes are actually displayed instead of
  [being represented by a '*'); then the last byte displayed is one of the
  [bytes from the last identical line skipped. Specifically, it is the byte ]
  [from the identical line in the same horizontal position as that of the
  [extra byte. This extraneous last byte can be confusing, and in any case,
  [should not appear. The display of input length that od writes before
  [exiting is always correct, though.
Solution
                                                    SMR Number: [1105
Fix will be included in:
Description:
   Files with an odd number of bytes are still followed by an extra value/
   character except now it is quaranteed to be zero/null. This is somewhat
   better than before. The ideal solution would require a fairly radical
   change because od is written to handle 2 bytes at a time when it should be
   designed for 1 at a time.
SMR Number: [1106
                                          ROS Version: [3.3
                                                                     1
Keyword:
             [signal #117
Status: closed Target Release: ros3.4
                                                Last Reviewed: 04/22/1986
  [Signal #117 SIGINTDIVZERO is ignored (by default) be user monitor.
Solution
                                                    SMR Number: [1106
Fix will be included in:
Description:
  Done in ROS 3.4.
 ______
SMR Number: [1107 ]
                                         ROS Version: [3.3
Status: open
                  Target Release:
                                          Last Reviewed: 04/22/1986
  [There is a bug in the env command which causes the first (or only)
  [assignment to be mishandled. For example, try the command:
  [ env A=b printenv
  [and the last line printed from the environment is completely incorrect.
  [If additional assignments are put on the command line then only the
  [first assignment is mishandled.
SMR Number: [1109 ]
                                         ROS Version: [3.3
Status: closed Target Release:
                                                Last Reviewed: 04/22/1986
  [lpr is setuid to root. This means that any file on the system can
  The read.
Solution
                                                    SMR Number: [1109
Fix will be included in:
Description:
   obsolete by CIO
SMR Number: [1110
                                         ROS Version: [3.3
Status: closed Target Release:
                                                Last Reviewed: 04/22/1986
  [A line in /etc/profile is incorrect. About midway, there is a case
  [statement with a label "sh|-rsh)". This should not reference 'rsh',
  [but whatever the restricted shell is called these days.
Solution
                                                    SMR Number: [1110
Fix will be included in:
Description:
  I changed the word rsh to rshell as suggested.
```

```
SMR Number:
             [1118
                                         ROS Version: [3.3
Keyword:
                  Target Release:
                                                Last Reviewed: 04/22/1986
Status: open
  (cat doesn't work when input and output are sockets, eq:
  f rsh ridge cat < /etc/hosts > /tmp/junk
  [returns:
  f cat: input is output
  [This rsh command works fine on other bsd systems (eq Sun at S-Cubed)
  [and other programs (eg hexdump) work with input and output on a socket.
                                         ROS Version: [3.3
             f1125
SMR Number:
             [cc constants
Kevword:
                                                Last Reviewed: 04/22/1986
Status: closed Target Release:
  [The -a option of cc does not work if constants are used in expresssions. ]
_____
                                         ROS Version: [3.3
SMR Number: [1127 ]
             [-L option
Keyword:
Status: open
                  Target Release: 1.10
                                                Last Reviewed: 04/22/1986
  [The -L option of rf should flag format errors. The one it does not catch ]
  [1s:
  [ format ('bug:'/
  [ + ' xxx
  [ + ' xxx')
  [Should insert commas.
  [Also see spr#416. MJ 9/10/85
SMR Number: [1138 ]
                                         ROS Version: [3.3
Kevword:
             (modem
Status: closed
                 Target Release: ros3.4
                                                Last Reviewed: 05/06/1986
  [login shell is /bin/sh
  [login over modem
  frun vi
  [hangup the phone
  [expreserve and friends get stuck
Solution
                                                    SMR Number: [1138
Fix will be included in:
Description:
  This has already been fixed, at least I couldn't duplicate the
  problem. Supposedly, the next person who logs in after the phone
  has been hung up gets the previous shell, jobs, etc., but when I
  did it, I always got the login prompt.
SMR Number: [1142
                                         ROS Version: [3.3
Program: [lp spooler
                                         Version: [1.0
Status: closed Target Release:
                                               Last Reviewed: 04/22/1986
  [The manual pages for the lp spooler package have a bogus string at the end ]
  iof each.
Solution
                                                    SMR Number: [1142
Fix will be included in: ros3.4
Description:
  took out bogus strings, put each page under sccs instead of rcs.
SMR Number: [1144 ]
                                         ROS Version: [3.3
Keyword:
             [waterfall cou
Status: closed Target Release: ros3.4.ul
                                               Last Reviewed: 04/22/1986
  [/usr/bin/realdiag goes into debug when run on a system that has waterfall ]
  [cou boards.
Solution
                                                    SMR Number: [1144
Fix will be included in: 3.4.ul
Description:
  Added line in cleanup script that removes /usr/bin/realdiag if it exists.
SMR Number:
                                         ROS Version: [3.3u2
Keyword:
             [ns panics
                Target Release: ros3.4
Status: closed
                                                Last Reviewed: 04/22/1986
 [network panic: no more big buffers
```

Description:

```
[ns then goes into debug with SIGUSR1
                                               SMR Number: [1147
 Solution
 Fix will be included in:
 Description:
   Instead of massive changes suggested in analysis section, we allocate the
   same amount of buffer space initially, but add the ability to allocate
   additional buffers (mbufs & big bufs). We can allocate up to 4 times the
   initial number of each type of buffer. (This limitation is imposed by the
   size of the tables used to control these buffer pools -- we do not use a
   linked list, so we can't grow the tables.) In this fashion we can allocate
   more buffers to accomodate a peak load, but we suffer no performance
   degradation accessing the initial buffers. There is some performance drop
   when accessing buffers allocated later. We could have just allocated all
   of the buffers initially, but since they are rarely necessary, it seemed
   ridiculous to increase the buffer area so dramatically.
   <mbuf.h, uipc mbuf.c>
 SMR Number: [1149 ] ROS Version: [3.3u2 ]
 Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
  [telnetd does not display the /etc/issue file. Since important information ]
  [may be contained in this file telnetd should be enhanced to display the
  [file as getty does. This should replace the message now displayed:
  ["Ridge Computers ROS 3.3 (hostname)".
Solution
                                              SMR Number: (1149
Fix will be included in:
Description:
   It does in ROS 3.4. It no longer displays the banner that was compiled
   in the source. You must use /etc/issue to get any banner.
SMR Number: [1150 ]
                                  ROS Version: [3.3u2
Keyword: [root]
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [When mail is saved for root (with home directory = /), mail prints the
  [pathname as //mbox. While technically correct, this is not the normal
  [pathname for /mbox.
 ------
SMR Number: [1153 ] ROS Version: [3.3
Keyword: [from root
Status: open Target Release: unknown
                                          Last Reviewed: 04/22/1986
  (Mail received from root has ')' in 'from' line that causes the replies
  Ito generate errors. The ')' comes from /etc/passwd.
SMR Number: [1154 ] ROS Version: [3.3
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  (If rlogin to host and .rhosts and hosts.equiv fail, login should NOT
  [prompt for login name since it has username already; should prompt only
  [for Password:. (tested on a sun)
SMR Number: [1155 ]
                                    ROS Version: [3.3u2]
Status: closed Target Release: moot Last Reviewed: 04/22/1986
  [Modity UM to only allow 'load enable off' shell for rcUM. All others
  [should run getty/login.
Solution
                                              SMR Number: [1155
Fix will be included in:
Description:
   In ROS 3.4 there is no notion of an rcUM. Control of what runs where is
   in the hands of the system administrator via /etc/inittab.
ROS Version: [3.3u2 ]
SMR Number: [1158
Status: closed Target Release:
                                     Last Reviewed: 04/22/1986
  [If 'ld' encounters an error such as an unresolved reference, it leaves
  Ithe a.out file around even though the link was not successful. This is
  [consistent with the documentation (ld(1)). I am suggesting that 'ld'
 [be enhanced to remove any a.out that was not successfully linked.
Solution
                                           SMR Number: [1158
Fix will be included in:
```

```
Will not be fixed, that's the way it works.
SMR Number: [1161 ]
                                   ROS Version: [3.3
           [drand48 (3C)
Keyword:
Status: closed Target Release:
                                         Last Reviewed: 04/22/1986
  [man drand48 changes terminal settings. For instance, on a tvi950 it turns ]
  [on smoot scroll. On a ridge display, lightening bolts appear.
Solution
                                            SMR Number: [1161
Fix will be included in: ros3.4
Description:
  changed 'fixup' script to runn all pages with eqn, tbl through col.
ROS Version: [3.3
SMR Number: [1162 ]
Keyword:
           [echo
                                         Last Reviewed: 04/22/1986
Status: closed Target Release:
  (The cshell builtin command 'echo' should be enhanced so that it understands)
  Ithe 'backslash escapes' of the /bin/echo command.
  (Note: this should only be done in some way that requires an
  [action on the user's part to enable the new semantics. Otherwise someone ]
  (somewhere will be mad at us.
Solution
                                            SMR Number: [1162
Fix will be included in:
Description:
  I added the expansion of backslash escapes to the built-in echo() function.
  The function is in the sh.func.c module. The change is enclosed in an
  #ifdef ridge statement. The ifdef could easily be replaced with a geteny()
  system call. This way a user could control whether expansion takes place
  by setting an environment variable. As the code is written now, expansion
  is always active.
SMR Number: [1163 ]
                                  ROS Version: [3.3
Status: open Target Release: unknown Last Reviewed: 04/22/1986
 [Desire an option in ps to display processes by user.
________
                                  ROS Version: [3.3
SMR Number: [1164 ]
Keyword: [cshell
Status: open Target Release: unknown
                                        Last Reviewed: 04/22/1986
 (Request modification of at/batch to work with cshell scripts.
SMR Number: [1165 ]
                                  ROS Version: [3.3
          [time
Keyword:
Status: open Target Release:
                                        Last Reviewed: 04/22/1986
 [cron and ftp always report time as PST.
-------
SMR Number: [1168 ]
                                  ROS Version: [3.3u2
Kevword:
          Ísionals
Status: open Target Release: 3.4
                                     Last Reviewed: 04/22/1986
 [Any process running under a UM which runs at a higher priority than the
 (UM can cause the system to hang if it receives a signal while it is in a
 [system call. Eq. /ros/ns.
SMR Number: [1170 ]
                                  ROS Version: [3.3
Status: closed Target Release:
                                 Last Reviewed: 04/22/1986
 [The correct usage for kermit is:
 [kermit c[ddhilbep] [line] [baud] [esc] [even[odd]
 [or kermit s[ddiflbp] [line] [baud] [even[odd] file...
 [or kermit r[ddiflbp] [line] [baud] [even[odd]
Solution
                                           SMR Number: [1170
Fix will be included in:
Description:
  I added the "p" for parity and "evenlodd" to the Usage messages to
  reflect Doug's enhancement.
SMR Number: [1173
                                ROS Version: [3.3
                                                         1
Keyword:
          flibc
```

```
Status: closed Target Release: ros3.4
                                           Last Reviewed: 04/22/1986
  (strspn function in libc doesn't work right. The actual file for this
  [function contains the C version and the translation into ridge assembly.
  [The C version is correct. The translation is wrong. (This is an
  (important bug to fix if utilities or tools use this function).
  [Note 10/4/85 from mehdi: strcspn does work.
                                               SMR Number: [1173
Solution
Fix will be included in: ros3.4
Description:
   The translation from the C source to assembly language was missing a branch
   instruction. This code had never worked. It always returned 0!
   Module: strspn.s
SMR Number: [1174] ROS Version: [3.3
Status: open Target Release: 3.4
                                    Last Reviewed: 04/22/1986
  [The csh manual and tutorial state that stty commands can be put in the
  [.login file. Unfortunately, the way the window manager initializes
  (windows, this won't work on a display. The stty commands must be put in
  [the .cshrc file. This should be viewed as a) a bug, b) an enhancement
  (request, or c) a documentation 'fix.
 SMR Number: [1175] ROS Version: [3.3u2
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
  [chown system call allows 4.2bsd clients to give away files!
                                               SMR Number: [1175
Solution
Fix will be included in:
Description:
   Added OS specific processing to chown in UM. Also updated crtl.h for libc
   changes to set the OS field in the mesage header.
  _____
                                     ROS Version: [3.3u2
SMR Number: [1176 ]
            [fortran/crt0.o
Kevword:
Status: closed Target Release:
                                           Last Reviewed: 04/22/1986
  [Any FORTRAN program, when executed from the shell, sets $status to 64.
  [Therefore, FORTRAN programs cannot be used in scripts which do error
  [checking. e.g., makefiles.
                                               SMR Number: [1176
Solution
Fix will be included in:
Description:
  Not a problem. User error.
------
SMR Number: [1178 ]
                                     ROS Version: [3.3
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [stty < /dev/rmt16 causes a file mark to be written to the tape when there ]
  (is a write ring in the tape.
------
SMR Number: [1179 ]
                        ROS Version: [3.3
Status: open Target Release: unknown Last Reviewed: 04/22/1986
  [cut.ex does not convert the termcap entry for the 'bitgraph' correctly. ]
  [There is an example of the bad entry produced by cut.ex on the hard
  [copy version of this.
SMR Number: [1181
                                     ROS Version: [3.3u2
Keyword:
           [pipes
Status: open Target Release: unknown
                                           Last Reviewed: 04/22/1986
 [the command:
  [ cat filename | head -2 | tail -1
 (with the file "ABCDE
                PORST"
 [produces "GHIJ". The "F" is missing. This is intermittant. If it doesn't 1
 [happen, try it with a big file first, then with this file a few times.
SMR Number:
                                     ROS Version: [3.3u2
           (1185 )
Keyword:
            [Record Locking
```

```
Last Reviewed: 04/22/1986
Status: closed
                  Target Release: 3.4u3
  (Added System V record locking to the system.
  [This was implemented in the FileMgr, Kernel, and the VolMgr.
  [The I/O portion of the runtime was also modified.
  [The chmod was modified to place a file in manditory locking mode.
Solution
                                                    SMR Number: [1185
Fix will be included in: ros3.3
Description:
   Files modified to support record locking:
    crt1 -- read.c 1.10, write.c 1.9, fcntl.c 1.3, crtl.h 1.11
    chmod.c 1.3
    filemgr -- delta 4.1 removed, base delta
              delta 3.2.1.1 added to main stream as 3.2
              delta 3.3 record locking delta
   include -- fcntl.h 1.4, unistd.h 1.1, makefile
    include/sys -- errno.h 1.2, errors.h 1.6
    kernel -- deltas 4.1, 3.4 removed, base delta
             delta 3.4.1.1 added to main stream as 3.4
             delta 3.5 record locking
    volmgr -- delta 4.1 removed, base version
             delta 3.3 record locking
    port/gen -- lockf.c 1.1.errlst.c 1.3.makefile
    SMR Number: [1188 ]
                                         ROS Version: [3.3u2
             ERQUEUEFULL
Keyword:
Status: closed
                 Target Release:
                                                Last Reviewed: 04/22/1986
  [s3 (and hood) have gotten:
       UB/DR11: cannot set timer = 1
  [This is ERQUEUEFULL from send when ns sends reset timer request to the
  [timer. Also, on trinity, sendmail hung when it theoretically had set
  (an alarm.
  (1) timer needs a bigger queue
  [2) do we need a mechanism (in the system of in the application) to recover ]
  [from an alarm not being able to be set?
                                                    SMR Number: [1188
Solution
Fix will be included in:
Description:
  cannot reproduce
SMR Number: [1189 ]
                                         ROS Version: {3.3u2
Keyword: {ruptime
                               1
Status: closed Target Release: enet3.4 Last Reviewed: 04/22/1986
  [ruptime doesn't work on ridge with a remote vax at UCSB. ruptime indicates ]
  [the vaxen are down. (The suns think ridges and vaxen and suns are up;
  (the vaxen also think everyone is up.) Occassionally, we will correctly
  [receive an rwho packet from the vaxen (like once a day).
Solution
                                                    SMR Number: [1189
Fix will be included in:
Description:
  Disabled UDP checksumming on incoming data. Unfortunately, this has the
   side effect of disabling it on outgoing data as well. We should beta test
  this with a variety of non-ridge systems. (UDP is spec'd to accept a zero
  checksum as correct (which is what we will send when checksumming is
  disabled), but we don't know if everyone follows this spec.)
  We should remove this patch when 4.3 BSD is more widely distributed, as it
  contains the fix for the VAX side of this.
SMR Number: [1190 ]
                                         ROS Version: [3.3
Status: open
                                               Last Reviewed: 04/22/1986
                  Target Release:
  [The command 'crypt < file | page' causes the terminal to be left in an
  [unsane state. There seems to be an interaction when echo is turned
 [off to enter the crypt key.
SMR Number: [1191 ]
                                         ROS Version: (3.3u2
                                                                     1
Keyword:
             [dbx, ^z
```

Last Reviewed: 04/22/1986

Status: closed Target Release:

```
[Dbx gets confused after it has been suspended with ^x (under CSH) and then ]
   [restarted. i.e.: typing, where before ^z reported state correctly, after ]
   [^z garbaged the arguments of the current procedure and printer "Ref
   [Write Page at Oxffffffff" repeatedly until <DEL> was hit. In one case,
   [dbx resumed execution of the program even though it was not asked to and
   [the program was stopped a ta break point. It also takes several cursor
   [returns before a prompt is displayed.
                                                    SMR Number: [1191
 Solution
Fix will be included in:
Description:
   Fixed in ROS 3.4 Update 1.
                                          ROS Version: [3.3u2
SMR Number: [1192 ]
Keyword: Ins
                                 1
                                                Last Reviewed: 04/22/1986
Status: closed Target Release: enet3.4
   [ns gets an ill mem reference in the data segment. Recreate by:
         rsh shasta csh -i
         vi file
  [this hangs. Type <DEL>, then ^d. One of the 2 rsh's on the local
  [host will then die and ns on the remote has gone into debug.
                                                    SMR Number: [1192
Solution
Fix will be included in:
Description:
   Modified soo_ioctl to always allocate an mbuf when it allocates a big buff
   so we abide by the buffer allocation rules. This problem occurred several
   times in this routine.
SMR Number: [1196 ]
                                         ROS Version: [3.3u2
             [um, get priority
                               1
Keyword:
                                             Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.3.u3
  [The um gets stuck in a loop that hangs the system when getpriority is
  (called with the which parameter=PRIO USER. Mike also thought that
  [which=PRIO PGRP would do the same.
  [This impacts the 4.2 utility 'renice'.
Solution
                                                    SMR Number: [1196
Fix will be included in:
Description:
   This was fixed in ROS 3.3 update 3.
SMR Number: [1198 ]
                                         ROS Version: [3.3u2
Keyword: [ros vs. unix
                               1
                                                Last Reviewed: 04/22/1986
Status: open
                  Target Release: ros3.5
  (1) mkdir test1
  (2), cd test1; pwd
  (3) mv ../test1 ../test2
  [ cd 'pwd' fails
SMR Number: [1200
                   1
                                         ROS Version: [3.3
Keyword:
          [lint
                                                Last Reviewed: 04/22/1986
Status: closed Target Release:
  [Lint uses 'cc' to preprocessa C file. New customers don't have 'cc'!
  [Lint must be changed to use 'rc' instead. This problem happened at a
 fcustomer site.
------
                                         ROS Version: [3.3u2
SMR Number: [1201 ]
Keyword:
             [stty, autoflow
                                                Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
 [In stty, the parameter 'autoflow' should be changed to 'cauto' to conform ]
 [with the documentation in stty(1) and termio(7).
Solution
                                                    SMR Number: [1201
Fix will be included in: ROS3.4
Description:
  The "autoflow" option has been changed to "cauto" (Ridge specific
   hardware feature) to conform with documentation in stty(1) and termio(7).
```

```
Keyword:
            [4.2 include file ]
Status: closed Target Release: 4.2util
                                             Last Reviewed: 04/22/1986
  [The 4.2 include file, curses.h, is broken.
                                                SMR Number: [1202
Solution.
Fix will be included in: ros3.4.ul
Description:
   Repaired curses.h file
SMR Number:
            [1203]
                                       ROS Version: [3.3u2
Keyword:
            [4.2 libraries
Status: open Target Release: 4.2util
                                          Last Reviewed: 04/22/1986
  [How about porting 4.2 libcurses.s and 4.2 libtermcap.a?
SMR Number:
            [1206]
                                       ROS Version: (3.3u2
Keyword:
            [eof pascal
Status: closed Target Release: rpl.8
                                            Last Reviewed: 04/22/1986
  [after eof returns true, then subsequent calls to eof return unpredictable ]
  [values even though the file pointer is still at the end of the file. eof ]
  [should continue to return true according to the ISO Pascal standard.
Solution
                                                SMR Number: [1206
Fix will be included in: rpl.8
Description:
   eof was trying to read the file even though it knew it was at the end of
   the file. I added an if statement to simply return true if the file pointer
  is at the end.
SMR Number: [1208 ]
                                      ROS Version: [3.3u2
                Target Release:
Status: closed
                                            Last Reviewed: 04/22/1986
  [We should port release 2 version of this program. We state that we support]
  [Sys V release 2, yet this utility (and perhaps others) are from release 1. ]
                                                SMR Number: [1208 ]
Fix will be included in:
Description:
  I "ported" the System 5 release 2 version of cal over from ridge.
  No changes were necessary.
SMR Number: [1347 ]
                        ROS Version: [3.3
Status: closed Target Release: never Last Reviewed: 05/08/1986
  [Files having 339 extents never get more when attempting to append to file. ]
  [Experienced in C, f77, and by catting stuff to file. Workaround: cp file]
  [to another when large # of extents, then mv copy to original name. This ]
  [leaves less # of extents.
Solution
                                                SMR Number: [1347
Fix will be included in: never
Description:
  This is a limitation of the system.
SMR Number: [1373 ]
                                      ROS Version: [3.3 ]
Status: closed Target Release:
                                            Last Reviewed: 04/22/1986
  [The command newgrp - <groupname> doesn't cause the environment to be
  [changed to the one that would be expected if the user actually logged in
  [again. This is stated in the manuals. All newgrp does is exec another
  [sh. However, sys V, rel 2 newgrp does change the environment. This is
 [found in /usr/5/usr/src/cmd/newgrp.c on ridge.
Solution
                                                SMR Number: [1373
Fix will be included in:
Description:
  I did not find problem given in SMR. I fixed the size of a malloc which
  was 4 bytes smaller than intended and commented out a no longer used
  function *rname(). See the analysis form for more info.
  12/19/1985
  I ported the system 5, release 2 version. AT&T did not fix the problems I
  found above so I fixed those before checking it in. AT&T did, however,
  fix the problem I didn't find above. Everything should be right now.
SMR Number: [1382 ]
                                      ROS Version: [3.3
```

```
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
  [The following shell scrpt:
  f mt rew
  f tar tb 20
  [when run on a blank tape (new) appears to have crashed the system.
SMR Number: [1417 ]
                                       ROS Version: [3.3u1
Status: known bug Target Release:
                                             Last Reviewed: 04/22/1986
  [Please enhance the ROS debugger to preserve the cause of a violation
  land give a command to print it out. I submit huge batch lobs through a
  [front-end switch and check on it from time to time. If the 10b bombs to
  [the ROS debugger, there is currently no way to find out why.,
  [Note that if you disconnect and the line is CLOCAL your process will no
  [longer go into debug. Core files will be provided at some future release. ]
    SMR Number: [1446
                                       ROS Version: (3.3ul
Keyword:
            [tapedriver
Status: closed
                 Target Release:
                                             Last Reviewed: 04/22/1986
  [1. find . -cpio /dev/rmt17 produces 'find: can't write output Tape is not ]
  [write protected. If you want to go on, type device file name when ready.' ]
  [When the tape in the drive does not have the write enable ring. Message ]
  [should not have the 'not'.
  [2. a) mt fsf & taking the tape drive offline while forwarding results in th]
  [the prompt coming back to your terminal.
     b) mt rew & taking the tape drive offline while rewinding results in a
  [locked up terminal.
  [Would prefer that the terminal does not get locked out; however, he feels ]
  [that there should be consistency between a & b.
 SMR Number: [1448
                                      ROS Version: [3.2 and 3.3 ]
Keyword:
            [tbl
Status: open
                 Target Release:
                                             Last Reviewed: 04/22/1986
  [tbl modifies tab settings and does not reset them to the original
  (values after printing the table.
SMR Number: [1452
                                    ROS Version: [3.3
Keyword:
            femacs
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
  [Start shell in buffer command does not work. It appears to execute, but ]
  (no new window is started and EMACS is still ready to accept the next
  [command. Beth was able to execute one successful shell escape, but the
  frest failed.
SMR Number: (1453
                                      ROS Version: [3.3
Kevword:
            [emacs
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
  [Prefix character with terminator does not throw away the ctl-1 at the
  [end for query replace and search commands.
SMR Number: [1454
                                       ROS Version: [3.3
Keyword:
            (emacs
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
  [View Syntax Table output format truncates the display.
SMR Number:
            [1455
                                       ROS Version: [3.3
Keyword:
            [emacs
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
  [Keyboard macro does not continue executing after a recursive edit has been ]
  [entered and exited. There's one thing (C-U C-XQ) that allows user to edit ]
  [for a while, each time the macro is exited. Let's see if that fixes this ]
  foroblem.
SMR Number: [1456
                                      ROS Version: [3.3
Keyword:
         [emacs
Status: open Target Release: unknown
                                             Last Reviewed: 04/22/1986
 [Keyboard macros should be expandable to
```

```
(Elisp language.
  (No editing in mini buffer for search command.
  [Word/character toggle would be nice for movement commands so that forward |
  [arrow could move either a character or a word.
SMR Number: [1457
                                          ROS Version: [3.3
Kevword:
             ítar
                   Target Release:
                                                 Last Reviewed: 04/22/1986
Status: closed
 ftar does not restore the mtime. Is that because there is no utime(s)
  [call? If so, when will that be fixed, or when will that call be
  (released?
SMR Number: [1458
                                          ROS Version: [3.3
                                          Version: [1.6
Program: [rp
Kevword:
             [rp
                   Target Release:
                                                 Last Reviewed: 04/22/1986
Status: closed
  [End of file test fails with attempt to read last end of file when called
  [twice at the end of the file.
  [See the example in /usr/beth/exp/458.ex
Solution
                                                     SMR Number: [1458
Fix will be included in:
Description:
   This is a duplicate of smr 1206.
______
SMR Number: [1459
                                          ROS Version: [3.3
                                          Version: [1.6
Program: [ro
                   Target Release:
                                                 Last Reviewed: 04/22/1986
Status: closed
  [reset does not work when several pascal files are connected to the same
  iphysical file.
  [See the example in /usr/beth/exp/459.ex
Solution
                                                     SMR Number: [1459
Fix will be included in:
Description:
   This is not a bug. Pascal does not have a "close" statement which
   normally is used to tell the system to "flush" the buffer. In this
   case, when the user is "finished" writing to the file, some of the
   data is in the file buffer and has not been written out yet. When the
   reader tries to read the file, the file is empty. The programming
   solution to this problem is for the writer to do a "reset" when
   it is finished writing to the file. The reset in this case acts like
  a "close" and will flush the buffer. The reader will then be able to
  read the file completely.
_____
SMR Number: [1460
                                          ROS Version: [3.3
Program: [rp
                                          Version: [1.6
                   Target Release: rpl.9
Status: closed
                                                 Last Reviewed: 04/22/1986
  (When a run-time error occurs the results written on 'output' file are
  [lost if the stdout is redirected to a file.
  The example is found in /usr/beth/exp/460.ex.
  [The execution produces:
     with stdout not redirected:
      record 1, value : 1 end-of-file = false record 2 value : 2
       end-of-file = true end-of-file = Attempt to read past end of file.
     stdout redirected to a file (a.out > result)
      -the file result is empty.
       -the error message 'Attempt...' is issued on the CRT.
Solution
                                                     SMR Number: [1460
Fix will be included in: rp1.9
Description:
  This is not a bug, strictly speaking. Pascal I/O goes through the standard
   UNIX IO. File I/O is buffered by default. That is, program output is
   accumulated until there is "enough" of it to be written out. So, if the
  program terminates abnormally, all the data that has been accumulated but
   not written out yet, is lost. I/O to the terminal is not buffered. The
  buffer size is 4k by default. This occurs in C and Pascal both of which go
```

through standard IO.

There is a system call, setbuf (3S) which you can call in your program to tell the system NOT to buffer IO to a particular file. This call is easily made from a C program. For release 1.9 of rp, we will provide the include files and interfaces to make this call easily callable from Pascal as well. Note that standard error is unbuffered by default.

```
SMR Number: [1461 ]
                                        ROS Version: [3.3
 Program: [rp
                                        Version: [1.6
                      1
                  Target Release:
                                              Last Reviewed: 04/22/1986
 Status: open
   [Compiler does not check constant sets.
     program esset (input, output);
     var a:integer;
     begin
          a:=32:
           if a in [32] then writeln('pass')
           else writeln('fail');
     end.
   [If compiled without the -i option: no compilation error, and
   [the execution produces: fail.
 ---------
 SMR Number: [1462 ]
                                        ROS Version: [3.3
                                        Version: [1.6
 Program: [rp
                     1
 Status: closed
                  Target Release: rpl.8
                                              Last Reviewed: 04/22/1986
  [Sets containing more than 32 elements and the use of the compiler
  [extensions are incompatible. Would like to have a separate compiler
  [option to allow sets to contain more than 32 elements.
 Solution
                                                  SMR Number: [1462
Fix will be included in: rpl.8
Description:
   An option (-j) has been added to control the set size. This is now
   independent of the -i (for iso extension) switch.
SMR Number: [1463 ]
                                     ROS Version: [3.3u2
                                       Version: [1.50
Program: [tapedriver
Keyword:
Status: closed Target Release: ros3.3u5
                                              Last Reviewed: 04/22/1986
  [When reading a multi-file tape, the tapedriver intermittantly misses EOF
  (marks. Driver completes and returns a record with a length equal to the
  foriginally requested length. Contents of record is unknown.
  (See Glenn for a script on how to easily reproduce this problem.
*************************
SMR Number: [1464 ]
                                       ROS Version: [3.3u2
             [XON/XOFF
Keyword:
Status: open
                  Target Release:
                                              Last Reviewed: 04/22/1986
  When using stry with BSD option for setting start/stop characters the
  (option seems to work when they are set to different characters but when
  (set to the same character for toggle mode it does not. When set to the
  [same character the stop character will not stop the output.
SMR Number: [1465 ]
                                       ROS Version: [3.3
Status: closed Target Release: ros3.4.ul Last Reviewed: 04/22/1986
  [When using a range-specification in a 'scanf' scan-set, the last element
  [of the range is not accepted by the scan-set. For example.
  [%[0-9] behaves as %[012345678], not as %[0123456789].
Solution
                                                  SMR Number: [1465
Fix will be included in: 3.4.ul
Description:
  Fixed coding error on /usr/src/lib/libc/port/stdio/doscan.c where the
   range of a scanset was being improperly calculated (setup()).
SMR Number: [1466 ]
                               ROS Version: [3.3
Status: closed Target Release:
                                       Last Reviewed: 04/22/1986
  [It would be very useful if the Ridge implementation of the C compiler
  [would allow static initialization of unions.
Solution
                                                 SMR Number: [1466
```

```
Fix will be included in:
 Description:
      will not be fixed until specified in the C standard
 SMR Number: [1467
                                                                           ROS Version: [3.3
 Status: closed
                                  Target Release:
                                                                                      Last Reviewed: 04/22/1986
     [It would be useful to have login c-shells execute a file /etc/login
     [before the user's $HOME/.login. This would be similar to the Bourne
     [shell's execution of /etc/profile.
 Solution
                                                                                              SMR Number: [1467
 Fix will be included in: ros3.4
 Description:
     Fixed by adding /etc/profile.csh to the system.
 SMR Number: [1468
                                                                           ROS Version: [3.3
 Status: open Target Release: unknown
                                                                           Last Reviewed: 05/08/1986
    [When continuing an interactive command line with "\<CR>" from a
     [non-display terminal (Heath/Zenith 29), sh saves up all PS2 (continuation)
    {prompts and prints them after command entry has completed.
    [Example:
    ($ echo a\
    [b\
    [C
    (> > abc
     [Should be:
                             $echo a\
                             > h\
                             > c
                             abc
                             $
 SMR Number:
                        [1469
                                                                          ROS Version: [3.3
Keyword:
                        [mouse cursor
Status: known bug Target Release:
                                                                                       Last Reviewed: 04/22/1986
    [Suggest adding the ability to disable the display of the mouse cursor
    [when using the window manager. The cursor position should still be
    supply of the state of the stat
    [This capability would make it easier for users to implement user-defined
    (cursors.
 _____
SMR Number: [1470 ]
                                                                          ROS Version: [3.3u2
                      [FORTRAN I/O speed ]
Keyword:
Status: closed Target Release: rfl.8
                                                                                     Last Reviewed: 04/22/1986
    [FORTRAN I/O is too slow. It does too many seeks that it doesn't have to.
Solution
                                                                                             SMR Number: [1470
Fix will be included in: rf1.8
Description:
     I incorporated all changes into our
     libI77. All the work is under the OPTLIBI define symbol. The makefile
     has been changed to define this symbol.
_______
SMR Number: [1471
                                  1
                                                                          ROS Version: [3.3u2
                                                                                                                          1
Kevword:
                       (kermit
Status: open
                                 Target Release:
                                                                                      Last Reviewed: 04/22/1986
   [Kermit should use the same /usr/spool/uucp/LCK..ttyx file that is used
    [by 'uucp' to prevent the two applications from stepping on each other
   [when using the same outgoing modem port. This enhancement has already
   [been done to 'cu' for 3.3.
-----
SMR Number: [1472
                                                                          ROS Version: [3.3
Program: [rc
                                      1
                                                                          Version: (1.6
Status: closed
                                Target Release: rcl.8
                                                                                     Last Reviewed: 04/22/1986
   [Casting a simple integer into a character works correctly, but when
   [trying to cast an element of an array, zero is returned.
   [Sample program lives in /usr/beth/exp/cast.c.
Solution
                                                                                             SMR Number: [1472
```

Description:

```
Fix will be included in: rc1.8
Description:
   Actually, the problem was with some casts of integer to char. We had
   already run into it and fixed it internally. It will be part of the 1.8
   release.
                                           ROS Version: (3.3
SMR Number: [1473
                                                 Last Reviewed: 04/22/1986
Status: open
                   Target Release:
   [Sometimes when newaliases is run, it creates a null aliases.dir file.
   (A warning is displayed: 'Warning: alias database is out of date' and
   (if newaliases is run again, it usually corrects the aliases.dir file.
   (This has happened at least a few times on ridge, and once at caltech.
 SMR Number: 11474
                                          ROS Version: [3.3
                                                Last Reviewed: 04/22/1986
Status: closed
                   Target Release:
  [If the line 'ex:something:' is placed in a file, the next time that file is]
  [edited, an error message is displayed about such and such (whatever
   (character follows the colon) is not an editor command.
   [Note from customer: this also occurs on a masscomp and a vax.
  [This is even a problem when it's 'tex', etc.
                                                     SMR Number: [1474
Solution
Fix will be included in:
Description:
   undocumented feature- that's the way it works
                                          ROS Version: [3.3u2
SMR Number:
Keyword:
              [magic
Status: closed
                   Target Release: ros3.4.ul
                                                 Last Reviewed: 04/22/1986
  [add the following entries to the distribution /etc/magic file:
  01
             short
                        0x1f9d
                                     netnews compressed batch
  10
                        0x1f1e
                                     pack(1) compressd file
             short
                                                     SMR Number: [1475
Solution
Fix will be included in: ros3.4.ul
Description:
    Added netnews compressed batch and pack(1) compressed file numbers
SMR Number:
                                          ROS Version: [3.3u2
Keyword:
              [scanrange
Status: closed
                                                 Last Reviewed: 04/22/1986
                   Target Release:
  [Intermittently, the system will print a number of the following message
  [on the system console:
        Scanrange, found free page (typically 1-10)
  [followed usually by:
        DeleteMap(Free) <> FreeMapList
        Flip Load Enable to continue
  [The system never recovers from this condition. Attempts to replicate the
  [problem have failed. However, the problem usually occurs on systems with
  [a heavy load. No other correlation is evident.
SMR Number: [1477
                                          ROS Version: [3.3u2
Program: [emacs
                                          Version: [1.0
Keyword:
             [bad keystrokes
                               3
Status: open Target Release: emacs1.1
                                              Last Reviewed: 04/22/1986
  [Someone was using EMACS on a Wyse terminal and hit a key that evidently
  [was not understood by EMACS, but which caused it to abort. EMACS
  [apparently did not set the terminal back to the original state upon
  [this abnormal termination. This caused the terminal to be left in
  [a state where he was immediately logged out.
  [Emacs needs to be tidier.
SMR Number: [1478
                                          ROS Version: [3.3u3
Keyword:
             [enumerated types ]
Status: closed Target Release: rc,rf,rp1.8 Last Reviewed: 04/22/1986
 [enumerated types do not print out correctly
Solution
                                                     SMR Number: [1478
Fix will be included in:
```

```
The size of the enumerated type variable was not being properly set when
   the object file is read in, and it was not being proprely checked when the
   variable was being printed.
SMR Number: [1478
                                           ROS Version: [3.3u3
Keyword:
              [enumerated types ]
Status: closed
                   Target Release: rc:rf.rpl.8 Last Reviewed: 04/22/1986
  [enumerated types do not print out correctly
Solution.
                                                      SMR Number: (1478
Fix will be included in:
Description:
   The size of the enumerated type variable was not being properly set when
   the object file is read in, and it was not being proprely checked when the
   variable was being printed.
SMR Number:
                                           ROS Version: [3.3u2
              11479
Kevword:
              [unsigned mod
Status: closed
                  Target Release: ccl.3
                                                  Last Reviewed: 04/22/1986
  [In a c program, the instruction:
           v=1000.000:
            res=(v/100) $10:
  (gives a wrong result.
  [It was working in Ros 3.2.
Solution
                                                      SMR Number: [1479
Fix will be included in: ccl.3
Description:
   Re-wrote all the templates in table.c for DIV and MOD such that any
   scratch registers obtained are returned at the end of the operation.
   This necessitated leaving the result of a DIV or MOD in the left
   hand node of the tree, rather than in one or the other of the scratch
   registers. Unfortunately, the code generated is quite obscene with
   possibly several unneccessary moves. Changed local2.c so that the result
   of MOD or DIV is left in left node and added a check for discontiguous
   register allocation, with a fatal compiler error generated if this
   occurs.
SMR Number:
              [1480
                                           ROS Version: [3.3u2
Keyword:
              [code generation
Status: closed Target Release: ccl.3
                                                 Last Reviewed: 04/22/1986
  [Rc and cc do not generate the same code when profiling is turned on.
Solution
                                                     SMR Number: (1480
Fix will be included in: cc1.3
Description:
   Changed cc code generater to make it compatible with rc.
SMR Number:
             [1481
                                           ROS Version: [3.3u2
Kevword:
              ffield $1
                   Target Release: ros3.4
Status: closed
                                                 Last Reviewed: 04/22/1986
  [The command (print $1) for awk should print the first field of every line. ]
  [Instead, it prints the entire line. If you use the supposedly equivalent
  [command (printf("*s\n",$1)), the correct result is produced -- i.e. only
  [the first field is printed for each line of input.
  [Even though this problem is not serious in that it does not crash the
  [system, I don't see how any awk user can be happy when such a very basic
  [command does not work. That's why I rate it as "high priority".
Solution.
                                                     SMR Number: [1481
Fix will be included in:
Description:
   No problem. Stripping awk causes it to work properly.
SMR Number: [1482
                                           ROS Version: [3.3
Status: closed
                   Target Release: ros3.3u5
                                                 Last Reviewed: 04/22/1986
  [While displaying the contents of an array with dbx, if one strikes the
  [DEL key to stop output, dbx is trashed from then on.
Solution
                                                     SMR Number: [1482
```

Status: closed

```
Fix will be included in:
Description:
   Fixed in ROS 3.4 Update 1.
SMR Number: [1483
                                        ROS Version: [3.3u3
Program: [libm.a
                                        Version: [1.47
Keyword:
             [loops on infinity ]
Status: closed Target Release: rc,rf,rpl.8 Last Reviewed: 04/22/1986
  [d atan and r atn2 (both assembly language math functions) loop when their ]
  (input is infinity.
Solution
                                                   SMR Number: [1483
Fix will be included in:
Description:
   d atan. S and r atn2. S were not allocating space for a new stack frame
   before calling write when the input was infinity.
             [1484
                   1
                                        ROS Version: [3.3u2
SMR Number:
             [french changes
Keyword:
Status: closed
                  Target Release: 3.3u3
                                               Last Reviewed: 04/22/1986
      1) Fix bug found in kernel.s
      2) New Version info 'ifdefed' with SEMS in vmm.p
      Vmm makefile enhancement
      4) Initialize HostLength and HostIdent in dirmgr.p
     _____
SMR Number: [1485 ]
                                        ROS Version: [3.3
             [/usr/lib/xcpp
Keyword:
Status: open
                  Target Release: 3.5
                                               Last Reviewed: 04/22/1986
  [cxref or /usr/lib/xcpp apparently has a coupld of undocumented limitations ]
  [which cause it to unexpectedly fail. There are two problems: 1) there
  [exists a limitation to the number of #define symbols which cxref or xcpp
  (can handle. 2) xcpp (as used by cxref) truncates some symbols to their
  [first eight characters. This means that a number of constants in
  [/usr/include/sys/*.h files cannot be processed because the names are not
  [unique in 8 characters. Test program:
  [#include <stdio.h>
  [#include <sys/param.h>
  (main()
  [[ printf("Hello world\n"); ]
  (It behaves differently when the includes are reversed.
 _____
SMR Number: [1486
                                        ROS Version: {3.3u2
Program: [awk/strip
                     1
                                        Version: [1.11
Status: open Target Release: 3.4
                                           Last Reviewed: 04/22/1986
  [A problem was discovered with 'awk'. This particular version had not
  [been stripped. Using the same executable, but stripped caused 'awk'.
  (to work properly.
SMR Number: [1487
                                        ROS Version: [all
Program: [ridge/gks
                                        Version: [1.0
Keyword:
            [gks,rc
                              1
Status: closed Target Release: gksl.1
                                              Last Reviewed: 04/22/1986
  [Ridge/Gks was compiled with a version of rc that had bugs which were
  [just found , in the versated driver protion. Mark discovered
  [rc has been fixed. I also found a couple of small minor bugs in
 (the versatec driver. )
SMR Number: [1488 ]
                                        ROS Version: [3.3
Keyword:
            (signals
Status:
                  Target Release:
                                              Last Reviewed:
  [When using make (on cshell) and the del key is hit, that terminal hangs,
  [and then if you try to kill the job from another terminal, the second
 [terminal hangs, etc.
------
SMR Number:
            [1489
                                        ROS Version: [3.3u3
Keyword:
            file I/O
```

```
Solution
                                                  SMR Number: [1489
Fix will be included in: f771.3
Description:
   A check had been added to libI77 to not allow the reading of records longer
   than 1MB. This was an attempt to catch erroneous programs. Unfortunately,
   some people have records that ARE larger than 1MB. I have now added a check
   to see if the record being read is of size less than or equal to the number
   of bytes'left in the file. Since the check involves a call to fstat and a
   call to ftell, it is expensive. Therefore, the check is only done when the
   size of the record being read is > 1MB. The implication is that we only
   catch erroneous programs if they attempt to read a record larger than
   1MB. This is okay since we can't catch all errors anyway.
ROS Version: [3.3u2
SMR Number: [1490
                                                                  1
Keyword:
             [truly zero
                Target Release: rfl.9
                                              Last Reviewed: 04/22/1986
Status: closed
  (A number that is truly zero, as opposed to very close to zero, in F and G
  [format is printed as 0. This is a Ridge extension. There is a conflict,
  [however, if the user tries to print this number with a f2.1 format because ]
  (there is no space before the "." left for the zero. As a result, we print
  [just "." instead of ".0".
  [We should make a special check for this case and print .0.
Solution
                                                  SMR Number: [1490
Fix will be included in: rf1.9
Description:
   I added a check to explicitly look for the case when a truly zero is
   being printed but there is no space to the left of the decimal point.
   MODULE: wrtfmt.c
                                        ROS Version: [3.3
SMR Number: [1491 ]
             [prototype file
Keyword:
                Target Release: ros3.4.ul Last Reviewed: 04/22/1986
Status: closed
  (In the prototype file for sendmail, the line for local mail (Mlocal)
  [specifies P=/bin/mail. This line should actually read P=/bin/binmail.
  (Has it been fixed?
Solution
                                                  SMR Number: [1491
Fix will be included in: 3.4.ul
Description:
   The ridge.cf and trinity.cf files look ok. Changed 'P=' line in
   uucpproto.cf to 'P-/bin/binmail'.
_____
                                        ROS Version: [3.3u3
SMR Number: [1492 ]
                                                                  1
Program: [string.h
                    1
                                        Version: [1.2
Keyword: [string.h strlen ]
Status: open
                Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
  [strlen and several others are missing from string.h. The system V
  [include file is CORRECT. Ours is incomplete.
SMR Number: [1493 ]
                                        ROS Version: [3.3
            [bad ifdef
Keyword:
Status: open
                  Target Release:
                                              Last Reviewed: 04/22/1986
  (This include file has an ifdef that enables a #define PageSize and
  (disables #define NBPG (among other things). Is there a reason that
  [these other things need to be disabled?
______
SMR Number: [1494 ]
                                        ROS Version: [3.3
Program: [GH compilers ]
                                        Version: [1.8
Keyword:
            [assembly code
Status: closed Target Release: rc,rf,rpl.9 Last Reviewed: 04/22/1986
  [The assembly language generated for strings should be in string
  [form, not a series of numbers. Makes it much easier on those of
  [us who look at the assembly language output while trying to
  [find compiler bugs. Other compilers do this.
Solution
                                                  SMR Number: [1494
Fix will be included in: 1.9
```

Target Release: rf1.9

Last Reviewed: 04/22/1986

```
Description:
   This is fixed in the lab and will be in release 1.9 of the compilers.
                                        ROS Version: [3.3
Program: [rc
                                        Version: [1.8
                     1
Keyword:
             [error messages
Status: open Target Release: rc1.9
                                           Last Reviewed: 04/22/1986
  [The error messages are much better than pcc. However, rc doesn't know
  [when to quit. Someone should put in a heuristic which will make
  [it give up when it is hopelessly lost and is dishing out useless
  [error messages.
                                        ROS Version: [3.3u3
SMR Number: [1496
Program: [vi
                                        Version: [1.18
Keyword: [ctrl c
                                              Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [Get into 'vi', but before it has started up, type ^C. It goes into
  [the debugger. This happened to Mehdi with ^2.
SMR Number: [1497 ]
                                        ROS Version: (3.3u2
Program: [fdlp
                                        Version: [1.20
           [ctrl O
Keyword:
Status: open Target Release: unknown
                                                  Last Reviewed: 04/22/1986
  [Customer cu's from the ridge to the fortune box. 'O is being intercepted ]
  [by the ridge. This isn't supposed to happen. It should let it go through.]
______
SMR Number: [1498 ]
                                       ROS Version: [3.3u2
                                       Version: [1.26
Program: [ns
                      1
Status: closed
                 Target Release: enet3.4 Last Reviewed: 04/22/1986
  [At least once a day the system hangs, all terminals stop responding. When I
  [switch 0 is pressed, instead of going into rbug, ns goes into debug with
  [an illegal memory reference in the code segment. Those users who are not ]
  [involved in networking activities are able to continue working.
                                                  SMR Number: [1498
Solution
Fix will be included in:
Description:
   On a receive buffer error, simulate an end of packet condition. Also, when
   looking for an end of packet, if we've looked at every receive buffer and
   they all belong to us, but there is no end of packet, give up and reset the
   wonderboard ethernet driver (don't reset TCP, IP, socket stuff, etc, just
   the low level driver).
   <wonder.c>
                                        ROS Version: [all
SMR Number: [1499 ]
Status: open
                 Target Release: 3.5
                                             Last Reviewed: 04/22/1986
  [The as assembler accepts a 'p' suffix on all load instructions to indicate ]
  [the load should be done from the code segment. The assembler appears to
  [ignore this suffix, however, relying on the type of the operand to generate]
  [a code or data relative load.
SMR Number: [1500 ]
                                       ROS Version: [all
Status: open Target Release: 3.5 Last Reviewed: 04/22/1986
  [The -e option to the linker, ld, does not actually change the entry
  [point of the program. It appears that the code start address in the
 [code file header always has the same value, independent of any
 [specification of a -e option.
SMR Number: [1501 ]
                                       ROS Version: [3.3
Keyword:
Status: closed
                Target Release: ros3.4
                                             Last Reviewed: 04/22/1986
 [In certain cases, cron will not execute a command from a crontab file.
 [The problem arises when:
      * The crontab entry has multiple values in the minute field
       * The hour field in the crontab entry has specific hour value(s)
       * The crontab file is installed on the same day of scheduled execution!
      * The crontab file is installed X minutes after the hour,
```

```
where X is between the smallest & greatest minutes field value
  [The symptoms are:
       * In the 1st several attempts, (where the minutes field < X) cron will ]
         not execute the command. Once cron starts executing the command,
         however, the command will run at the correct times.
                                                SMR Number: [1501
Solution
Fix will be included in:
Description:
   I added the code suggested by the AT&T System Support & Update News 11/85
   issue on page 10. It is in the module "cron.c", in the function
   "next time(e)", on lines 871, 890-892.
 SMR Number: [1502 ]
                                       ROS Version: [3.3
Kevword:
            [date prompt
                                             Last Reviewed: 04/22/1986
Status: open
                 Target Release:
  [The customer urgently requests that startup be modified to allow booting
  [without checking the date so the system can come up unattended.
SMR Number: [1503
                                       ROS Version: [3.3
Keyword:
            [make
Status: closed Target Release: ros3.4
                                             Last Reviewed: 04/22/1986
  [This fix was suggested by the AT&T customer support sheet/newsletter.
                                                SMR Number: [1503
Solution
Fix will be included in:
Description:
   I changed the while in function "execat" in module "misc.c" from:
        while (*sl && *sl != KOLON && *sl != MINUS)
        while (*s1 && *s1 != KOLON)
   as suggested in code fix sheet from AT&T.
                                       ROS Version: [3.3
SMR Number: [1504
Keyword:
            [ pg
Status: closed
                 Target Release: ros3.4
                                             Last Reviewed: 04/22/1986
  [This fix was suggested by the AT&T customer support "newsletter".
                                                SMR Number: [1504
Solution
Fix will be included in:
Description:
  I checked in the suggested fix. Though it didn't seem to fix anything, the
   use of putp instead of pr is appropriate as well as compatible with AT&T's
  idea of how pg should look.
 _____
SMR Number: [1505 ]
                                      ROS Version: [3.3
Keyword:
           [pg
Status: open Target Release: ros3.4
                                        Last Reviewed: 04/22/1986
  [Do a "pg *" on a directory of files. Type "n" at the prompt given by pg ]
  [and press <CR> to skip to the (n)ext file. Pg prints a message indicating ]
  (the name of the next file. This message has what seem like trash
  [characters (", V, F, lightning-bolt) on the end of it.
SMR Number: [1506 ]
                                      ROS Version: [all
Status: closed Target Release:
                                      Last Reviewed: 04/22/1986
  [When declaring a parameter within a procedure when the parameter is less
  [than 4 bytes long, the wrong address is generated. If, for example, you
  [have a 2 byte long structure declared as the first parameter to a
  [procedure, then the address generated is R15,26 instead of the correct
  [address R15, 24.
Solution
                                                SMR Number: [1506
Fix will be included in:
Description:
  Changed code.c so that allocating structure parameter addresses no longer
  calls calloc. Instead it simply knows the next 8 byte boundary on the
  stack is the next parameter slot. Then it adds the size of the structure
  to the address and rounds up to the next 8 byte alignment.
SMR Number: [1507
```

ROS Version: [3.3u3

```
Kevword:
             [shutdown
                                                 Last Reviewed: 04/22/1986
                   Target Release: 3.4
Status: open
  [Manual indicates that we have Sys V shutdown(1). This is not true.
SMR Number:
             11508
                                          ROS Version: [3.3u3
              [/etc/rc
Keyword:
                   Target Release: 3.4
                                                 Last Reviewed: 04/22/1986
Status: open
  [Example in Local Area Network User's Guide for /etc/rc does not
  [reflect the version currently distributed as /etc/rc.3.3
SMR Number: [1509
                                          ROS Version: [3.3
                                          Version: [1.6
Program: [rc
                   Target Release: rcl.9
                                              Last Reviewed: 04/22/1986
Status: closed
  [Since both cc and rc 1.6 treat chars as unsigned by default, a normal EOF ]
  [test of getc() will always fail. This is due to the fact that the compiler]
  [will not promote the 255 to an integer -1 for the comparison.
  (While the customer understands why this has been done, and how to work
  [around the problem, it would be nice if the compiler would, by default,
  (properly compile the following:
  [while ((ch = getchar()) != EOF)
  f putchar (ch):
Solution
                                                     SMR Number: [1509
Fix will be included in:
Description:
   The example program ((ch = getchar()) !=EOF) is not good programming
   practice. You should at least use an int instead of ch. But, of course,
   there are programs that contain this kind of code. The rc compiler has an
   option (-k) that instructs it to treat char's as signed. You can use
   this option for these situations. Please be advised that signed chars are
   much slower on the Ridge than unsigned chars.
   This smr does not require any code change.
_____
                                          ROS Version: [3.3u2
SMR Number: [1510
Keyword:
             [ctrl-x
                                                 Last Reviewed: 04/22/1986
Status: open
                Target Release: unknown
  [On a monochrome display, line erase (ctrl-x) of an excessively long line
  [(1000+ chars) immediately erases the current line and returns to the
  [command level as it should. However, the same activity on a serial or
  [network line causes the entire system to hang for 45 to 90 seconds (or
  [four minutes!) before returning control to the user. We have seen some
  [cases where the system has not recovered from this state. An examination
  [of the processor lights shows that the system is running in a very tight
  [loop when this event occurs.
_____
SMR Number: [1511 ]
                                          ROS Version: [3.3u2
Status: open Target Release: unknown
                                          Last Reviewed: 04/22/1986
  [Since ROS causes a process to trap to the debugger rather than core dump. ]
  [as a BSD 4.2 system would, the external program interface is significantly ]
  [different. For most human users, this is not a hardship, however, we have ]
  [a number of computers pretending to be users through normal serial lines. ]
  [Our normal way of returning the line to a consistant state is to send
  [multiple ctrl-d's (EOF) until we logout the job.
  [Our recommendation is to allow the debugger to treat the INTR and EOF
  [characters, as well as the terminate signal (15) as a KILL PROCESS command.]
  [This would allow us to use the same interface to a ROS system that we use ]
 [with a BSD 4.2 system.
SMR Number: [1512
                                          ROS Version: [3.3u2
Program: [rc
                                          Version: [1.8
Keyword:
             [SIGSEGV
Status: closed
                   Target Release:
                                                 Last Reviewed: 04/22/1986
  [The example code in /usr/beth/exp/1512.c when compiled with rc (with
  [or without -O optimization] runs for a while, then fails with a SIGSEGV
  [signal to the debugger (Illegal Memory Reference in the Code Segment).
 [The same program compiles and runs fine when using cc.
Solution
                                                     SMR Number: [1512
```

```
Fix will be included in:
Description:
   I cannot reproduce this problem. Please give me more info if there is a
   real problem. This could be a system problem which you somehow attributed
   to the compiler?
   From Beth: This was a problem with the customer's code.
SMR Number: [1513
                                           ROS Version: [3.3
Status: open Target Release: unknown
                                           Last Reviewed: 04/22/1986
  (When doing database work, or building large module libraries we hit the
  [limit of 331 extents per file. These files are incrementally built up
  [over time and maintained by a program; they are open, extended, and then
  [closed. It would be nice if open were enhanced so that a recommended
  [(not a hard minimum) extent size for the file could be specified.
  [Alternatively, loctl could be enhanced so that a file descriptor and
  [recommended extent size could be accepted.
SMR Number: [1514
                                           ROS Version: [3.3u2
Status: closed
                   Target Release: ros3.4
                                                  Last Reviewed: 04/22/1986
  [The example in /usr/beth/exp/1514.c does the opposite of what the manual
  [states it should do. The BSD 4.2 open returns an error if the file does
  [NOT exist, and returns a descriptor if the file DOES exist. The manual
  Istates "If O EXCL is set with O CREAT, then if the file already exists,
  (the open returns an error. This can be used to implement a simple
  [exclusive access locking mechanism."
Solution
                                                      SMR Number: [1514
Fix will be included in:
Description:
   Fixed in ROS 3.4.
SMR Number: [1515
                                           ROS Version: [3.3u2
Status: closed
                   Target Release:
                                                  Last Reviewed: 04/22/1986
  [Customer is using 25' shielded cable on a recently serviced Versatec and
  [it seems to drop characters (leading spaces) sometimes on plots and prints ]
  [It seems to correspond to high system load.
SMR Number: [1516
                                           ROS Version: [3.3u3
Program: [rf
                                           Version: [1.8
Keyword:
             [dbx with rf
                                  1
Status: closed Target Release: rf1.9
                                                  Last Reviewed: 04/22/1986
  [rf generates incorrect information for dbx to use when printing character
  [variables. Works correctly with f77.
  [example:
         character*8 a,b
         a="aaaaaaaa"
         b="bbbbbbbb"
         dbx:
         print a ->
                            "aaaaaaabbbbbbbb"
                                               should be "aaaaaaaa"
         print b ->
                            "bbbbbbbb"
                                               this one is OK
Solution
                                                      SMR Number: [1516
Fix will be included in: rf1.9
Description:
   The problem has been fixed in the lab and will be included in the next
   release of the compiler.
SMR Number: [1517
                                           ROS Version: [3,3u3
Program: [rf
                                           Version: [1.8
Keyword:
             (rf
Status: closed
                   Target Release: rfl.9
                                                  Last Reviewed: 04/22/1986
  [rf should be enhanced to allow renaming to f77 so that customers
  [makefiles will work unaltered. It is understood that some of the less
  [common compiler options may have to be changed in makefiles.
  [The same change has already been made for 'rc', and probably should
  [also be made for 'rp'.
Solution
                                                      SMR Number: [1517
Fix will be included in:
```

```
Description:
  This is alread allowed in rf 1.8. You have to be careful, however, with
  libraries. That is, if you change the name rf to f77, you will need to
  explicitly take care of loading the FORTRAN libraries.
  Requires no code change.
                                          ROS Version: [3.3u3
SMR Number: [1518
Keyword:
             [getpgrp
                                                 Last Reviewed: 04/22/1986
Status: closed
                  Target Release: ros3.4
  [Getgrp should be added to the system V libc.
                                                     SMR Number: [1518
Solution
Fix will be included in:
Description:
  Added getpgrp to libc. Added OS specific operation to UM.
SMR Number:
                                          ROS Version: [3.3u2
Program: [rf
                                          Version: [1.6
Keyword:
             [rf without rc
                                                 Last Reviewed: 04/22/1986
Status: closed Target Release:
  [If a customer has purchased 'rf' and NOT 'rc' he is unable to pass both
  [Fortran and C sources to 'rf'. If the new compiler driver can't find
  [/usr/lib/rccom, should it try to execute the old 'cc' compiler instead?
  [If this is inconvenient for technical reasons (i.e. option incompatability)]
  [then paragraph 3 should be updated to indicate that the compiler will only ]
  [accept C (& Pascal) files if 'rc' & 'rp' are present (in the man pages). ]
Solution
                                                     SMR Number: [1519
Fix will be included in: 1.9
Description:
  The next manual update will make this point clear. It will state that only
  the new compilers are used on the source files that are written in a
  foreign language.
  There are two reasons for not making the driver invoke the old compilers:
  1- The most important reason is that we have announced that we are not
  supporting the old compilers any more. This was never communicated to the
  customers properly in the first place and has caused a lot of confusion and
  problems. It would not be wise for us to come out with a product that takes
  special pains to support the old compilers at this time.
  2- There are some conflicts in the use of options by the old and the new
  compilers. It would be confusing for both the driver and the user if we
  tried to accomodate both compilers.
 _____
SMR Number:
             11520
                                          ROS Version: [3.3
Keyword:
             [break
Status: closed Target Release:
                                                 Last Reviewed: 04/22/1986
  [When a ~b is used, the Cray does not receive the break. The cray needs
  [a 220 millisecond break sent.
SMR Number: [1521
                                          ROS Version: [3.3u3
Program: [debug
                                          Version: [1.17
Status: closed
                   Target Release: ros3.4
                                                 Last Reviewed: 04/22/1986
 [Debug prints the error:
  [ debug: internal error, can't find afterbranch breakpoint
  [Reproduce as follows. There are 2 programs, xmit & recv. each of which
  [does a "signal (SIGUSR2, SIG DBG)" and later "kill (getpid(), SIGUSR2)" to put ]
  [the process into debug. The kill is in the main processing loop of each. ]
  [In xmit, set a permanent breakpoint on a call, and another on the instruc-]
  [tion following the call. Exit debug. Each time one of the processes goes ]
  [into debug, check where debug thinks the breakpoints are, and then exit. ]
  [Sometimes one or both breakpoints will move to the process, and then later ]
  [the error will occur. Sometimes, these events will occur together.
Solution
                                                    SMR Number: [1521
Fix will be included in:
Description:
  fixed debug to maintain proper notion of current process.
  SMR Number: [1522
                                          ROS Version: [3.3u2
```

```
[cu LOCK files
Keyword:
                   Target Release: ros3.4
                                                  Last Reviewed: 04/22/1986
Status: open
  [cu(1) man page should be changed to document LOCK files added with 3.3.
  [Lock file name is /usr/spool/uucp/LCK..ttyx
  [Message generated when file exists and an attempt is made to run cu is:
  ["Requested device not available"
                                            ROS Version: [3.3u3
SMR Number:
              f1523
              [fseek bad status ]
Keyword:
                                                  Last Reviewed: 04/22/1986
                   Target Release: rf1.8A
Status: closed
  [A call to fseek caused a bad status to be returned. This code
  (worked with the previous version of lib177.
                                                       SMR Number: [1523
Solution
Fix will be included in: rf1.8A
Description:
  The libI77.a included with rf 1.8 contained performance enhancements
   to FORTRAN IO. This library was compiled with a new option -DOPTLIBI.
   The libU77 library, however, also uses some of the libI77 modules that
   had been changed subject to the OPTLIBI flag. Since libU77 was not rebuilt,
   we saw an incompatibility between the two libraries. I have changed the
   makefile for libU77 and rebuilt it.
                                           ROS Version: [3.3u3
SMR Number:
              [1524
              [conversion
Keyword:
                   Target Release:
                                                  Last Reviewed: 04/22/1986
Status: closed
  [The rc compiler generates incorrect code when the program tries to compare ]
  [an unsigned short to a signed shor. In particular, it should first convert ]
  [both comparands to int and then the signed to unsigned. Rc 1.8 does not
  [convert to int first. Therefore the following code sequence:
       unsigned short a;
       short b;
       a = 32788;
       b = -32784;
       if (a ==b)
             printf ("equal\n");
            printf ("not equal\n");
   should print "not equal". It prints "equal".
                                                       SMR Number: [1524
Solution
Fix will be included in: rc1.9
Description:
   Module getcompat whas changed to always promote its operands to int if they
   are short, before doing the unsigned to signed conversion.
SMR Number:
              ſ1525
                                            ROS Version: [3.3u3
Keyword:
              [sendmail distribut.]
Status: closed Target Release: ros3.5
                                                  Last Reviewed: 04/22/1986
  [The sendmail programs are also useful for sites running only uucp.
  [However, these sites do not have the programs as they are distributed
  [only on the enet floppy. Please consider distributing these programs
  [as part of the basic ROS floppies.
Solution
                                                      SMR Number: [1525
Fix will be included in: ros3.4
Description:
   This is now included on the baseline ros3.4 distribution.
SMR Number:
              [1526
                                           ROS Version: [all
Keyword:
              [complex power
                   Target Release:
                                                  Last Reviewed: 04/22/1986
Status: closed
  (the complex number power function pow zi.c passes z div two arguments.
  [z div expects three arguments. the result of all this will depend on
  (what type of garbage z div picks up as its third argument, it could
  [be a data alignment violation, or an under/overflow, or just a wrong
  [answer.
Solution
                                                      SMR Number: [1526
Fix will be included in: rf1.9
```

```
Description:
   pow zi calls z div with two arguments. z div expects three arguments.
   this is the way the system 5 code looks also (libF77 came from sys 5).
   the 4.2 code has apparently fixed this, they pass three args to z div.
   I copied the 4.2 code for the call to z div.
                                       ROS Version: [3.3u2 ]
SMR Number: [1527 ]
Status: open Target Release: unknown
                                       Last Reviewed: 04/22/1986
  [Customer is strongly requesting that we support the berkeley netstat
  [command.
SMR Number: [1528 ]
                                       ROS Version: [3,3u2
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
  [The on-line man page for msgs exists, but the executable does not.
                                                SMR Number: [1528
Solution
Fix will be included in: ros3.4ul
Description:
   moved location of /usr/msgs/msgs to /usr/bin/msgs.
                                       ROS Version: [3.3u3
                                       Version: [1.8
Program: [rp
             [preprocessor
Keyword:
                 Target Release: 1.10
                                              Last Reviewed: 04/22/1986
Status: open
  [Pascal compiler does not handle preprocessor flags that are combinations
  [of upper and lower case letters. For example:
  [rp -DxY t.p
  [does not define the flag "xY" in the source program t.p.
SMR Number: [1530
                                       ROS Version: [all
Keyword:
             faetcwd
Status: closed Target Release: rf1.9
                                              Last Reviewed: 04/22/1986
  [Calling getcwd from FORTRAN causes an undefined symbol from ld.
Solution
                                                 SMR Number: [1530
Fix will be included in:
Description:
   Getcwd from libU77.a calls getwd to get the current working directory.
   Getwd is defined in the 4.2 libc.a, but not in the Sys 5 libc.a. In Sys 5
   libc.a, the proper call is to getcwd. I have changed the getwd call in
  libu77/getcwd .c to a getcwd call.
SMR Number: [1531 ]
                                       ROS Version: [3.3
Status: open
               Target Release:
                                       Last Reviewed: 04/22/1986
  I have no way to verify this, but the customer complains that on an
  [intermittent basis, the ridge does not respond to rsh or ftp from Sun
  Inodes on the net. Console and other connections not utilizing the net
  [are not affected at the time the problem is being observed. When rebooted.]
  [normal operation resumes with no after effects seen.
SMR Number: [1532 ]
                                       ROS Version: [3.3
Status: open Target Release: unknown
                                      Last Reviewed: 04/22/1986
  [About 75% of the time, shutdaemon never exits. A ctrl-z is typed and
  [a ps shows that the daemons have been killed, but shutdaemon never
  freturns.
SMR Number: [1533
                                       ROS Version: [3.3
                   1
Program: (rf
                                       Version: [1.8 beta
              Target Release: rf1.9
                                             Last Reviewed: 04/22/1986
 [rf has problems with external functions and entry points within subroutines]
 [The following subroutine contains the error, but compiles if the 'entry'
 [statement is removed:
     subroutine testit (fxn)
      external fxn
      entry testit2(fxn)
      y = fxn()
      return
      end
```

```
[This compiles ok with f77.
  (Is rf handling this correctly, or was f77 correct?
                                                     SMR Number: [1533
Solution
Fix will be included in: rf1.9
Description:
   The problem was that the entry name was being treated twice in fixupentry,
   the second time incorrectly. Based on Green Hills help, I have added a
   check in fixupentry to ignore the entry the second time around if the
   object is a rouconstr.
   Module changed: forpro.p
 ·
SMR Number: [1534 ]
                                          ROS Version: [3.3
Keyword:
             [shared code & data ]
                                                Last Reviewed: 04/22/1986
Status: closed Target Release:
  [The example in /usr/beth/exp/1534.c demonstrates a mysterious bug where
  [printf acts strangely if a program is compiled with shared code and data
  [and the ctype macros are used. Use the Makefile in /usr/beth/exp to
  (compile 1534.c with the '-DCTYPE -Wl.-C' and the program will print
  ['3.5=(3)' rather than '3.5=(3.5)', as it should.
SMR Number: [1535
                                          ROS Version: [3.3u3
                                         Version: [1.8
                                                                 1
Program: [rf
Keyword:
             [char function
Status: closed Target Release: rf1.9
                                                 Last Reviewed: 04/22/1986
  (character*1 var
  (var-char (65)
  (Should return 'A', instead returns 'null'. Works with f77.
Solution
                                                    SMR Number: [1535
Fix will be included in: rf1.9
Description:
   rfcom was compiled with a bad rpcom (see SMR #1536), which caused the
   problem described. When rfcom was recompiled with a fixed rpcom, the bug
SMR Number: [1536 ]
                                         ROS Version: [all
Keyword:
             (data conversion
Status: closed Target Release: rpl.9
                                                Last Reviewed: 04/22/1986
  [for the statement "ch:-chr(int);", where ch is a char variable and int is a]
  [integer/local/non-register variable, rpcom loads from the upper byte of int]
  [unstead of from the lower byte of int.
  [this same type of problem existed in rccom, doing int/char conversions when]
  [the int was a local automatic and did not end up in a register.
Solution
                                                    SMR Number: [1536
Fix will be included in:
Description:
   Since the code generator was originally a VAX code generator, there are
   several places where we have to be sure to add on offset to a load or store
  in order to make up for the Ridge/VAX difference in byte ordering within
   words. This case was added to a series of similar cases where a byte offse
  offset was added to the load/store address.
SMR Number: [1537
                                         ROS Version: [all
Kevword:
             fcommon stabs
Status: closed Target Release: rfl.9
                                                Last Reviewed: 04/22/1986
  [common block elements don't print out properly under dbx. The first
  [element value gets printed regardless of which element is requested.
Solution
                                                    SMR Number: [1537
Fix will be included in:
Description:
  The field offset within the common block was not being properly recorded in
  the stabs statement for the common block elements. All elements were given
______
SMR Number: [1538 ]
                                         ROS Version: [all
Status: open Target Release: ros3.4 Last Reviewed: 04/22/1986
 [If a floppy that is currently in the drive has no file with the name 'fl' ]
```

fappear:

```
(and install.rest is invoked, it will tell you it can't find the file
   [and it will keep telling you everytime you hit return until you either
  freboot or put a floppy in the drive that has an 'fl' file.
SMR Number: [1539
                                            ROS Version: [3.3u3
                                                                        1
Keyword:
              [3.3u4
Status: closed Target Release: ros3.3u4
                                                  Last Reviewed: 04/22/1986
  [DR-11 input and output is slower in ROS 3.3U3 than it was in ROS 3.3U2.
                                                      SMR Number: [1539
Fix will be included in: ROS3.3U4
Description:
   The AdjustPriority calls of the tty drivers were changed and the
   DR-11 driver now does adjust priority for graphic devices.
      AdjustPriority (0) -> Terminal Read Priority
      AdjustPriority (1) => Interactive Graphics output
      AdjustPriority (2) => Terminal output
   Changed Modules
      FDLP 3.8
      disp's module ros.h 3.2
      drll.c 3.4.1.3 and 4.5
      kernel s 3.9
SMR Number: [1540
                                           ROS Version: [3.3u3
Keyword:
              [ROS 3.3u4
Status: closed Target Release: ros3.3u4
                                                  Last Reviewed: 04/22/1986
  (When Lisp and Prolog are in the debugger, they adversely affect the
  [performance of the entire system.
                                                      SMR Number: [1540
Solution
Fix will be included in: ROS 3.3U4
Description:
   The FDLP driver was changed to not adjust priority for nodelay reads
   which found zero characters. This means that polling programs
   migrate to the low priority of their subclass and will become a
   batch process.
        fdlp.p ver 3.8
SMR Number: [1541
                                           ROS Version: [3.3u3
Keyword:
              [ROS 3.3u4
Status: closed Target Release: ros3.3u4
                                                  Last Reviewed: 04/22/1986
  [On a Busy system, vi of a large file takes much longer than vi
  [of a smaller file. On the order of minutes rather than 10 seconds.
Solution
                                                      SMR Number: [1541
Fix will be included in: ROS 3.3 U4
Description:
   Vi speeds on busy system is now improved. Vi should now be marked as a
   sticky file (see chmod). If a file is sticy, the VMM treats the file
   as an interactive process regardless of CPU priority. The FM detects
   sticky clients and will make itself interactive.
   Changed Files:
     UM - forkexec.p 3.3.1.5, load.p 3.2.1.5, sign.signal.p 3.2.1.2,
          up.p 3.4.1.5, global.type.h 3.3.1.5, history.h 3.2.1.3
     kernel - kernel.s 3.10, kim.s 3.4, kim.pasc.h 3.1
     vmm - vmm.p 3.7, vmmasm.s 3.3
     fm - 3.4
   a
SMR Number: [1542
                                           ROS Version: (3.3u3
             [ROS 3.3u4
                                 1
                   Target Release: ros3.3u4
                                                  Last Reviewed: 04/22/1986
  [When UUCP runs on ROS 3.3 Update 3 it slows the system down more than
  [it did before.
SMR Number: [1543
                                           ROS Version: [all
Status: closed Target Release: enet1.4 Last Reviewed: 04/22/1986
  [If the ethernet cable is broken (the terminator is removed or a new section]
  [of cable is added), and ns is driving a wonderboard, the following messages]
```

```
Wonder: excessive retries on transmission, TDR value = 10
       Wonder: removing interface
       Wonder: LANCE has been stopped
  [This requires rebooting the ridge to restart the network server. This
  [error should not cause such drastic action.
Solution
                                                   SMR Number: [1543
Fix will be included in: ros3.4
Description:
   1) On retry errors don't shut down the LANCE, as this requires rebooting
       to restart ns. Simply reinitialize the LANCE.
   2) Don't get so upset about interrupt queue overflow on the wonderboard.
       It should not be treated as a failure of the current command. On
       errors make sure we release the current interrupt queue element or
       transmit buffer queue element, as appropriate, so we don't continue
       processing the same error over and over.
      STOP, START commands don't seem to fix the LANCE when it's upset due to
       a retry error. So, on retry error, underflow, and memory error,
       reinitialize the chip instead.
   <wonder.c>
SMR Number: [1544
                                        ROS Version: [3.3u3
Status: closed
                  Target Release: ros3.4 Last Reviewed: 04/22/1986
  [uname(2) does not have a man page, despite the fact that uname(1) refers
  {to it.
  [uname is supposed to return a non-negative value if it completes without
  [error, but it returns whatever random trash is in r0.
Solution
                                                   SMR Number: [1544
Fix will be included in:
Description:
   This is fixed in ROS 3.4. The documentation update has also been done.
SMR Number:
            {1545
                                        ROS Version: [3.3
Keyword:
             [system call
Status: closed
                  Target Release: ros3.4
                                               Last Reviewed: 04/22/1986
  [Under dbx, when you step over a system call, the result of the command
  (is not displayed.
  (is this related to smr 785?)
Solution
                                                   SMR Number: [1545
Fix will be included in:
Description:
   The system (3f) is implemented by an exec call which implies a new process.
   Dbx does not handle multiple-process programs.
   Therefore, dbx is working as designed but not doing what the user wanted.
   What the user was expecting is beyond the capability of dbx.
   SMR Number: [1546
                                        ROS Version: [3.3
Kevword:
             [date
                  Target Release: ros3.4
Status: open
                                               Last Reviewed: 04/22/1986
  [ar xo always returns the date: 1 Jan 1970 for the named file instead
  [of the last modified date recorded in the archive.
SMR Number: [1547
                                        ROS Version: [3.3
Keyword:
             fenv variables
                 Target Release:
Status: closed
                                               Last Reviewed: 04/22/1986
  [Example: if T2=FST - 2FDT
  [1] date > file date is correct in file
  (2) file.cron
    **** date > res
     crontab file.cron
                          the date is not correct and corresponds to
  [a variable TZ = PST - 8PDT (good for Pacific)
Solution
                                                  SMR Number: [1547
Fix will be included in:
Description:
  that's the way it works
```

```
ROS Version: [3.3
 SMR Number: (1548 )
 Keyword:
            [assembler files
                                         Last Reviewed: 04/22/1986
 Status: closed Target Release: rcl.9
  frc -P fic.s (preprocess assembler file)
  [Would like to preprocess assembler files which contain "INCLUDE"
  [(or other directives).
 Solution
                                             SMR Number: [1548
 Fix will be included in:
 Description:
   As the documentation indicates, rc accepts various input files such as
   C or assembly language programs. The -P, however, only applies to C,
   FORTRAN and PASCAL. You may, however, use the preprocessor on your assembly
   language files by calling the preprocessor directly. Just use the
   cop command.
   Note: this smr is the result of a user misunderstanding and not a software
   bug.
 SMR Number: [1549 ] ROS Version: [3.3
 Status: closed Target Release: rc1.9 Last Reviewed: 04/22/1986
  [If a good file.s exists and an rc -P file.c is done, the file.s is
  [overwritten with an empty file.s.
                                             SMR Number: [1549
Solution
Fix will be included in: rcl.9
Description:
   The driver has been fixed to not always generate a .s file.
 SMR Number: [1550 ]
                                   ROS Version: [3.3
                                       Last Reviewed: 04/22/1986
Status: open
                Target Release: 1.10
  [Preprocessing assembler files (after renaming .c) generates lines with
  [pound signs in first character where a directive appears. This generates
  (an assembler error.
Solution
                                            SMR Number: [1550
Fix will be included in:
Description:
   rc and cc were not meant for preprocessing assembler files. Use
   cpp -P or the m4 macro processor.
SMR Number: [1551 ]
                                   ROS Version: [3.3
Status: open Target Release: ros3.4 Last Reviewed: 04/22/1986
  [One user can remove another user's file with lprm.
 ______
SMR Number: [1552 ]
                                   ROS Version: [3.3
Status: open Target Release: 3.5
                                 Last Reviewed: 04/22/1986
  [A request has been made that the pound sign be made an acceptable
  [comment sign for the assembler.
SMR Number: [1553 ]
                                 ROS Version: [3.3u3
Keyword:
           [dump/restore
Status: open Target Release: unknown
                                         Last Reviewed: 04/22/1986
ROS Version: [3.3
SMR Number: (1554
Keyword: (dbx
Status: closed Target Release: ros3.3u4
                                         Last Reviewed: 04/22/1986
  [The files crater:/usr/beth/crashit.c. isort.f ssort.f when compiled with
  [rc -g and run with dbx, crash the system. The error message is
  [startup: descendent 65553, crashed: faulted
  [Beyond allocated memory space
 \{address = -393220, file = 5.61238\}
 [ 24 65553 101 -393220
 [ 5 61238 318686 65539
Solution
                                            SMR Number: [1554
Fix will be included in:
Description:
  The problem was the system(3) calls. Fixed in ROS 3.4 and ROS 3.3 Update 1
SMR Number: [1555 ]
```

```
Status: closed
                  Target Release:
                                             Last Reviewed: 04/22/1986
    [When deroff is run on the example file /usr/beth/exp/1555, it goes into
   (debug:
   freceived signal SIGSEGV (illegal memory reference)
   [illegal memory reference at address 6E00800 in the data segment
                                                 SMR Number: [1555
  Fix will be included in:
  Description:
    that's the way it works
  SMR Number: [1556
                                       ROS Version: [3.3u3
  Program: [tapedriver ]
                                       Version: [1.51
  Kevword:
           [multiple units
  Status: closed Target Release:
                                             Last Reviewed: 05/08/1986
   [We should be able to handle multiple tape units on the same controller.
   [At the moment, the driver does not understand anything but unit 0.
  Solution
                                                SMR Number: [1556
 Fix will be included in:
 Description:
    Fixed. Requested code on May 12 (paw).
  -----
 SMR Number: [1557 ]
                                       ROS Version: [none
 Keyword:
             [getfd, getfp
 Status: closed Target Release: rfl.9
                                             Last Reviewed: 04/22/1986
   [getfd (get file descriptor) is a misnomer, and should be renamed getfp ]
   [(get file pointer), since it returns a file pointer (FILE *), instead of a ]
   [file descriptor (integer).
 Solution
                                                SMR Number: [1557
 Fix will be included in:
 Description:
    A "getfp" function has been added to libI77.a. It is the equivalent to
    "getfd". They will co-exist until people have been given warning that
    "getfd" will disappear.
 SMR Number: [1558 ]
                                       ROS Version: [none
 Keyword:
             (double complex
 Status: closed
                Target Release: ros3.4
                                             Last Reviewed: 04/22/1986
   [Dbx gets an internal error trying to print double complex variables from
   [a FORTRAN program.
 Solution
                                                SMR Number: [1558
 Fix will be included in:
 Description:
    Dbx was not originally set up to print double complex variables. I copied
    the code which prints single precision complex variables, using doubles
    instead of floats.
 -----
 SMR Number: [1559 ] ROS Version: [none ]
 Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
   [Dbx may print out the integer value of a character variable instead of it's]
   [character representation. (May print 97 instead of 'a').
 Solution
                                                SMR Number: [1559
 Fix will be included in:
 Description:
    Dbx lost the information that the variable was a character variable by the
   time it got around to printing the value. One recursive-call-level up from
   this point dbx did know that this was a character variable, so I print the
    value at the point where dbx knows what it is dealing with.
 SMR Number: [1560 ]
                                      ROS Version: [3.3u3
 Keyword:
            [at - global permissi]
 Status: open
                 Target Release: ros3.4
                                            Last Reviewed: 04/22/1986
   [Sentence reading 'If either file is at.deny, global usage is permitted'
   (is confusing. Most customers call when they come across this.
 SMR Number: [1561
                                      ROS Version: [3.3u3
 Program: [rf
                                      Version: [1.8
```

```
Keyword:
             [.F files w/ includes]
Status: closed Target Release: rf1.9
                                                Last Reviewed: 04/22/1986
  [main.F:
            include 'local.include'
  [when compiled with rf causes .f file (after C pre-processing for customer's]
  [IFDEF's] can't find Fortran include. .f file is in /tmp, rfcom then
  [expects include files, not having full path names, to be in /tmp also.
  This works with F77.
Solution
                                                    SMR Number: [1561
Fix will be included in:
Description:
   The compiler driver (rf) was creating a file in /tmp for the output of cpp
   to go into. The compiler was looking only in /tmp for include files. Now
   rf sends the cpp output of file.F into file.f in the same directory, which
   is what f77 does.
SMR Number: [1562 ]
                                         ROS Version: [3.3u3
Keyword:
             [single-user mode? ]
Status: closed
                 Target Release: ros3.4
                                                Last Reviewed: 04/22/1986
  [When slow-booting, UM sometimes thinks it is running in multi-user more.
  [It runs getty & login and prompts for a passwd. This makes it impossible ]
  [to build a system directly with 3.3u3 software, as getty & login are not ]
  [yet present on disc. Can also be inconvenient if the only way to get
  [a system running is by slow-booting (i.e. corrupted passwd file???).
Solution
                                                    SMR Number: [1562
Fix will be included in:
Description:
   This is fixed in ROS 3.4. Complete control is given to the system
   administrator via /etc/inittab.
SMR Number: [1563 ]
                                         ROS Version: [3.3u3
Keyword:
             [data seg size > 32Mb]
Status: closed Target Release: ros3.3u5
                                                Last Reviewed: 04/22/1986
  [Several customers require large data segments for large simulations.
  The correct solution is to implement the setrlimit/getrlimit calls so
  (that they may request larger segments instead of simply increasing the
  [default. At least one customer needs sizes approaching 256 Mb (yes,
  (he intends to have a nearly empty Eagle available as backing store).
SMR Number: [1564 ]
                                         ROS Version: Inone
Keyword:
             ftapelo
Status: closed Target Release: rfl.9
                                                Last Reviewed: 04/22/1986
 [The tapeio routines from libU77 for FORTRAN tape i/o are not implemented. ]
Solution
                                                    SMR Number: [1564
Fix will be included in:
Description:
   The tapeio (topen(3F)) routines from BSD/libU77 have been added to Ridge
   libU77.a. Tskipf does not work properly, and I don't see how it could
   possibly be working properly on a 4.2 system. Tskipf was omitted from the
   documentation which I submitted to pubs.
SMR Number: [1565
                                         ROS Version: [3.3u3
                                                                     1
Program: [rf
                    1
                                         Version: [1.8
Keyword:
             [implicit undefined ]
Status: closed Target Release: rfl.9
                                                Last Reviewed: 04/22/1986
      logical function foobarfunction(i)
      implicit undefined (a-z)
      integer i
      logical bar
      foobarfunction=bar
      return
      end
 [gives 'fatal error 5, undefined name: foobarfunction'. The type should be ]
 [taken from the 'logical function' line. This works correctly with f77.
 [If attempting to define 'logical foobarfunction', entry point name gets
```

```
[truncated to foobarfunction (missing trailing ) so that ld can't resolve]
  [the reference from the caller (who is looking for foobarfunction )
Solution
                                                   SMR Number: [1565
Fix will be included in: rfl.9
Description:
   The problem reported in this smr actually shows two problems in the FORTRAN
   1) There is a problem in dealing with names of functions or procedures that
   are longer than eight characters. I have fixed this problem in the scanner
   (forscn.p).
   2) The second problem has to do with the improper treatment of implicit
   undefined specifications. This is the same problem as reported in
   smr
               1569. Refer to that smr for the status of that bug.
SMR Number:
             [1566
                                         ROS Version: [none
                    1
                                                                    1
Keyword:
             [struct copy
                                1
Status: closed Target Release: rcl.9
                                               Last Reviewed: 04/22/1986
  [struct copy with postincrement fails with rccom. an example:
  [typedef struct (int a,b) S;
  (f()
  [ [
      S *s1, *s2;
      s1++ = s2++;;;
  ()
Solution
                                                   SMR Number: [1566
Fix will be included in: rcl.9
Description:
   The compiler was pre-incrementing the source pointer, instead of post-
   incrementing. movemm/blockmove was trying to do the increment, this code
   was removed and fixmachops now does the increment.
  SMR Number:
             [1567
                                         ROS Version: [3.3
             startup
Keyword:
                  Target Release: ros3.4
Status: closed
                                               Last Reviewed: 04/22/1986
  [Sometimes on reboot, just after the um's have been started, the error
  [message: startup: descendent 65556 crashed: faulted. beyond allocated
  [memory space.' occurs. In the latest case, the address was 49152 and
  [the file was 1.4. The other numbers given were:
  [24 65556 101 49152
  11
            4 316444 65539
  [I think this problem is probably related to smr # 1544.
SMR Number: [1568
                                         ROS Version: [3.3u3
Program: [rf
                                         Version: [1.8
Keyword:
             [external statement ]
Status: closed Target Release: rfl.9
                                               Last Reviewed: 04/22/1986
       subroutine suba(i)
       external subb
       i=1
       The 'external subb' statement should generate the appropriate external]
  [reference to subb so subb will be pulled in by ld. This works OK in f77. ]
  [This feature is used for incremental loading on other machines and to
  [insure that block data subroutines are included when loading with a library]
Solution
                                                   SMR Number: [1568
Fix will be included in: rfl.9
Description:
  Rfcom has been modified so that now, upon seeing 'external subname', it
  will generate 'global _subname_' in the assembly file, just as f77 does.
______
SMR Number: [1569
                                        ROS Version: [3.3u3
Program: [rf
                      1
                                        Version: [1.8
Kevword:
             [implicit undefined ]
Status: closed
                  Target Release: rfl.9
                                               Last Reviewed: 04/22/1986
      subroutine suba(i)
      implicit undefined (a-z)
```

```
integer i
       external subb
   The 'external subb' generates a compiler error indicating undefined type.
   (Since this is an external reference that is not called directly from the
   [offending module, the lack of typing should be ignored. The f77 compiler
   (seems to handle this properly.
                                                     SMR Number: [1569
Solution
Fix will be included in: rf1.9
Description:
   There was a basic problem in how declarations of procedures were handled in
   the compiler. I have fixed this in fordec.p. The problem actually existed
   whether you used implicit undefined or not but if you did use it. the
   compiler really got confused because of the original bug.
SMR Number: [1570
                                          ROS Version: [3.3
                                                                      1
                                          Version: [1.8a
Program: [rf
Status: closed
                   Target Release: rfl.9
                                                Last Reviewed: 04/22/1986
  [Internal list-directed I/O does not work. There is an example in
   [/usr/beth/exp/1570.f. It works with f77, and the rf manual says
   [explicitly that internal list-directed I/O has been implemented
  [as a non-ansi standard extension.
Solution
                                                     SMR Number: [1570
Fix will be included in: rfl.9
Description:
   All that needed to be done was to prevent the error checking for this
   condition.
SMR Number: [1571
                                          ROS Version: [3.3
Program: [rf
                                          Version: [1.8a
Status: open
               Target Release: unknown
                                                 Last Reviewed: 04/22/1986
  (A customer requests that:
  (1) rf complain when variables are declared but not used
  (2) rf complain when variables are declared twice and
  (3) rf give the names of separate modules during compilation
ROS Version: [none
SMR Number:
Keyword:
             [rfcom into debug ]
Status: closed
                  Target Release: rf1.9
                                                 Last Reviewed: 04/22/1986
  [rfcom goes into debug when compiling a particular program. It gets either ]
  [a segmentation violation or a data alignment violation. The problem does ]
  [not happen if the fortran program is fsplit into seperate subroutines.
Solution
                                                    SMR Number: [1572
Fix will be included in: rf1.9
Description:
   There was an uninitialized pointer which was being followed. The pointer
   was being allocated when processing the "mod" intrinsic function. It
   should have been initialized to nil. The problem would not duplicate when
   the program was fsplit because the first time rfcom allocates memory it
   gets zeroed memory. At the end of each subroutine memory is released, and
   when it gets reused for a subsequent sburoutine it is not zeroed.
SMR Number: [1573
                                          ROS Version: [none
Status: closed
                  Target Release: rf1.9
                                                Last Reviewed: 04/22/1986
  [dummy arguments to a fortran subroutine which are dimensioned by a common ]
  [block element, where the array dimension statement preceeds the common
  (statement will have bad code generated, if the common block element is not )
  [the first element in the common block. An example subroutine:
      subroutine sub(ia)
      dimension ia (n, n)
      common nl.n
      1a(2,2) = n
      end
  ("ia(2,2)" will not really get set to n, the array bounds are incorrectly
  [computed.
Solution
                                                    SMR Number: [1573
Fix will be included in: rf1.9
```

```
Description:
   All copies of references to the common block element which were made before
   the compiler discovered that the variable really was a common block element
   were not getting fixed up.
SMR Number: [1574
                                          ROS Version: [3.3
                  Target Release: next lang Last Reviewed: 04/22/1986
Status: closed
  fit would be nice to be able to type 'list 240, 20' meaning list line
  [240 and the next 20 lines. In general, 'list m,n' should list lines
  [m through n inclusive if n >= m and lines m through m+n otherwise.
Solution
                                                    SMR Number: [1574
Fix will be included in:
Description:
   Dbx modified to do this. It will be included in the next release.
   (dbx goes with any language release; the next language release will be 1.9.
SMR Number: [1575
                                          ROS Version: [3.3
                    1
                 Target Release:
                                              Last Reviewed: 04/22/1986
Status: closed
  (It should be possible to save the dialog with dbx in a file for later
  (printout, instead of having the session disappear over the top of the
  [terminal screen.
SMR Number:
             f1576
                                          ROS Version: [3.3u3
Program: [4.2 libc
                                          Version: [10/9/85
Kevword:
             [ftruncate missing ]
                                                Last Reviewed: 04/22/1986
Status: closed
                 Target Release: ros3.4
  [ftruncate missing from the library
                                                    SMR Number: [1576
Solution
Fix will be included in:
Description:
   Fixed in ROS 3.4.
             [1577
                                          ROS Version: [3.4a
SMR Number:
             [laser writer
Keyword:
                  Target Release:
                                                Last Reviewed: 04/22/1986
Status: open
  (When a file containing such characters as ^B or ^C is spooled to the
  [laserwriter, the laserwriter seems to flush its output to the ether.
  [It doesn't pring anything, not even a header page. Taking the characters
  [out causes the file to be printed normally.
SMR Number: [1578
                                          ROS Version: [3.3
Status: open
                  Target Release: 1.9
                                                Last Reviewed: 04/22/1986
  [If x is assigned the value 1.0e15, dbx prints out the value as 1e+15.0.
  (There is an example program in /usr/beth/1578.f. This happens with
  [f77 as well as rf, so the problem is with dbx.
 SMR Number: [1579
                                          ROS Version: [3.3]
Status: closed
                 Target Release: ros3.4
                                                Last Reviewed: 04/22/1986
  [When using dbx on /usr/beth/exp/1578.f (compiled with either rf or f77),
  [if you try to reset the value of x, you get an internal alignment error.
Solution
                                                    SMR Number: [1579
Fix will be included in:
Description:
   dbx thought a FORTRAN "real" was the same as a Pascal "real". They are not
  the same. A FORTRAN real is a double, and a Pascal real is a float. Dbx
  now checks the language to figure out what "real" means.
f1580
                                         ROS Version: [3.3
SMR Number:
Kevword:
             [spelling
Status: closed
                  Target Release: ros3.4.ul
                                                Last Reviewed: 04/22/1986
  [If you do
  [apropos x
  [where x is not known to the system, the message from apropos is:
  (x: nothing apropriate
  [The word should be spelled appropriate! Or you could say: "nothing apropos"]
```

```
[This is obviously not a high-priority bug but it reflects on the quality
  fof our work.
                                                      SMR Number: [1580
Solution
Fix will be included in: ros3.4.ul
Description:
  Corrected spelling of appropriate.
                                           ROS Version: [3.3u3
SMR Number: [1581
Program: [rf
                                           Version: [1.8
Keyword:
             floop index
                   Target Release: rfl.9
                                                  Last Reviewed: 04/22/1986
Status: closed
    do 10 i=1,10
      if (i.at.5) go to 10
      do 10 j=1,10
        if (i.gt.5) print *, "DO LOOP ERROR"
  [10 continue
  (The 'i' loop body is incorrectly executed when "i" is greater than 5.
  [In at least one example, the code loops forever.
Solution
                                                      SMR Number: [1581
Fix will be included in:
Description:
  This is a programming error. The label 10 is ambiguously associated with
  both the inner AND the outer loop. The GOTO 10 is therefore ambiguous:
   should it go to the end of the inner loop or the end of the outer loop?
   We go to the end of the inner loop and just because of the state of
   the registers, the loop happens to execute forever. This kind of program
   will behave differently on different machines because its semantics are
   unclear and implementation-dependent. This particular program happens to
   work with f77 but others can be constructed that won't.
  The best thing to do is to either not use the GOTO or have a distinct
  label for each loop ending (using CONTINUE).
SMR Number: [1582
                                           ROS Version: [3.3
Program: [rf
                                          Version: [1.8c
Keyword:
Status: closed
                  Target Release: rf1.9
                                                 Last Reviewed: 04/22/1986
  [rf generates illegal instructions that cause as to complain.
  [Use rf (1.8c) -c -v -O to compile /usr/beth/exp/1582.f.
Solution
                                                     SMR Number: [1582
Fix will be included in: rf1.9
Description:
  The compiler generated the instruction "laddr Lx, Lx, 64", thinking that the
  data item represented by "Lx" would be in a register instead of a static
  memory location. The fixup routine which looks for illegal instructions
   such as this missed this case.
SMR Number: [1583
                                           ROS Version: [none
                                                                       1
Program: [rccom
                                           Version: [1.8
Status: closed
                                                 Last Reviewed: 04/22/1986
                   Target Release:
  [the following program causes the rccom compiler to generate bad code
  [extern int f1():
  [extern int f2();
  (main()
  [[
      int i = (int)f1 - (int)f2; /*notice this doesn't do a call*/
      printf("%x\n", i);
Solution
                                                     SMR Number: [1583
Fix will be included in: rcl.9
  The compiler was trying to do immediate value optimizations, and got
  confused about the different types of immediate/absolute values it knows
  about. It thought (in this one place in dobinop) that mode = imm implied
  reloc = noreloc.
SMR Number: [1584
                                          ROS Version: [3.3
```

```
Program: [rc
                                           Version: [1.8 alpha
Status: closed
                                                  Last Reviewed: 04/22/1986
                   Target Release:
  (The example in /usr/beth/exp/1584.c generates bad as code.
                                                      SMR Number: [1584
Fix will be included in: rc 1.8
Description:
   Customer was using rc 1.8 alpha, but this problem was fixed in the
   released version of rc 1.8.
SMR Number:
             11585
                                           ROS Version: [3.3u3
             ffoutc into debug
Kevword:
                   Target Release: 1.9
                                                  Last Reviewed: 04/22/1986
Status: open
       read *.1
       open (4, file='junk', status='UNKNOWN')
       ip=fputc(4,'x')
       close(4)
  [ This code gets a data alignment violation. Removing the 'read *,i'
  [lets the code execute properly. Also 'putc' to stdout (unit 6)
  [seems to work OK.
SMR Number: (1586
                                           ROS Version: [3.3
Status: closed
                   Target Release: rf1.9
                                                  Last Reviewed: 04/22/1986
  [See example /usr/beth/exp/1586.f. If the file junk does not have write
  (permission turned on, the default close and buffer flushing routines
  (do not report an error, and one would never know that the file was not
  (written to.
Solution
                                                      SMR Number: [1586
Fix will be included in:
Description:
   The 1/o library would not report errors once it started it's end of program
   cleanup (like closing files). I have enabled error reporting during
   cleanup, so we now get an error when the read-only file is closed after the
   program has written to it. Hopefully we will not start getting unwanted
   error messages during cleanup.
SMR Number:
             11587
                                           ROS Version: [3.3u3
Kevword:
             [sdiff pipe page
Status: open
               Target Release: unknown
                                                      Last Reviewed: 04/22/1986
  [I have two files called x1 and x2 in my directory /usr/rtc/1.8c. I did:
  [sdiff -w 80 x1 x2 |page
  [I kept typing space to see successive pages of the output. After the files ]
  [were finished, I kept seeing blank pages. Page never terminated as long as ]
  [I typed spaces. It terminated only after I typed "q".
  [Possibly relevant info: The files x1 and x2 were outputs of grep and
  [contain the same number of bytes. I know this operation works most of the
  Itime so I am keeping the files around to demonstrate the problem. I tried
  fit twice and it happened both times.
_____
SMR Number:
             [1588
                                           ROS Version: [3.4a
Keyword:
             [disp
Status: closed
                   Target Release: ros3.4
                                                  Last Reviewed: 04/22/1986
  Number of changes to disp driver for ROS 3.4. Runs under driverUM, has
  [select text/paste support, fixes some Textronix4014 bugs, has start of
  [CGI support (not finished, but safe as is). Several header files updated: ]
  [<cgi.h>, <sys/cgidefs.h>, <sys/winctrl.h> associated with disp.
Solution
                                                     SMR Number: [1588
Fix will be included in: ROS3.4
Description:
   updated disp driver
SMR Number:
                                          ROS Version: [3.4a
Kevword:
Status: closed
                   Target Release: ros3.4
                                                 Last Reviewed: 04/22/1986
 [Updated DR11/color display drivers for ROS 3.4 to run under driverUM.
  [also fixed several bugs in select, fcntl, and other calls issued to the
  [driver. Updated <sys/drllio.h> to have correct symbols and values as
```

```
(documented in metheus (7) and rastertech (7).
                                              SMR Number: [1589
Solution
Fix will be included in: ROS3.4
Description:
   updated drll drivers: metheus, rastertech, lexidata
SMR Number: [1590 ]
                                    ROS Version: [3.4a
Keyword: [windowmar
                                        Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
  [Enhanced windowmgr to allow text selection in window, and "paste" as
  [though input from keyboard (previously promised to a customer, now part
  (of standard release).
______
SMR Number: [1591 ]
                            ROS Version: [3.4a
Keyword: [libwindows.a
Status: closed Target Release: rod3.4
                                        Last Reviewed: 04/22/1986
  [added routines in libwindows.a to support text selection and paste in
  (windowmar.
                                              SMR Number: [1591
Solution
Fix will be included in: ROS3.4
Description:
  modified libwindows.a
SMR Number: [1592 ] ROS. Version: [3.4a Keyword: [11bwgraf.a ]
                                          Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
  [Added GetPenColor, GetPenWidth routines to library.
                                              SMR Number: [1592
Solution
Fix will be included in: ROS3.4
Description:
  modified libwgraf.a
-----
                                    ROS Version: [3.4a
SMR Number: [1593 ]
           [libdriver.a
Keyword:
Status: closed Target Release: ros3.4
                                        Last Reviewed: 04/22/1986
  [Created /usr/lib/libdriver.a library that is used with ROS 3.4 drivers
  [for CIO board.
                                              SMR Number: [1593
Solution
Fix will be included in: ROS3.4
Description:
  added /usr/lib/libdriver.a
SMR Number: [1594 ] ROS Version: [3.4a
Keyword: [clotty
                            1
Status: closed Target Release: ros3.4
                                          Last Reviewed: 04/22/1986
  [Created CIOTTY driver for CIO board tty's for ROS 3.4.
Solution
                                           SMR Number: [1594
Fix will be included in: ROS3.4
Description:
  added /drivers/ciotty
~~~~
SMR Number: [1595
                                    ROS Version: [3.4a
Keyword: [driverconf.h
Status: closed Target Release: ros3.4
                                          Last Reviewed: 04/22/1986
  (Created <ros/driverconf.h> header file that defines interface to
  [libdriver.a for use with ROS 3.4 CIO drivers.
Solution
                                              SMR Number: [1595
Fix will be included in: ROS3.4
Description:
  added /usr/include/ros/driverconf.h
SMR Number: [1596] ROS Version: [3.4a
Keyword:
          [driverMsqs.h
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
 [Modifications to <sys/driverMsgs.h> file for use with ROS 3.4 libdriver.a ]
Solution
                                           SMR Number: [1596 ]
```

```
Fix will be included in: ROS3.4
Description:
   updated /usr/include/sys/driverMsgs.h
SMR Number: [1597 ]
                                     ROS Version: [3.4a
Keyword:
            [makefiles
Status: closed Target Release: ros3.4
                                            Last Reviewed: 04/22/1986
  [changed organization of sources on "hood" for drivers (drl1, tapedriver, ]
  [cioct, ciolp, ciotty, timer), so modified appropriate makefiles -- This
  [probably shouldn't require an SMR, but this seemed like a good "audit trail]
  ffor what I did.
Solution
                                               SMR Number: [1597
Fix will be included in: ROS3.4
Description:
   modified makefiles, directory structure of files under hood:/usr/src/sys/
   drivers.
SMR Number: [1598 ]
                                   ROS Version: [3.4b
Keyword:
            [new program
Status: closed Target Release: ros3.4
                                           Last Reviewed: 04/22/1986
  [added cloct (cartridge tape driver) to system for ros 3.4.
Solution
                                               SMR Number: [1598
Fix will be included in: ros3.4
Description:
   Added the following new files to the source area:
     /usr/src/sys/drivers/cioct/s.cioct dev.c
     /usr/src/svs/drivers/cioct/s.cioct_soft.c
     /usr/src/sys/drivers/cioct/s.cioct.h
     /usr/src/sys/drivers/cioct/s.Makefile
SMR Number: [1599 }
                                     ROS Version: [3.4b
Keyword:
           [new program
Status: closed Target Release: ros3.4
                                            Last Reviewed: 04/22/1986
  [added 'ct' command to the system for ros 3.4
Solution
                                               SMR Number: [1599
Fix will be included in: ros3.4
Description:
  Added the following new files to the source area:
     /usr/src/cmd/ct/s.ct.c
     /usr/src/cmd/ct/s.ct.v
  Added rules to /usr/src/cmd/s.cmd.mk to make 'ct'.
--------
SMR Number: [1600 ]
                                     ROS Version: [3.4b
Keyword: [new program
                             1
Status: closed Target Release: ros3.4
                                            Last Reviewed: 04/22/1986
  [added new 'ctcat' to the system for 3.4
Solution
                                               SMR Number: [1600
Fix will be included in: ros3.4
Description:
  Added the following new file to the source area:
     /usr/src/cmd/ctcat/s.ctcat.c
     /usr/src/cmd/ctcat/s.ctcat.v
  Modified /usr/src/cmd/s.cmd.mk with rules to make 'ctcat'.
SMR Number: [1601 ]
                                     ROS Version: [3.4b
Keyword: [new file
Status: closed Target Release: ros3.4
                                           Last Reviewed: 04/22/1986
  [added ctcat.n to the system for 3.4. This header file describes the
  [format of a 'ctcat' formatted tape.
Solution
                                               SMR Number: [1601
Fix will be included in: ros3.4
Description:
  Added /usr/src/include/s.ctcat.h to the source area. Modified
  /usr/src/include/s.makefile to make ctcat.h.
SMR Number: [1602 ]
                                   ROS Version: [3.4b
```

```
Keyword:
             inew file
                                               Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
  [added ctio.h to the system for 3.4. This file describes the loctl commands]
 ' [for the cartridge tape drive
                                                   SMR Number: [1602
Solution
Fix will be included in: ros3.4
Description:
  Added /usr/src/include/sys/s.ctio.h to source area. Modified
  /usr/src/include/s.makefile to make this new header file.
                                        ROS Version: [3.4b]
SMR Number: [1603
            inew file
Keyword:
Status: closed Target Release: ros3.4
                                               Last Reviewed: 04/22/1986
  (added this new header file to the system
                                                   SMR Number: [1603
Solution
Fix will be included in: ros3.4
Description:
  Added /usr/src/include/ros/s.scsi.cmds.h to source area. Modified
  /usr/src/include/s.makefile to make this new header file.
SMR Number: [1604 ]
                                        ROS Version: [3.4b]
Keyword:
             [new file
                                               Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
  [added scsi.data.h to the system for 3.4
Solution
                                                   SMR Number: [1604
Fix will be included in: ros3.4
Description:
  Added the file /usr/src/include/ros/s.scsi.data.h to the source area.
  Modified /usr/src/include/s.makefile with rules to make this new header
  file.
SMR Number: (1605
                                        ROS Version: [3.4b
Keyword:
             new file
                                               Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
 [added emulex.mt01.h to the system for 3.4
Solution
                                                   SMR Number: [1605
Fix will be included in: ros3.4
Description:
  Added /usr/src/include/ros/s.emulex.mt01.h to the source area. Modified
  /usr/src/include/s.makefile with rules to make this header file.
_____
SMR Number: [1606
                                                                   1
                                        ROS Version: (3.3u3
Program: [rp
                                        Version: [1.8
Keyword:
            [diagnostic
Status: closed Target Release: rol.9
                                               Last Reviewed: 04/22/1986
 [If f is defined to be a function, the Pascal compiler flags the statement ]
 [as an error only if the iso standard switch -i is used at compilation. This]
  [error should always be reported to the user regardless of compiler options.]
Solution
                                                   SMR Number: [1606
Fix will be included in: rpl.9
Description:
  There was a check for this error in the wrong place in passta.p. I moved
  the test to be made before the check for the iso compile flag.
SMR Number: [1607 ]
                                        ROS Version: [3.4a
Keyword:
            (volmgr
Status: closed Target Release: ros3.4
                                               Last Reviewed: 04/22/1986
· [The volmgr needs performance enhancements added.
Solution
                                                   SMR Number: [1607
Fix will be included in: ROS 3.4
Description:
  The volmgr was changed to provide a variety of performance enhancements.
      * File labels are now allocated in a LIFO manner to localize file
       label references.
      * File extension attempts to retain physical contiguity.
```

- * Filemar compacted during pass 1 compaction.
- * Flexible allocation of data space chunks used to increase filemgr's data space.

```
SMR Number: [1608
                                        ROS Version: [3.3u3
Status: open Target Release: unknown
                                           Last Reviewed: 04/22/1986
  [The sbrk routine should return -1 when memory resource limits have been
  [reached. Instead, the routine traps to an illegal memory reference
  (violation in debug.
-------
SMR Number: [1609 ]
                                        ROS Version: [3.4a
Status: closed Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
  [ns must be modified for 3.4 to support the modified driver interface
Solution
                                                  SMR Number: [1609
Fix will be included in:
Description:
   Changed the following:
   <trace.h, att signal.h, h/makefile, if ec.c, lance.h, wonder.c, wonder.h>
   <tcp input.c, ns.c, ns const.h, support.c, syscall.c, uipc mbuf.c>
   <uipc socket.c, net.mk>
SMR Number: [1610 ]
                                        ROS Version: [3.4a
Keyword:
             inew program
Status: closed Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
  [Added ciolp to the system for ROS 3.4.
Solution
                                                  SMR Number: [1610
Fix will be included in: ros3.4
Description:
  added the files for the cio lp driver in /usr/src/sys/drivers/ciolp.
SMR Number: [1611 ]
                                                                  1
                                        ROS Version: [3.4a
Kevword:
            inew file
Status: closed Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
  [Added include file for use by cio drivers.
Solution
                                                  SMR Number: [1611
Fix will be included in: ros3.4
Description:
  Added the file: /usr/src/include/ros/s.ciomem.h. Modified the makefile
  in /usr/src/include/s.makefile.
   ------
SMR Number: [1612 ]
                                        ROS Version: [3.4a
Status: closed Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
  [Added printer type bit definitions for data products and versatec - for
  [use by ciolp driver.
Solution
                                                  SMR Number: [1612
Fix will be included in: ros3.4
Description:
  modified the file: /usr/src/include/ros/s.lprio.h for 3.4.
 SMR Number: [1613 ]
                                       ROS Version: [3.4a
Kevword:
            [new file
Status: closed
                 Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
  [Added the header file, ros/iodev.h, to the system for ROS 3.4. This
  [contains constants for IO addresses and IO device types.
Solution
                                                  SMR Number: [1613
Fix will be included in: ros3.4
Description:
  added the file: /usr/src/include/ros/s.iodev.h and modified the
  makefile in /usr/src/include/s.makefile.
SMR Number: [1614
                                       ROS Version: [3.4a
Keyword:
            [blanket
Status: closed Target Release: ros3.4
                                              Last Reviewed: 04/22/1986
 [Update all sorts of things for ROS 3.4 (CIO support).
```

```
SMR Number: [1615
                                       ROS Version: [all
             [ASYNC
Keyword:
                                             Last Reviewed: 04/22/1986
Status: closed Target Release: ros3.4
  [The constants are defined properly in the header files, but they don't
  (work. FIOASYNC does work.
Solution
                                                 SMR Number: [1615
Fix will be included in:
Description:
   This has been fixed in ROS 3.4 by changing the constants in the header
   files to be correct. This means that programs that use the header files
   can be recompiled and they will work. Programs that 'know' the values
   from 4.2, will continue to not work.
 -----
SMR Number: [1616 ]
                                       ROS Version: [3.3
Keyword:
          [~%b -- smr 1520
Status: open Target Release: unknown
                                           Last Reviewed: 04/22/1986
  [Please make the break given by ~ to in cu to two times what it
  fcurrently is.
 ______
SMR Number: [1617 ] ROS Version: [3.3u3
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
  [ns runs out of pages in the Q segment in which to receive data. An
  (application process such as ftp, or the UM will get a send error 5 when
  [trying to send data to it.
  [To reproduce, start 2 windows on a display, each of which does continuous ]
  [gets of a very large file, while a tty does continuous "rsh date"s. If the
  [application gets the error it is:
      Write: SendData err 5
  (while the UM might print:
      UM: Send Page error#5 sending from 65550 using link 17
          194
                 524293 196816 5
          0
                         2
                 1
                                 ٥
Solution.
                                                SMR Number: [1617
Fix will be included in:
Description:
   1) libc.a was modified to use blocking links for sockets.
   2) ns was modified to allocate a page per UM (assumes a maximum of 20),
     plus 4 pages to be shared by all clients. The UMs do not block, but
     all clients should.
   <ns const.h>
SMR Number:
            [1618 ]
                                    ROS Version: [3.3
Keyword:
            [security break
                             1
Status: open
                 Target Release:
                                            Last Reviewed: 04/22/1986
  The sequence:
  [ /usr/lib/sendmail -bs
  [ wiz
  [ shell
  [gives the user a shell with root capabilities.
 SMR Number: [1619 ]
                                      ROS Version: [3.3
Keyword:
            [security break ]
Status: open Target Release: unknown
                                            Last Reviewed: 04/22/1986
  (If the command
  [ /usr/lib/sendmail -Cfilename
  (is executed, where filename is a file without read permission,
  (in addition to driving sendmail crazy, this exposes each
  [line of the file in question as an error message.
SMR Number: [1620 ]
                                      ROS Version: [all
Keyword:
            [new files
Status: closed Target Release: haspl.0
                                         Last Reviewed: 04/22/1986
  [Added sources for send (or gath) and rje programs.
  [Modified rje.h include file.
Solution
                                                SMR Number: [1620
Fix will be included in:
```

```
Description:
   Added rie program sources in /usr/src/cmd/rie directory.
   < subdirectories are gath/lib, gath/src, lib, src, and util >
                                        ROS Version: [3.3u3
SMR Number: [1621 ]
Kevword:
             status
                Target Release:
Status: closed
                                              Last Reviewed: 04/22/1986
  [mail -e
  (is supposed to return successful status if mail exists. On my machine,
  (status is always 0 whether I have mail or not. That is,
  [mail -e
  [echo $status
  (always prints 0. I don't think this is right.
 . ______
SMR Number: [1622 ]
                                        ROS Version: [3.3
Status: open Target Release:
                                              Last Reviewed: 04/22/1986
  (rsh sometimes hangs and hitting the del key accomplishes nothing. It-
  (must be killed from another terminal. The customer uses rsh to send
  [jobs to a remote printer, and when the rsh hangs, the jobs get gueued
  Jup and when the rsh's are all finally killed, the jobs print.
  [I've had the same problem myself. It doesn't seem to be consistent with
  fanything, and it is not reproducible on demand. Sometimes it is possible
  [to get away 'cleanly' by typing '~.'.
 ______
                                        ROS Version: [3.3
SMR Number: [1623 ]
Kevword:
             [exception signal ]
Status: open Target Release: unknown
                                              Last Reviewed: 04/22/1986
  [If the program being debugged with dbx terminates with a signal, dbx loses ]
  [the breakpoints that have been set. If you set any more breakpoints, they ]
  (do not take effect.
  (This problem happens with some signals only. For example, if the program
  fgets a "SEMENTATION VIOLATION", breakpoints are remembered. But if the
  [program terminates with a nonzero signal, then the breakpoint capability
  is lost forever.
  [This is probably a ROS problem and not a dbx problem since it used to
  [work in 3.2 and dbx has not changed.
  (Probably related to SMRs 1191 and 1482)
 __________
SMR Number: [1624 ]
                                        ROS Version: [3.3
Status: closed Target Release: rpl.9 Last Reviewed: 04/22/1986
  The example /usr/beth/exp/1624.p generates bad as code and causes dbx
  [to fail with a data alignment violation.
Solution
                                                  SMR Number: [1624
Fix will be included in: rpl.9
Description:
  The Pascal file variable structure needed to be aligned on a double word
  boundry.
SMR Number: [1625 ]
                                        ROS Version: [3.3u3
Kevword:
             [address constant ]
                Target Release: rcl.9
Status: closed
                                              Last Reviewed: 04/22/1986
  [In the following code, the function f should return 4. It returns 32
  finstead.
  {struct x {short s; long l};
  (f()
      return( (int) &(((struct x *)0)->1) );
  ()
Solution
                                                  SMR Number: [1625
Fix will be included in: rcl.9
Description:
  There seems to be some confusion at GreenHills whether the "dotoffset"
  field represents bits or bytes. In this case, and in their single comment
  about the field, they think it is a byte offset. However in all other uses
  they use it as a bit offset. Since the use as a byte offset was the cause
  of the bug, I am using it as a bitoffset.
```

```
ROS Version: [3.3
SMR Number:
Program: [rf
                                          Version: [1.8
Keyword:
             (character string )
Status: closed Target Release: rfl.9
                                                Last Reviewed: 04/22/1986
  [This problem was reported by Logicon to Mark Mellis:
  [The program
      PARAMETER (I=2)
      CHARACTER A*I
  [does not compile with rf. It DOES compile with f77.
                                                     SMR Number: [1626
Solution
Fix will be included in: rf1.9
Description:
   The program reported in this smr is actually not standard FORTRAN. The
   standard FORTRAN statement is:
     CHARACTER A*(I)
   But because f77 used to accept this syntax, we have to allow it with rf
   also so as not to break existing code.
   I have made the modification in procedure dotypestatement in file fordec.p.
                                          ROS Version: [all
SMR Number: [1627
                                                Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  (Add the Svs V 'shl' (shell layering) utility to implement some kind
  [of job control in the Bourne shell.
SMR Number: [1628
                                          ROS Version: [3.3
                  Target Release: ros3.5
                                                Last Reviewed: 04/22/1986
Status: closed
 .[We need to create files analogous to /usr/lib/includ/pascal that are
  [compatible with rp.
Solution
                                                     SMR Number: [1628
Fix will be included in: ros3.5
Description:
  I have created the directory /usr/include/pas. In this directory, I have
  placed the files
      ctypes.h
      a.out.h
      stabs.h
      stdio.h
   These files are compatible with both pp and rp. Eventually, the directory
   /usr/include/pascal should go away. We are now converting the as assembler
   to use this new directory. The file stdio.h is new and provides the
   interface to C's stdio routines.
SMR Number: [1629
                                          ROS Version: [3.3
                                          Version: [1.8
Program: [rp
             [file pointer
Keyword:
Status: closed Target Release: rpl.9
                                                Last Reviewed: 04/22/1986
 [Several customers have asked for the ability to get the FILE* from Pascal. ]
  [Once they have the file pointer, they can call any of the C library
  (routines that operate on file descriptors (e.g. setbuf).
Solution
                                                    SMR Number: [1629
Fix will be included in: rpl.9
Description:
  I have added the routine getfp to libpas.a. An external declaration for
  getfp is in /usr/include/pas/stdio.h. See smr1628 and my memo for more
  details.
_____
SMR Number: [1630
                                          ROS Version: [3.3
Status: closed Target Release:
                                                Last Reviewed: 04/22/1986
 [When cpio encounters an error and prints the 'enter device if you wish
 [to continue' message, sometimes the del key is ignored. Please change
 [cpio to provide a cleaner way to exit at this point.
SMR Number: [1631
                                          ROS Version: [3.4a
                  Target Release: ros3.4
                                                Last Reviewed: 04/22/1986
```

Status: closed

```
[Release ciodebug program, for use in downloading cioboard.
                 ROS Version: [3.4a
SMR Number: [1632
                                                Last Reviewed: 04/22/1986
Status: closed
                 Target Release: ros3.4
 [clodiag, cstream, ifet, readlr, rnumber, rstream, systest.ex, lance.h, test_case.h]
 ROS Version: [3.4a
SMR Number: [1633
Status: closed
                                                Last Reviewed: 04/22/1986
                  Target Release: ros3.4
 [fsys.ct.c, fsys.ctdir.c
SMR Number:
             11634
                                         ROS Version: [3.4b
Keyword:
             [new scripts
                                                Last Reviewed: 04/22/1986
Status: open
                  Target Release: ros3.4ul
 [Added:
    /usr/pub/mcbackup
    /usr/pub/mclist
    /usr/pub/mcrestore
    /usr/pub/mtbackup
    /usr/pub/mtlist
    /usr/pub/mtrestore
  [These scripts make the backup, list, and restore cpio functions
 [transparent to the user for both the cartridge tape (mc*) and
 [reel-to-reel tape (mt*) devices.
 [The usage of these scripts, as well as how they can be modified, will
 [be described in Chapter 7 of the new User's Guide
                                         ROS Version: [3.3
SMR Number: [1635
                                               Last Reviewed: 04/22/1986
Status: closed
                  Target Release:
 [The example in /usr/beth/exp/1635 shows that when using the -T3000 option
 [to print on a Genicom printer, the printer doesn't know to turn off
 [underlining until a non-space character is printed, but this makes funny
  (lines on the paper that you really don't want. We could change the
  [tabs file to not know about italics mode, and then it would backspace
 [to do its underlining, and the lines before a non-space character that
 [we don't like would not be there.
SMR Number: [1636 ]
                                         ROS Version: [3.3
                                                Last Reviewed: 04/22/1986
Status: open
                  Target Release:
 [/usr/beth/exp/1636.c is an example of strtok not working properly. It
 [should print out every token on the lines of the standard input which
 [begin with the token named as the first argument of the command line.
 [It prints some of the tokens every time it should, some of the tokens
 [some of the time, and none of the tokens sometimes.
                                         ROS Version: [3.3
SMR Number: [1637
                                               Last Reviewed: 04/22/1986
Status: open Target Release: unknown
  [Rapidly moving the mouse across pad causes response time for other users
 (to significantly slow until data input is finished. With a CAD package,
 [picking is not possible because data acquisition from a Summagraphic
 [tablet is too slow. (high resolution tablet, connected at 9600 baud
 [on RS232 port in conjunction with 19" display).
SMR Number: (1638
                                         ROS Version: [3.3
                                               Last Reviewed: 04/22/1986
Status: open
                  Target Release:
 [In the following situation: power fail, reboot, problem with modem,
 [abort vi (by kill -9 vi for the remote terminal), vi -r does not later
 [restore the file. If you instead use kill -9 sh, the file is saved.
 [Is this the way it should work?
SMR Number: [1639
                     1
                                         ROS Version: [3.3
Status: open
                  Target Release:
                                               Last Reviewed: 04/22/1986
 [A user logged into local over modem, and from there rlogged in to remote. ]
 [Interference caused a loss of carrier, the shell at local was terminated;
 [however, the remote login session on remote remained and had to bed
 [manually killed. In other cases, a remote login has to be terminated with ]
 [a '~.' sequence, but has not quite gone completely away (it may leave
```

```
[behind some trace in the same manner that an rsh does not always close
  (out properly).
                                            ROS Version: [3.3
SMR Number:
                                                  Last Reviewed: 04/22/1986
Status: open
                   Target Release: 3.5
  (Example:
     #define ABCDEFGH 0
     #define ABCDEFGHI 1
  [cxref prints 'ABCDEFGH redefined', and doesn't give
  [correct cross reference.
                                           ROS Version: [3.3u3
SMR Number: [1641
                                                  Last Reviewed: 04/22/1986
Status: closed
                   Target Release: ros3.4
  [dbx prints stored, opcode b8, as an indexed stored. it is not an indexed ]
  [strored. this problem exists in debug also, since debug is where I lifted ]
  [the dis-assembly code from originally.
                                                      SMR Number: [1641
Solution
Fix will be included in: 3.4
Description:
   I changed the opcode table to fix the problem.
SMR Number: [1642
                                           ROS Version: [all
Keyword:
              [display
Status: closed
                   Target Release: 3.3.u5
                                                  Last Reviewed: 04/22/1986
  [Select was not returning immediately when requested by the UM. The async
  [flag was being tested with the wrong bitmask. Now a polling select will
  [return even when there are no characters outstanding. The CBREAK mode was
  [always returning as soon as 1 char was typed, rather than giving as many
  (characters as are available.
                                                      SMR Number: [1642
Solution
Fix will be included in: ros3.4
Description:
   Checked in new code.
                                           ROS Version: [3.3
SMR Number: [1643
                                           Version: [1.8c
Program: [rp
                                                  Last Reviewed: 04/22/1986
Status: closed
                   Target Release:
  [See example /usr/beth/exp/1643.p. It should produce files with names
  {'junk1111', 'junk2222', and 'junk3333'. The actual result is files with
  (names 'junk1111junk2222', 'junk2222', and 'junk3333junk1111'. The
  [program works correctly if shorter or longer strings are given as file
  [names, and it also works if the strings length of 8 contains a space as
  Itheir final character.
Solution
                                                      SMR Number: [1643
Fix will be included in: rpl.9
Description:
   The Pascal compiler aligns strings on double word boundries. Pascal strings
   of 8 chars have no unused bytes after the end of the string, and may run
   straight into the next data item. The Pascal runtime library expected file
   names to be blank or null terminated, and would see a concatination of the
   filename and whatever data came directly after it, until a blank or null
   was seen. The Pascal compiler has been changed to pass a maximum filename
   length to reset and rewrite. The reset and rewrite functions have been
   changed to make a local copy of the filename, and to put a null after the
   max length, and then look for the end of the filename (terminated by null
   or blank).
SMR Number:
             [1644
                                           ROS Version: [3.3
Keyword:
             (with rc
Status: open
                                                  Last Reviewed: 04/22/1986
                   Target Release: 3.5
  [See the /usr/beth/exp/1644.? examples and try lint 1644.c. Make sure
  [the lint is using rc, not cc. It works when lint uses cc.
                                           ROS Version: [all
SMR Number:
             11645
Keyword:
             [tbl
Status: closed
                   Target Release: ros3.4
                                                  Last Reviewed: 04/22/1986
```

```
(When man'ing some pages (those that have passed through 'tbl'), the
  (tty screen (especially on twi950's) gets all messed up. Sometimes to
  (the point of locking up. On displays, the only adverse thing that
  [happens is that lightening bolts are displayed in front of some lines.
  [Some pages that this happens with are (among others):
        aet.1
        prs.1
        matherr.3m
Solution
                                                     SMR Number: [1645
Fix will be included in: ros3.4
Description:
   Added the additional step of 'col' after the nroffing step to
   /usr/src/man/fixup.
SMR Number: [1646
                                          ROS Version: [3.3
Program: (eqn
                                          Version: [1.24
Status: open
                                                 Last Reviewed: 04/22/1986
                   Target Release:
  [See examples in /usr/beth/exp/1646*. When a subscript it placed on a
  (subscript, the second subscript is not placed below the baseline of the
  [first subscript -- in the example, there is no vertical motion to place
  [the 1 in an inferior position relative to the A; however, the point size
  [was changed appropriately for a subscript. There are additional helpful
  [comments in the example.
SMR Number: [1647
                                          ROS Version: [3.3
Status: open
                   Target Release:
                                                 Last Reviewed: 04/22/1986
  [The command 'gas -s0,t10 | af "x^2" | plot |td' generates this error
  [message 'af: cannot open x -- using standard input' and then draws
  [the graph. It seems like the error message is unnecessary.
SMR Number:
             [1648
                                          ROS Version: [all
             I debug
Keyword:
                   Target Release:
Status:
                                                 Last Reviewed:
  [See the summary.
Solution
                                                     SMR Number: [1648
Fix will be included in:
Description:
   This is fixed in ROS 3.4 Update 1.
SMR Number: [1649
                                          ROS Version: [3.3
Program: [rp
                                          Version: [1.8c
Keyword:
             ferror
Status: open
                   Target Release:
                                                 Last Reviewed: 04/07/1986
  [When rp is used with error, error thinks that error messages from rp
  [are from cc and inserts them into the source file as C-style comments.
SMR Number: [1650
                                          ROS Version: [3.3
                   Target Release:
Status: closed
                                                 Last Reviewed: 04/07/1986
  [Please add an option to tar that does not restore the owner when extracting]
  (files from tape. (The owner would then be the user extracting things
  (from the tape).
Solution
                                                     SMR Number: [1650
Fix will be included in:
Description:
   The 4.2 BSD version of tar will solve their problems.
SMR Number: [1651 ]
                                          ROS Version: [3.3
Status: known bug Target Release:
                                                Last Reviewed: 04/22/1986
  [The example /usr/beth/exp/1651.f when compiled without the optimizer
  [prints zeroes. When compiled with the optimizer, it prints 17 ones and
  [15 zeroes. The program runs fine with rf 1.8c. This is submitted just
  for info.
SMR Number: [1652
                    1
                                          ROS Version: [3.3
Status: open
                   Target Release:
                                                 Last Reviewed: 04/07/1986
 [When using programs with continuous screen output (more, cat, man) part
```

```
[of the information is displayed, and then it loses a large amount (maybe
  (half a screenful) of material. This happens fairly frequently, and
  (seems to be independent of system load.
 ______
SMR Number: [1653
                                         ROS Version: [3.3
Program: [rf/dbx
                                         Version: [1.8c
                                                Last Reviewed: 04/07/1986
Status: open
                   Target Release:
  [Example in /usr/beth/exp/1653.f. Dbx gets confused when it tries to
  [print addresses of arrays. The code executes fine, but dbx cannot
  [find the addresses.
                                         ROS Version: [3.3
SMR Number: [1654 ]
Status: closed Target Release:
                                              Last Reviewed: 04/21/1986
  [The MPY instructions sometimes generates an integer overflow signal,
  [according to customer. The example is in /usr/beth/exp1654.c, but
 [I cannot duplicate the problem. Supposedly, the signal is generated
  (by multiplying a positive number by a negative number such that the
  (sign of the result register changes.
Solution.
Fix will be included in:
Description:
   This has been fixed with efp/emc version 301 and efp version 261 of
   microcode.
   Still broken on old cpu, no plans to fix it.
SMR Number: [1655
                                         ROS Version: [all
Keyword:
             [linked directories ]
Status: closed
                 Target Release: ros3.5
                                                Last Reviewed: 04/21/1986
  (The link(IM) man page should be changed to reflect warnings about
  [recursively linking directories (they can keep the system from booting).
  [This is fixed in the new directory manager.
Solution
                                                    SMR Number: [1655
Fix will be included in:
Description:
   Manual page has been fixed.
SMR Number: [1656
                                         ROS Version: (3.3
Keyword:
Status: open
                  Target Release: ros3.5
                                                Last Reviewed: 04/21/1986
  [as doesn't use umask in creating object files but instead uses a hard
  [coded 644 mode. Since the customer is in a group environment, they
  (request that as use their umask environment value to modify its file
  (modes.
SMR Number:
             (1657
                    3
                                         ROS Version: [3.3u3
             [shift by constant 0 ]
Keyword:
Status: closed
                  Target Release: rc1.9
                                                Last Reviewed: 04/21/1986
  {rccom generates the illegal code "load r0," from the following program.
  (main()
  11
  [ int 1;
  [ 1 >>= 0:
  11
Solution
                                                    SMR Number: [1657
Fix will be included in: rcl.9
Description:
   fixed in optimizeconstop. in the case where no code is to be generated,
   mx must be set to nil (same problem as divide by 1 bug).
SMR Number: [1658
                                         ROS Version: [3.4b
Keyword:
             [clotty
Status: closed
                  Target Release: ros3.4ul
                                                Last Reviewed: 04/21/1986
  [New versions of CIOTTY driver, and driver interface (libdriver.a) to
  [increase performance from original 3.4 release. Also fixes crash in
  [driver when switching between several background "vi" processes under csh. ]
Solution
                                                   SMR Number: [1658
```

```
Fix will be included in: ROS3.4ul
Description:
  checked in new sources for ciotty and libdriver.a
SMR Number: [1659
                                         ROS Version: [3.3
                  Target Release: ros3.4ul
                                               Last Reviewed: 05/19/1986
Status: closed
  [Coio sometimes loops. See shell script in /usr/beth/exp/1659. We
  [haven't reproduced it in house, because it loops in the customer's
  [own directories (when it gets to that part of the script).
                                                   SMR Number: [1659
Solution
Fix will be included in: 3.4ul
Description:
  Closed by smr 1064. Fixed for 3.4 update 1 and 3.3 update 5.
                      _____
                                         ROS Version: [3.3u3
SMR Number: [1660
                                         Version: [1.7
Program: [ftp
                                               Last Reviewed: 04/21/1986
Status: open
                  Target Release:
  [In ftp, connected to an apollo, if we do a remotehelp command, the apollo
  (sends a multi-line reply formatted as follows:
      214- text
      214- text
      214- text
      214- text
      214 text
  [We erroneously think the response is terminated after the second line.
  (giving an ftp prompt to the user. The user's next command gets the next
  (two lines of text, and we are hopelessly out of sync from then on. The
  fuser must exit ftp to recover.
 ______
                                         ROS Version: [3.3u3
SMR Number: [1661
                                         Version: [1.7?
Program: [telnet
                                               Last Reviewed: 04/21/1986
Status: closed
                  Target Release:
  (telnet has problems mapping cr to cr-lf and vice versa when talking with
  (a UNIVAC
                                                   SMR Number: [1661
Solution
Fix will be included in:
Description:
  Modified telnet to handle cr, cr-lf mapping the same as 4.3 BSD (yes, 4.3
  not 4.2).
  <telnet.c>
SMR Number: [1662
                                         ROS Version: [3.3u3
Status: closed
                  Target Release:
                                               Last Reviewed: 04/21/1986
  (When you try to telnet to a system whose host name is greater than 16
  [characters, you get a host name too long error message.
                                                   SMR Number: [1662
Solution
Fix will be included in:
Description:
  modified login to use 32 character hostnames instead of 16 characters.
  <loain.c>
SMR Number: [1663
                                         ROS Version: [3.3
             [kermit
Keyword:
                  Target Release:
                                               Last Reviewed: 04/21/1986
Status: open
 (Customer rlogin'ed to one machine, started kermit, and as soon as kermit
  (was started on the remote machine, the kermit on the ridge exited. No
 (initiate packet reached the receiving system. The obvious way around
 (this is to not use kermit over rlogin, so it is low priority.
_____
                                        ROS Version: [3.3
SMR Number: [1664 ]
                  Target Release:
Status: open
                                               Last Reviewed: 04/21/1986
 [Cron vanishes, and no errors are left in /usr/lib/cron/errors, and there
 [is no evidence of corruption of /usr/lib/cron.pid. Log file indicates
 [that nothing was running under cron's control when cron disappeared, and
 (the last thing to run completed execution normally. The last thing to
```

[run on two separate occasions were different things, and the uptime on

```
[the affected machine was less than two weeks in each case. I gave the
   customer a newer version of cron, with the fixes suggested by AT&T (that
   (supposedly fix these kinds of mysterious problems), but the problems
   Inersist. I have logfiles and the crontab file for reference, if
   inecessary.
                                          ROS Version: [3.3
 SMR Number: (1665
                     1
                                          Last Reviewed: 04/28/1986
 Status: open
                   Target Release:
   [IP input calling m pollup to get hlen bytes data
   [IP: bad checksum: IP=1160 IP=1180c
   (this error message was displayed when an rsh to a vax was
   [initiated
 SMR Number: [1666
                                          Version: [1.8d
 Program: [rf
                       1.
                                                 Last Reviewed: 04/28/1986
                   Target Release:
 Status: open
   [When this example is run:
          double precision a
          a=1.0D-100
          print *,a
          write(*.10) a
   110
          format (1pd20.10)
   [the D is dropped, but should be printed in both cases.
 SMR Number: [1667
                                          ROS Version: (3.4b
 Keyword:
              Ístatus
 Status: closed Target Release: ros3.4
                                                 Last Reviewed: 04/28/1986
   [The mt command doesn't know about ct drives when the status is requested. ]
   [To reproduce, type
           mt -f /dev/nct0 status
   [And you will get the message
           unknown tape drive type (1)
 Solution
                                                     SMR Number: [1667
 Fix will be included in: 3.4ul
Description:
   Added knowledge about CT 540 tape drive to mt.c.
                                          ROS Version: [3.4a
 SMR Number: [1668
                                          Version: [1.8d
 Program: [rc
                       1
                   Target Release: rc1.9
                                                 Last Reviewed: 04/28/1986
 Status: closed
  [Dereferencing a pointer to a bit field may fail if
  [ 1] the compiler thought the pointer would be in a register, but it
        ended up on the stack.
  ( 2) the bit field is not on a byte boundry.
  (The symptom is that the pointer is loaded off of the stack, but does
  inot get dereferenced.
Solution
                                                     SMR Number: [1668
Fix will be included in: rcl.9
Description:
   The function "fixload" did not recognize that it needed to generate an
   indirect load in this case.
SMR Number:
             [1669
                                          ROS Version: (3.3
Keyword:
             [get
Status: open
                   Target Release:
                                                Last Reviewed: 04/28/1986
  [Specifying 'get -e ../sccs' causes sccs to loop (it keeps trying to
  (create p-files that have already been created). An easy way around
  (the looping is to specify 'get -e ../sccs/*f' if fortran programs
  [need editing, for instance.
SMR Number: [1670
                                          ROS Version: [3.3
Kevword:
Status: closed
                  Target Release:
                                                Last Reviewed: 04/28/1986
  (Skipping more lines than exist in the file causes more to hang, but
  (it is possible to DEL out.
Solution
                                                    SMR Number: [1670
```

```
Fix will be included in:
Description:
   Closed. Same as SMR #1042
SMR Number: [1671
                                       ROS Version: [3.3
Status: closed Target Release: ros3.4 Last Reviewed: 04/28/1986
  [The 2A man pages are included in /usr/lib/whatis, and therefore are
  [displayed for apropos, but there are no man pages. I looked on a 3.4
  [system, and it is corrected there.
SMR Number:
            [1672]
                                       ROS Version: [all
Kevword:
            [csh nice
Status: open
                                             Last Reviewed: 04/28/1986
                 Target Release:
  [nice & nice +number should increment the priority of the csh and all
  [of it's subsequent children by 4 & +number, respectively. In the nice
  (case, priority is incremented by 24, not 4. It appears that in the
  [second case, +number is ignored.
_____
SMR Number: [1673
                                      ROS Version: [3.4
Program: (rc
                                      Version: [1.8c
Keyword:
            [data alignment
Status: closed Target Release: rcl.9
                                            Last Reviewed: 05/05/1986
  [rc generates a loadh from an odd byte boundry from the following code:
  [struct xx {
     int 1:8.
         1:16,
         k:8:
  [] *x,y;
  (£()
  11
      x->1 += 1;
  ()
Solution
                                                SMR Number: [1673
Fix will be included in: rc 1.9
Description:
   In movemm/mov, for the reg->mem and mem->reg cases an extra check was added
   for the dotmode, size-16 bits case (all other cases are ok). Extv.extzv or
   insv will be called in this case.
SMR Number: [1674
                                      ROS Version: [3.3u3
Program: [rc
                                      Version: [1.8
                     1
Status: closed
                 Target Release: rcl.9
                                            Last Reviewed: 05/05/1986
  [A bad argument list to rc. i.e.
                 or rc -o foo.l foo.c
  [overwrites source with executable, cc does not allow this to happen.
Solution
                                                SMR Number: [1674
Fix will be included in: rc 1.9
Description.
  The rc, rp and rf drivers (they are all the same actual executable file)
  now check to be sure that the output file from 1d does not end in ".c",
  ".p" or ".f". If the output file does end in one of these suffixes, the
  driver issues the same error message as cc issues.
SMR Number:
           [1675]
                                      ROS Version: [3.3
Kevword:
            (.F extension
Status: open Target Release:
                                            Last Reviewed: 05/05/1986
 [Dbx doesn't recognize a fortran source file with a .F extension. Dbx
 [seems to run fine, but if you try to list the contents of the source
 [file, it complains, 'cannot open file.f'.
SMR Number: [1676
                                      ROS Version: [all
Keyword: [new program
Status: open Target Release: unknown
                                            Last Reviewed: 05/19/1986
 [The 'script' program needs to be ported.
SMR Number: [1677 ]
                           ROS Version: [all
```

```
Keyword:
              Itanedriver
                                                 Last Reviewed: 05/19/1986
Status: open
                   Target Release:
  [1) mt fsf and aking the tape drive offline while forwarding results in a
  [ prompt coming back to your terminal.
  (2) mt rew and taking the tape drive offline while rewinding results in a
  [ locked up terminal.
  [He would prefer that the terminal does not get locked out; however, he
  [feels that there should be consistency between 1 and 2.
  [(This problem has been copied from SMR #1446)
                                          ROS Version: [3.3
SMR Number: [1678
Program: [rf
                                          Version: [1.8d
                                                 Last Reviewed: 05/19/1986
Status: closed
                   Target Release: rf1.9
  [Bad code is generated for the loop
        do 10 j=1,0
  [10
        write(6,*) 1
  (The loop is executed once even when the 'onetrip' flag is turned off.
  [This problem also occurs when 0 results from the evaluation of a parameter:]
         parameter(n=1)
         do 10 1=1.n-1
  [However, the loop
        do 10 1=10.0
  [10
        write(6,*) 1
  (is not executed at all.
Solution
                                                     SMR Number: [1678
Fix will be included in: rf 1.9
Description:
   In dodostatement a boundry condition was missed, and code gets generated
   and executed for the "do 10.i=1.0" loop. I have fixed the boundry
   condition, and informed GreenHills of the fix.
SMR Number: [1679
                                          ROS Version: [3.3
Program: [rf
                                          Version: [1.8d
Status: closed
                                                 Last Reviewed: 05/19/1986
                 Target Release: rf1.9
  [The compiler does not flag admittedly archaic statements like
         intstr=5h(4a8)
  [Only the first 4 characters of the Hollerith string are assigned to the
  [integer variable intstr. The 'old' f77 generated an error message for
  [this. Customer runs into this problem on occasion as he reworks old Cray
  [codes, where 8 characters per word are acceptable, written before a full
 ['77 compiler was available.
Solution
                                                     SMR Number: [1679
Fix will be included in: rf 1.9
Description:
   I have added a warning "String too long for integer" to flag this problem.
___________
SMR Number: [1680
                                          ROS Version: [3.3
Program: [rf
                                          Version: [1.8d
Status: closed
                                                 Last Reviewed: 05/19/1986
                   Target Release: rfl.9
  [rf sometimes generates incorrect code in assigning one double complex-
  [variable to another. See example in /usr/beth/exp/1680.f, which inputs
 [the real and complex parts of the roots of a 3rd degree polynomial,
 (computes the corresponding coefficients, then recomputes the roots. Run
  [the program with 'echo 1 2 3 4 5 6 | a.out', and then comment out line
  [158 and uncomment lines 159-160 to see the incorrect results. Temp is
  (not assigned the value 1, which is contained in a(1), leading to division
  [by 0.
Solution
                                                     SMR Number: [1680
Fix will be included in: rf 1.9
Description:
   rf generated bad code for the assignment of the double complex array
   element to the double complex local variable. I have obsoleted the
   complex alignment field from the baserel machoos, and have a better way
   for movemm to determine if a machop has complex data type alignment (see
   eval.p/isComplexPtr).
```

```
SMR Number: [1681
                                           ROS Version: [all
Status: closed
                   Target Release: ros3.4.ul
                                                 Last Reviewed: 05/19/1986
  [The network server uses numerous 4.2 include files, many of which it
  (has its own version of. Some of these are duplicates of the 4.2 include
  (files, while others have been slightly modified. Delete the duplicates
  [from the network sources, and update the 4.2 includes to be compatible
  (with the needs of the network server.
Solution
                                                      SMR Number: [1681
Fix will be included in:
Description:
   Modified 4.2 files where necessary, modified ns sources to use 4.2 includes
   except for <sys/trace.h> (since users could get into trouble with that
   information).
   <ros: <ros/if.h.list.h>>
   <4.2: <netinet/if_ether.h,ip.h,ip_var.h,tcp.h,tcp_timer.h><sys/mbuf.h,
         socketvar.h,trace.h>>
   <ns: <h/makefile><net/makefile, *.c><netinet/makefile, *.c><socket/makefile,</pre>
         *.c>>
SMR Number: [1682
                                          ROS Version: [all
Program: (1s
                                          Version: [1.25
                                                 Last Reviewed: 05/19/1986
Status: open
                   Target Release:
  [The following command does some output, then gets an illegal memory
  [reference in the data segment and goes into debug:
 [ lr -l /usr/spool/lp*
SMR Number: [1683
                                          ROS Version: [all
Status: open
                   Target Release:
                                                 Last Reviewed: 05/19/1986
  (The lineprinter drivers (ciolp, fdlp) along with the tty drivers delay
  [their response to a close request until the driver's buffers have emptied.
  [The client's UM hangs, waiting for the response.
  [In the case of the LP spooler, if the printer runs out of paper while the
  [driver is emptying the buffer, the close can hang indefinitely.
  [Unfortunately, the same UM is shared by the LP spooler, and the networking
  [daemons, so the daemons will also be hung until the close of the LP
  [completes.
SMR Number: [1684 ]
                                          ROS Version: [3.3
Status:
                   Target Release:
                                                 Last Reviewed:
  [Man searches only man[1-8] and cat[1-8]. Customer would like to keep
  [local command documentation in a separate place, so please fix man so
  [that it will search /usr/man/{man,cat}[0-9]*.
SMR Number: [1685
                                           ROS Version: [3.3
                                                                       1
Status:
                   Target Release:
                                                 Last Reviewed:
  [When the following define is in a program
     #define NAME "=>"
  (the cop gives an 'illegal symbol' error.
SMR Number:
                                           ROS Version: 13.4
Program: [rc
                                          Version: [1.8d
Keyword:
Status:
                   Target Release:
                                                  Last Reviewed:
  [The following function shows the problem. *u gets the high half word from
  (unsigned short) 1, instead of the low half word.
  (fun (n)
  [unsigned short *u;
      unsigned long 1 = 13;
      donothing(&1);
      *u = (unsigned short) 1:
      printf("%d %d\n", *u, 1);
  []
Solution
                                                     SMR Number: [1686
Fix will be included in: rc 1.9
```

Description:

```
case was added to an existing list of checks to be made. This is done
   after the big case statement in neweval, where
   target^.datatype <> ret^.datatype, and other conditions are met.
   SMR Number: [1687 ]
                                        ROS Version: [3.3u5
Keyword:
             [cbreak
                  Target Release:
Status:
                                              Last Reviewed:
  [The cs8 AT&T mode must be set manually with stty to enable a 4.2 program
  [using CBREAK mode on output to work correctly. Without doing this,
  (the high-order bit is set (or not) incorrectly.
SMR Number: [1688
                                        ROS Version: [none
Program: [rp
                     1
                                        Version: [1.8d
Keyword:
             [pascal type-cast ]
Status: closed Target Release: rpl.9
                                              Last Reviewed: 06/09/1986
  [The type cast causes the error
  [mentioned in the comment.
  {type GENERIC FILE = text;
       ftype = file of integer;
  (var f3: ftype;
       i, i: integer;
  [function getfp(var f: GENERIC_FILE): integer; external;
  (procedure p;
  [begin
      f3^ := i; put(f3);
      j := getfp(f3\GENERIC FILE);
      f3^ := i; {'type mismatch' error on this line}
      put (f3);
  fend:
Solution
                                                  SMR Number: [1688
Fix will be included in: rp1.9
Description:
   The type casting code in twoop was resetting the typorval field in an
   object, so that subsequent references to the casted object using the same
   object had the new typorval field being used. I created a new object for
  the new typorval field to be associated with.
SMR Number:
            [1689
                                        ROS Version: [3.4ul
Keyword:
             [include files
Status: closed
                 Target Release:
                                              Last Reviewed: 06/09/1986
  {/usr/include/pas/{a.out.h,stdio.h} each include 'ctypes.h'. They should
  [each include '/usr/include/pas/ctypes.h'
Solution.
                                                  SMR Number: [1689
Fix will be included in:
Description:
  'ctypes.h' has been changed to <pas/ctypes.h>
SMR Number: [1690
Kevword:
            (blanket smr
Status: open
              Target Release: ros3.4u2
                                             Last Reviewed: 06/09/1986
  [This smr will be used to cover all system software changes made for
  [ROS3.4 update #2 (headwall release)
SMR Number: [1691 ]
                                       ROS Version: [3.4
Status: open
                 Target Release:
                                            Last Reviewed: 06/16/1986
  [After using the cancel command to abort a print-job, the process which
  (is writing the output (sh interface/lp) occasionally remains alive, with
 [the device-file /dev/lp open. This causes subsequent open requests to
 [fail. The problem has been seen twice on ridge, but is not easily
  [Symptom: lpstat -t reports printer is disabled because /dev/lp cannot
 [be opened.
SMR Number: [1692
                                       ROS Version: [3.4ul
Program: [login
                                       Version: [1.30
                     1
Status: closed
                 Target Release: ros3.4.ul Last Reviewed: 06/16/1986
```

There were already a series of cases which had this same problem, so this

```
[rlogin to a remote 3.4ul beta system, and you get a login prompt rather
  [than being automatically logged in. This is true despite the /etc/hosts.
  fequiv and .rhosts files being correct.
Solution
                                                   SMR Number: [1692
Fix will be included in: 3.4ul
Description:
   Copy the hostname from the variable into which we read it, into the utmp
   structure, instead of vice-versa. Make sure all the variables can handle
   32 char hostnames (including the null terminator), except for the utmp
   structure itself.
   <login.c>
                                         ROS Version: [3.4ul
SMR Number: [1693
Status: closed Target Release:
                                       Last Reviewed: 06/16/1986
  [Convert 'as' to compile and run with rp instead of pp.
Solution
                                                   SMR Number: [1693
Fix will be included in:
Description:
   'as' has been converted to compile and run with rp instead of pp. I also
   made 'as' accept longer source lines to accomidate the longer stabs lines
   which the 1.9 versions of the compilers are generating. My tests show 'as'
   is now about 20% faster than before.
SMR Number: [1694 ]
                                         ROS Version: [3.4ul
Status: closed Target Release:
                                          Last Reviewed: 06/16/1986
  [The version 1.9 compilers generate different symbolic debug information in ]
  [some cases. Dbx must be modified to accept this different information.
                                                  SMR Number: [1694
Solution |
Fix will be included in:
Description:
   Dbx has been modified to accept the different symbolic debug information
   generated by the version 1.9 compilers. Dbx may still be used with older
   versions of the compilers without any ill effects.
SMR Number: [1695
                    1
                                         ROS Version: [3.3
                                                                   1
Keyword:
             [magic .
                  Target Release:
                                               Last Reviewed: 06/16/1986
  [Files with correct magic numbers aren't recognized by the file command.
  [See example in /usr/beth/exp/1695
SMR Number: [1696 ]
                                         ROS Version: [all
Status: open
                  Target Release:
                                               Last Reviewed: 06/16/1986
  [From a local system, rlogin or telnet to remotel. From remotel.
  [ftp to remote2 (which can be the same as local if desired). If there
  (is no .netrc file on remote), the username in the ftp login promot for
  [remote2 is the hostname of remote2, rather than the user's username.
 SMR Number: [1697
                    1
                                         ROS Version: [all
Status: open
                  Target Release:
                                               Last Reviewed: 06/16/1986
  Irlogin to remote system. If the remote is moderately loaded, the echoing
  [of characters can be so slow that the user thinks the remote system has
  (This may be related to part of the pseudo tty running batch rather than
  (interactive.
SMR Number: [1698
                                        ROS Version: [3.3
            [dwb]
Keyword:
Status: open
                 Target Release:
                                               Last Reviewed: 06/16/1986
  (A manual page is needed for makedev(1), and the customer also thinks
  [it would be a good idea to include /usr/bin/makedev in the list of
 [files in the DWB SRD.
______
SMR Number: [1699 ]
                                        ROS Version: [3.3
Status: open
                  Target Release:
                                        Last Reviewed: 06/16/1986
 [If there's anything in the queue, lpshut doesn't kill lpsched, it just
  [removes the SCHEDLOCK file. Sometimes lpshut does worse than that...
```

{it just hangs, and things must be killed	
SMR Number: [1700] Status: open Target Release: [Including /usr/include/ndir.h and /usr/in in 'incompatible types' message. Repeat finclude <ndir.h> [#include <sys types.h=""> [cc -c foo.c [The reason for the error message is that u_short and u_long rather than including [this see the solution form. Solution Fix will be included in:</sys></ndir.h>	ROS Version: [3.3] Last Reviewed: 06/16/1986 nclude/sys/types.h results] by creating foo.c:]] ndir.h uses #define lines for]
Description: In ndir.h, change #define lines for u_showing the fide of the lines for u_showing the line of the lines for u_showing the line u_short unsigned short #define u_long unsigned long fendif This is safe against multiple includes of	f types.h because types.h uses a
SMR Number: [1701] Program: [telnetd] Status: Target Release: [telnet to a significantly faster system [the /etc/issue file and login prompt don' Solution Fix will be included in: Description: Change TIOCSETP to TIOCSETN so input is retelnetd.c>	ROS Version: [all] Version: [1.18] Last Reviewed: (e.g., a headwall), and sometimes] 't get output.] SMR Number: [1701]
SMR Number: [1702] Status: Target Release: [Several standard system maintenance opera [system. This is a frequent cause of majo [we try to run long jobs (>100 cpu hours), [part of our machine usage). Specifically [if the following operations could be carr [1] restarting the networking software, 2) [3] disk verify and possibly minor repair, [details are provided on each of these cases	or problems (particlarly when), which constitute a significant] y, it would be a great improvement] ried out without rebooting: restarting hung terminal drivers,] and 4) disk compaction. More] ses in /usr/beth/exp/1702.
[rc, cc, and lint do not allow structure/t [(struct_a = struct_b).field [See the longer example in /usr/beth/1703. [lint produces: [warning: v may be used before set [structure reference must be addressable [cc produces: [structure reference must be addressable [rc produces: [this is not an lvalue [type mismatch	ROS Version: [3.3] Last Reviewed: union references of the form:] .c] .
SMR Number: [1704] Status: Target Release: [Using newgrp to change to a group you don [to prints the error message 'Sorry', but [The new shell is not associated with the	starts a new shell anyway.

(the user st	arted from, or the us	er's login group.	
[is just rig	Target Release: can get the same pseu ht. As expected, the anything, but they ca	ROS Version: [all Last Reviewed: do tty at the same time, if their 2 remote users get confused. Ne n see some of each other's typing connections appear to be closed.	ither can]

3. Miscellaneous

Redit

Redit, the Ridge Editor, is a facility Ridge intends to drop from distribution and discontinue support of during the next year. The redit source is available to any customer who requests it.

Cu

Sometimes a /usr/spool/uucp/LCK..ttyx file is created by cu and uucp, which prevents cu from running. The solution to this problem is to remove the LCK..ttyx file.

4. Filters

We recommend you place your Ridge air filter every six months, or more frequently if inspection or your environment dictates. The filters are available from your Systems Engineer, and are supplied at no cost if your Ridge system is still under warranty, or covered by a service contract.

5. Disc Compaction

Over time, the distribution of data on a disk can become fragmented. If this fragmentation is severe, a decrease in file and virtual memory system performance may be noted. Compaction of the data on a disk can improve performance.

A compaction is done in two passes. The first pass tries to force multi-extent files into single-extent files. The second pass tries to move small files to free space near the beginning of the disc.

It is possible for customers to do the compaction themselves. The following are some guidelines on when it is necessary to compact the disk, and instructions for the procedure required.

5.1 When To Compact The Disk

1. Note the average size of free chunks (in kilobytes) on the disk.

To do this, type:

df -a

dev	kbytes	used	avail	avg.chunk	capacity	mounted at
/dev/disc	437840	309700	128140	572	70%	/

This disk does not need to be compacted because the average chunk size is 572. However, if the average chunk size on your system is less than 32, system performance would be improved with compaction.

- 2. Note the percentage of the disk used (capacity), as output by the df command. If the capacity is over 90%, compacting the disk will not improve performance for very long. However, if you remove any files from your disk which are no longer needed, the capacity may be reduced enough to make a compaction worthwhile.
- 3. Do a backup. Although disk compaction is safe, errors on the disk could occur should the compaction stop due to any unusual occurrence. So as an added precaution, we strongly advise doing a backup.

5.2 Compaction Procedure

The time required to compact a disk is dependent upon the size of the disk and the amount of main memory in the system. Increasing the size of the disk and decreasing the amount of memory both lead to longer compaction times. Compaction of a 445-Mybte Fujitsu drive will probably take six to eight hours.

Also, while the compaction is in progress, no one should touch the computer due to static electricity considerations. If it is necessary to stop the compaction, press switch zero. Switch zero is the lowest white button on the front of the right-most board (the half-sized clock board) in the cardcage.

To begin, do the following:

- 1. Make sure everyone has logged off the system.
- 2. Log in as root and type shutdaemon.
- 3. When shutdaemon is finished, log out and press switch zero.
- 4. Flip the load enable toggle switch (lowest toggle switch on the front of the right-most board in the card cage, the clock board) to the right.
- 5. Boot the system by pressing LOAD on the front panel switches.
- 6. The next part of the procedure consists of answering a series of system configuration questions. The notation [RETURN] means press the return key.

```
RBUG (22-Mar-84) PC=00040000 :h [RETURN]
```

```
Ridge Operating System, Copyright 1986 Ridge Computers.

VMM 21-Sep-85

This disc driver does multipage disc transfers.

If this machine does not have multipage SMD and/or ANSI proms, the FILE SYSTEM MAY BE DAMAGED!

Do you want to cold boot from scratch (N)? [RETURN]

Use standard VMM parameters (Y)? [RETURN]

MY id:65536

VolMgr PId=65537 VolMgr Data FId=1.2
(copy-on-write)

Do you want to see the list of pages (N)? [RETURN]
```

<< NOTE: The following will display 'SMD' if the disc is an SMD disc >>

```
Disc Device # = 2, Unit 0 ANSI
Disc Device # = 2, Unit 1 ANSI
Disc Device # = 2, Unit 2 ANSI
Disc Device # = 2, Unit 3 ANSI
Enter disc device number to use:
Enter disc unit to use:
Read bad block map from media
                                                             (N) ? [RETURN]
Map out bad spots on disc (Priam and Fujitsu)
                                                             (N) ? [RETURN]
                                                             (N) ? [RETURN]
Write bad block map to media
Format Hard Disc
                                                             (N)? [RETURN]
VolMgr 03-Mar-86
Do you want to cold boot the volume table
                                                             (N)? [RETURN]
Do you want to rebuild volume table
                                                             (N)? [RETURN]
Want to add a page to the bad block file
                                                             (N)? [RETURN]
```

NOTE: the following and subsequent similar messages may be displayed with different numbers >> Purging unnamed files. Number of files = 61268

Do you want to see file allocations (N)? [RETURN]

Clearing bit map

Number of free files = 47332

File table is 22 percent full

Do you want to compact the disc (N)? yes [RETURN]

Verbose printout of compacting motion (N)? yes [RETURN]

The compaction now begins.

You will receive information on which files are being turned from multi-extent to single-extent files, and which files are being moved.

When the compaction is finished, you may receive the following messages indicating that the compaction completed successfully, but improvements are still possible with another compaction.

Could not force all files to be single extent Consider re-trying compaction

Move RBUG from floppy to Ridge disc (N)? <see below> << This question indicates that the compaction is finished. You should now flip the load enable switch to the left, press switch 0 on the clock board, and press the LOAD switch on the front panel to re-boot the system. >>

After completing the procedure, run df-a again to determine if another compaction is needed.

6. Current Revision Levels

All service contract customers should be running ROS 3.3 update 3. For those customers that have the RISC-optimized compilers, they are at version 1.8, and f77 is at version 1.3. These releases were mailed in January/February 1986, and customers should contact Ridge if the updates have not been received.