

# Ridge Software Bulletin

## January 20, 1987

### 1. Introduction

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

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 and 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 SMR's, 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

## Software Bulletin Index

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
	1804	network error message on console
/etc/link	1655	do not recursively link directories
/etc/magic	1475	add 'netnews compressed batch' and 'pack(1) compressed file' magic numbers
/etc/profile	1110	a line in /etc/profile is incorrect
/etc/rc	1508	inconsistent example in LAN User's Guide
/etc/rc.inet	1778	unnecessary parameter to ifconfig
1G utilities	1834	the 1G commands are not on helix
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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 generated by asm statement properly
C	1466	C compiler should allow static initialization of unions
CIO download	1708	Release 8086 source code for CIO firmware.
DoSignal	877	DoSignal gets called one too many times for each delivered signal
Dr11 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 sluggish
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
as	1499	The 'p' suffix to load instructions does not generate code relative loads
as	1656	as should use user's umask setting to modify object file modes
as	1693	converted 'as' to compile and run under rp.
as	1735	8 character output file names get mangled by 'as'
as	1751	as produces listfile with truncated name
as	1761	'as' should generate legal nop-type instructions when it aligns in code sec
assembler	1552	make # an acceptable comment sign for the assembler
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!
backup stuff	1741	'sulog' is created automatically
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
chown	1175	chown system call allows 4.2bsd clients to give away files
cio debugger	1631	first release
cioc	1598	added to system
cioc	1706	dd < /dev/null > /dev/nct0 doesn't creat a blank file on the ct
cioc	1824	cat binary file, piped to tee and dd produces i/o error
cioc	1862	can't give commands to ct to quickly or you get an error
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
ciotty	1764	ciotty pseudos can't be a middle man
ciotty driver	1782	cannot use telnet from pc emulator
ciotty driver	1783	stty modes are not set correctly when using network from cio machine
config	1763	Enet only boards should not have an entry for downloading of code.
cpio	1630	request a more graceful exit from cpio upon error
cpio	1659	cpio loops
cpp	1685	rc cannot handle = or > in define statement
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
crt0.o	1176	Fortran programs always set status to 64
crypt	1190	crypt < file   page puts terminal in an unsane state
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
csH	1832	certain commands give error messages when run on csH
ct	1599	new program
ctcat	1600	added to system
ctcat	1707	tape is bad if a non-existent filename is given to ctcat to write to tape
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
cu	1616	please lengthen the cu break
cu	1856	output diversion to a file doesn't work
cut.ex	1179	cut.ex does not convert the termcap entr for the 'bitgraph' correctly
cxref	1485	cxref has limitations which cause it to fail

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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 several expressions
dbx	1191	dbx gets confused after it has been suspended with ^z
dbx	1478	enumerated types don't print out properly
dbx	1482	Striking DEL while using dbx causes trashed output.
dbx	1545	under dbx, system(3) calls are not executed
dbx	1558	dbx gets an internal error trying to print double complex variables
dbx	1559	dbx may print an integer value for a char variable, instead of the character
dbx	1574	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 compatible with stabs generated by the version 1.9 compilers
dbx	1732	fortran double precision variables only show 6 significant digits, should be 14
dbx	1733	can't print/use do loop variables
dbx	1734	can't pass ! as parameter to program being debugged
dbx	1853	please make dbx capable of printing out small float values
debug	1099	debug no longer saves terminal modes

## Software Bulletin Index

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 which process a breakpoint is in
debug	1648	debug prints opcode b8 (stored) as indexed when it's not indexed
deroff	1555	deroff goes into debug if input contains very long lines
deroff	1829	deroff goes into debug with ill mem ref with certain example
disp	1588	new disp for 3.4
disp	1642	Select and CBREAK are not working
disp	1784	Need ability to query screen color from command level and programatically
disp driver	815	display driver doesn't properly emulate all BSD 4.2 terminal functions
dr11/display	1589	new dr11 drivers for ROS 3.4: metheus, rastertech, lexicdata
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/daemons	1697	remote users can get awful performance
dup	1060	if any error occurs, FDLP warning: dup err=XX prints out.
dwb	1066	desire troff output on a ridge display
dwhet	1749	Adding dwhet to systest.
echo	1807	-n option doesn't work with Bourne shell
emacs	1452	start shell in buffer command doesn't work
emacs	1453	Query replace & search string problem.

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
emacs	1454	View syntax table output format truncates 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
emacs	1795	emacs doesn't work at 19.2
emulex.mt01.h	1605	added to the system
env	1107	env mishandles first (or only) assignment
eqn	1646	vertical motion on subscripts is done incorrectly
exec	1047	exec system call should recognize the syntax '#! /bin/csh'
exec(2)	1728	putting a # in a csh script should make it work with sh, but doesn't
f77	1651	example program gives different results with or without optimizer
fcntl	791	fcntl requests to get modes of file or pipe may not work
fcntl	1736	value returned upon successful completion is vague
fdlp	1009	cat to /dev/clp
fdlp	1018	removing a floppy file
fdlp	1019	removing a floppy file
fdlp	1497	cu intercepts ^O
fdlp	1687	cbreak output mode incorrect
fdlp driver	1637	system slows because fdlp driver cannot handle a lot of data from mouse
fifo	1838	write-only open of fifo does not delay returning until another process reads

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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
flush(3f)	1717	flush(3f) not documented
ftp	1660	multi-line replies from apollo cause us to get out of sync
ftp	1696	login prompt is wrong for remote users
ftp	1790	ftp put doesn't work
ftp	1796	telnet to a vms system and then ftp back to ridge doesn't always work
ftp	1798	would like to be able to turn verbose mode off
ftp	1808	ftp doesn't support autologin with .netrc file
ftp	1814	the ftp entries in /etc/wtmp are not done properly
ftp	1815	/etc/nologin file does not keep ftp users from login in
ftp	1827	ftp hangs when interface is reset
ftp	1841	doing a get into the root directory causes bizarre behavior
ftp	1842	binary and ascii commands don't always work
ftp	1843	ftp get to a directory or inaccessible file causes ftp & ftpd to be out of sync
ftp	1854	misspelling the directory name in the dir command puts ftp in funny state
ftpd	920	ftpd dies
getpgrp	1518	getpgrp doesn't exist in system V libc
getty	1825	getty does not correctly calculate baud rate when terminal power is cycled
h files	1681	consolidate 4.2 includes and ns includes

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
ifconfig	1777	ifconfig doesn't take flags on first iteration with interface name
ifet	1772	needs to run on all Ridge models
include	1628	Need new include files for rp
install.rest	1538	problems if there is no 'fl' file on floppy
invert	842	invert should be capable of setting a given value
ioctl	1722	ioctl prints wrong error message when redirecting to a file
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'
kermit	1813	hitting del key hangs the system and it must be rebooted
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 a.out that was not successfully linked
ld	1500	The -e option to ld (specify entry label appears to be ignored.
ld	1831	ld allocates the beginning of the common area on an odd word boundry
libF77.a	1526	complex power function fails
libF77.a	1715	add VMS bit functions to libF77 as part of the FORTRAN VMS extension project
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 truly zero extension & fx.y where x=y+1

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
libI77	1585	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
libI77.a	1719	changes for VAX/VMS extensions
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 ld
libU77.a	1564	The tapeio routines for FORTRAN tape i/o are not implemented
libU77.a	1765	libU77.a was built with wrong "CFLAGS" definition
libc	1544	uname(2) man page missing and return value incorrect
libc.a	1826	Speed up output by special casing a few popular formats in doprnt
libdriver.a	1593	created libdriver.a for ROS 3.4 CIO drivers
libm.a	1483	d_atan & r_atn2 loop when the input is infinity
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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 -l prints uid # instead of username if uid > 2048
ls	1682	lr -l goes into debug
mail	1006	mail from a telnet user is supposedly from LOGIN
mail	1071	sendmail doesn't notify when user is unknown
mail	1077	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
mail	1801	user name is set to sender for all destinations during a reply
make	162	directory entries should have modification/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	changed makefiles in /usr/src/sys/driver

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
		s directories
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.
mknod	1770	mknod(1) doesn't document fifo's
more	1042	s-skip hangs if tried to beyond EOF
more	1670	ctrl-l (redraw) doesn't really work 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.
mt	1757	'weof' command to raw 1/2" tape device
ndir.h	1700	including ndir.h results in 'incompatibl e types' message
ndir.h	1710	should not include <sys/types.h>
netstat	858	netstat needs to be ported
netstat	1527	customer requesting netstat
netstat	1811	netstat -r doesn't give complete list of routing table
networking	1847	network code prints "resetting interface" and hangs system
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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 segment
ns	1498	ns hangs system; goes into debug (not rbug) when switch 0 pressed
ns	1543	ns on wonderboard shuts down when enet cable disconnected, requiring reboot
ns	1609	initial 3.4 modifications
ns	1665	IP: bad checksum error
ns	1816	ns prints "ns: m_get buffer usage over 200"
ns	1828	ftpd connection is closed without sending data when interface reset
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 uninterpreted padded chars when using -s
pg	1505	Trash characters follow the message that the "n" (next file) command prints.
pipes	1064	reading an expanding directory may show duplicate entries
pipes	1755	Blocks of 5120 bytes not correctly sent across pipes
plot	1861	increase limitation of 1000 points for the plot command
pp	1860	compiling a certain module gives a floating point overflow with waterfall
ps	1163	desire option in ps to display process by user
pseudo ttys	1663	kermit doesn't work over pseudo ttys

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
ptty's	854	customer needs more than 4 ptty's
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	1720	rc generates a loadb from the wrong byte off of the stack.
rc	1721	returning doubles within subroutines prints incorrect results
rc	1729	rc (and cc) does not promote an integer to a float when it should
rc	1740	bug in the machine/language independent loop optimizer
rc	1759	commas in array initializations are optional
rc	1779	-E option puts garbage on screen
rc	1785	expression evaluated incorrectly when signed char involved.
rc	1802	rc gets a compiler error when compiling a piece of C code.
rc	1818	rc generates a loadd from an odd word address.
rc	1852	#include <stdio.h> generates error message
rc	1859	rc 2.1 and 2.0 generate 'compiler error'

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
		when trying to compile code
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
rc, rf, rp	1794	need to add /usr/lib/peep
rc, rf, rp	1799	add misc optimizations and bug fixes
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.
rccom	1724	peephole optimization of storeh/loadh shouldn't be done
rccom	1725	an extra store is generated after a call to extv or extzv in movemm
rcp	830	no error message for rcp when the wrong number of parameters is given
rcp	1041	rcp to the same host trashes file
readnews	1830	readnews has not had any new news for about a month
realdia	1144	realdia goes into debug when run on system with waterfall cpu
realdia	1773	Realdia needs to run on all Ridge models.
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
rf	1561	main.F requiring C pre-proc w/ Fortran includes can't find include files
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	1723	char function returns incorrect results
rf	1738	add the nbpar function for fortran
rf	1744	fortran bug with combination of entry point, array dimensioned by common elem.
rf	1747	rf does not accept library names that do not end with .a
rf	1758	non-ascii characters are not allowed in character strings
rf	1768	rf may destroy source file when given -L, -H or -n option.
rf	1781	secnds function is missing from libs
rf	1791	fputc(3f) not producing output
rf	1792	fortran close fails when writing floppy disc file
rf	1805	create single precision versions of the fortran nint intrinsic functions
rf	1809	fortran double complex assignment of six dimensional array fails with optimizer
rf	1810	problems with fortran octal and binary initializers
rf	1844	compiler should flag a value as being too large, but it doesn't

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
rf	1845	the -f option generates an error message (with namelist)
rf	1848	the mini/maxi intermediate code nodes have no entry in the cost function
rf	1849	the old (builtin to the compilers) peep-hole optimizer loops.
rf	1855	fseek is not positioning correctly, but does not generate an error
rf	1857	ioinit function doesn't work properly
rf / libI77.a	1726	the new fortran open mode specifier doesn't work
rf, rp, rc	1718	New code for 2.0 release of compilers
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
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
rlogin_login	1840	rlogging in without /etc/hosts.equiv gives strange error message
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

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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 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
rp	1711	rp does not pack arrays of subranges of integers
rp	1712	high level I/O too sensitive to types of arguments
rp	1713	file variables declared in functions are incorrectly initialized
rp	1714	rp generates illegal assembly code
rp	1771	uplevel reference of char param doesn't work from 2 levels down
rpcom	1536	rpcom loaded wrong byte from stack for ch:=char(int)
rsh	1118	cat doesn't work when input and output are sockets
rsh	1622	rsh's sometimes hang and it is impossible to del out of it
rsh	1836	rsh doesn't work
rsh/ftp	1531	ridge does not respond to rsh or ftp from sun nodes on net
rshd	1793	rsh to a UNIX ridge does not terminate
runtime	1750	Subroutine needed for whet and dwhet.

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
ruptime	1189	ruptime doesn't work on 'ridge' with a remote vax at UCSB
rwho	1823	rwho doesn't show users logged in on console
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 sequence gives privileged shell
sendmail	1619	sendmail -Cfile allows one to 'look at' a file without read permission
sendmail	1767	local mail will not work on a newly installed system
sendmail	1789	sendmail repeats a line in mail until disk is full
sendmail	1820	please implement option for a log file
settek	1760	gin mode should be able to append a return to character string
settitle	1819	settitle doesn't work right with a null title on a 19" display
setworigin	1737	there's a man page for setworigin, but no program
setwsize	1036	setwsize 3000 3000 hangs display

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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
shl	1821	shl command doesn't work on a pseudo port.
shutdaemon	1532	shutdaemon sometimes never exits after killing the daemons
shutdaemon	1837	shutdaemon continually generates a kill error message
shutdown halt	913	add shutdown, halt, and reboot to 3.3
shutdown(1)	1507	section 1 indicates we have shutdown(1)
shutdown, halt	1752	added to the system
signals	792	distribution of signals by process group doesn't always work right.
signals	912	add SIGINTOVER and SIGINTDIVZERO to set of signals
soelim	1822	soelim doesn't work
spell	1833	the spellhist file was created with incorrect permissions
spell	1858	spell used with a local dictionary doesn't understand uppercase
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.
stdio	1766	setvbuf() function doesn't work

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
string.h	1492	several externs are missing from string.string.h,
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
style	1835	the output from the -P option is in a bad format
systest	1632	Added modules for CIO
systest	1709	Added fffff.f src file for testing RF compiler.
tail	1181	cat filename   head -2   tail -1
talk	1730	added 'talk'
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
tapedriver	1716	tape position incorrect after read and close operation
tapedriver	1742	tapedriver doesn't work with new extended address tape board
tapedriver	1762	too many file marks are skipped by the tapedriver
tapedriver	1800	make it possible to restart crashed driver
tapedriver,mt	1756	system hangs with 'mt -f /dev/rmt1 weof'

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
tapedriver/mt	1817	System hangs when you try to rewind the second tape drive/second tapedriver (mt)
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	1769	'tar cvf outfile files' gives strange error message sometimes
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
termcap	1754	There is no entry for tvi925
timer	1188	UB/DR11: cannot set timer = 1
times	1812	system that has been up for a long time reports incorrect times
tr	1739	tr doesn't recognize a range of characters
troff	1031	mm operates in verbose mode and then goes into debug
tset	1745	the -m (mapping) option of tset doesn't seem to work

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
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
um	1562	when slow-booting, UM sometimes tries to run getty & login
um	1563	need larger data segments, request completion of set/getrlimit calls
um	1567	starting um's sometimes crashes system
um, TTY drivers	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
units	1839	/usr/lib/unittab doesn't exist, sot the units command doesn't work
unknown	1165	cron and ftp always report time as PST
unknown	1753	Modem support not completely documented
users	1788	an 8 character login name from a remote system is garbled
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
vgrind	1846	doesn't work. /usr/lib/prman/nice-i.sed is missing
vi	946	ctrl-v doesn't work on televideo

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
vi	947	vi doesn't know how to use diagonal arrow or function keys
vi	1081	cf has a problem with ignoring case
vi	1138	expreserve and friends get stuck when running vi and phone is hung up
vi	1474	'ex:something:' causes a funny error message
vi	1496	vi doesn't handle ^c sometimes
vi	1541	On a busy system vi of a large file takes much longer than small file
vi	1638	vi -r doesn't work properly
vmm	1476	Scanrange, found free page ..... Flip Load Enable to continue .....
vmm	1803	VMM: Cannot examine in-use page error = 15 or 16
volmgr	1746	Volmgr-RemoveFreeBlock error crashes system
vprint/vplot	1061	simultaneous print/plot mode does not work to versatec
wait	941	status returned by wait only provides for values 1-127
wc	1743	spaces needed in wc output for large files
whatis (graf)	1727	'whatis hpd' gives misleading info
whet	1748	Added whet to systest for more testing.
wi	1850	doesn't work over pseudo port
window manager	1469	desire ability to disable mouse cursor
windowmgr	1590	added text select/paste feature
xsend	1851	xsend and xget do not work
xsys	1774	This program is used to print out the

## Software Bulletin Index

PROGRAM	SMR #	DESCRIPTION
		configuration of the system (including
xsys.h	1806	Need general include file for getting system information.

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: on hold Target Release: Last Reviewed: 04/22/1986  
 [It would be nice if ]  
 [1) we could substitute a memory (core) dump rather than entering debugger ]  
 [(with option) ]  
 [2) we could specify that a SIG (whatever that causes a core dump/debug) ]  
 [should just generate a message and die. ]  
 [With ROS 3.4 the first of several changes intended to finally provide ]  
 [core files is being made. With this release, processes that are terminated]   
 [by the UM due to no debug will display some information on the console. ]  
 [While this is not really a substitute for core files, it is better than ]  
 [ROS 3.3 update 3. ]

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: on hold Target Release: Last Reviewed: 04/22/1986  
 [tar and dd do not know about multiple reel tapes ]

SMR Number: [451 ] ROS Version: [ ]  
 Program: [C ] Version: [ ]  
 Keyword: [ ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [The C optimizer 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: [3.2 ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [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?? ]

SMR Number: [549 ] ROS Version: [3.3 ]  
 Status: open Target Release: 3.5 Last Reviewed: 04/22/1986  
 [ld should give an error if a common declaration length is greater than ]  
 [the global declaration length for a symbol. ]  
 [note... from 3.2 ]

SMR Number: [665 ] ROS Version: [3.3 ]  
 Keyword: [rc 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 floppy?' ]  
 [This error occurs frequently (but not every time). ]  
 Solution SMR Number: [665 ]  
 Fix will be included in:  
 Description:  
 ROS 3.4 Startup fixes this.

SMR Number: [785 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [Under dbx, STEP into a C function from a FORTRAN program does not work. ]  
 [Workaround: use "STOP IN function" instead. ]

SMR Number: [787 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [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 ]  
 [that gets x as parameter. ]

SMR Number: [791 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [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. ]  
 [The pipe manager and file manager do not support DriverGetMode. ]

SMR Number: [792 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: 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 ]  
 [unaffected. ]

SMR Number: [815 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: 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 ctrlcho ]  
 [ 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. ]
Solution SMR Number: [842 ]
Fix will be included in: ROS3.4
Description:
new version of invert that works with 3.4 display driver, using ioctl's.
Has -i (invert), -b (black background), -w (white background) options.
-----
SMR Number: [854 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[There seem to be only 4 ptty's defined. This customer wants more (~30). ]
-----
SMR Number: [856 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 04/22/1986
[The 'route' command needs to be ported. ]
Solution SMR Number: [856 ]
Fix will be included in:
Description:
route and routed ported. Required new ioctl for ns to avoid using
/dev/kmem.
-----
SMR Number: [858 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[The netstat command needs to be ported. ]
Solution SMR Number: [858 ]
Fix will be included in:
Description:
netstat ported. Required changes to ns to add ioctl to replace calls to
/dev/kmem.
-h and -m not currently supported.
-----
SMR Number: [877 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[DoSignal gets called one too many times for each delivered signal. ]
-----
SMR Number: [880 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 04/22/1986
[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. ]
Solution SMR Number: [884 ]
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: on hold 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 ]
```

```
[fifo 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 ]
[SIGFPE. ]
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
a change.
-----
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: on hold Target Release: 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: on hold Target Release: 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: on hold Target Release: 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. ]
-----
SMR Number: [941 ] ROS Version: [3.3u2 ]
Status: on hold Target Release: 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. ]
[We must redefine the mapping of signal numbers. Using the currently ]
[defined mapping for 4.2bsd that we use in the UM would be fine. ]
[Note that the signal numbers 127 and above are not very likely to occur ]
[except by assembly language programs. ]
-----
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 teletype (it did work on 3.1) ]
```

SMR Number: [947 ] ROS Version: [3.3 ]  
 Keyword: [map command ]  
 Status: on hold Target Release: 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: 3.4u1 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: 3.4u1  
 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 mttime 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: on hold Target Release: Last Reviewed: 04/22/1986  
 [ls -l prints user id number instead of user name if the user id is ]  
 [greater than 2048. ]  
 [Use the BSD 4.3 version when possible. ]

SMR Number: [984 ] ROS Version: [3.3 ]  
 Status: on hold 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" ]  
 [This is caused by a TTY driver trying to notify the UM of a special event ]  
 [such as DEL or carrier loss. Since the driver can send any number of these] ]  
 [messages and it runs at higher priority it can overflow the queue of the ]  
 [UM. We do not have a solution to this problem at this time. ]

SMR Number: [986 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [In cu, if you type "n% take filename" and then backspace, every other ]  
 [letter is erased from the screen. ]

SMR Number: [994 ] ROS Version: [3.3 ]  
 Keyword: [cat ]  
 Status: on hold Target Release: 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 ]  
 Keyword: [from LOGIN ]  
 Status: on hold Target Release: 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. ]

SMR Number: [1011 ] ROS Version: [3.3 ]  
 Keyword: [-o option ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [Implement the -o option into tar from SYS V version 2. This option ]  
 [causes files to be owned by user rather than that on the tape. ]  
 [use the 4.2 version until we have resources to add to systemV version ]

SMR Number: [1018 ] ROS Version: [3.3 ]  
 Keyword: [floppy ]  
 Status: on hold Target Release: 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-existent ]  
 [Doing a 'dir' first, the the 'rm' works. ]

SMR Number: [1019 ] ROS Version: [3.3 ]  
 Keyword: [floppy ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [On a floppy, if you try to remove a file that doesn't exist, ]  
 [the file is created and the floppy is full. ]

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.

SMR Number: [1024 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [call a remote system via cu. cat an executable file on a televideo. <del>] ]  
 [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: on hold Target Release: 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
[setsize 3000 3000 hangs display even after process is killed. ]
[Other ttys and displays are active. ]
[This should be avoided. The display driver is hung because the vmm can't ]
[give it all the memory it needs. Known problem that will not get fixed. ]
-----
SMR Number: [1041 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[rcp /tmp/junk host:/tmp/junk (where host is same) causes file to be ]
[trashed. ]
-----
SMR Number: [1042 ] ROS Version: [3.3 ]
Status: 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-l (redraw screen) only works semi-right. It moves the ]
[more (XX)% label up a line - losing the top line. Also, a <CR> ]
[followed by a ctl-l moves you ahead almost a page instead of merely ]
[redrawing the screen. ]
-----
SMR Number: [1047 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[The exec system call should recognize the syntax '#! /bin/csh' ]
-----
SMR Number: [1060 ] ROS Version: [3.3 ]
Status: open Target Release: 3.3u2 Last Reviewed: 04/22/1986
[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 ]
Status: closed Target Release: never Last Reviewed: 05/08/1986
[Simultaneous print/plot mode doesn't work on versatec. In particular, ]
[the first line of text put to versatec is interpreted as a plot raster, ]
[so it comes out as a bunch of dots and dashes at the top of the page. ]
Solution SMR Number: [1061 ]
Fix will be included in: never
Description:
We do not support simultaneous print/plot mode.
-----
SMR Number: [1062 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[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 ]
Status: known bug Target Release: Last Reviewed: 04/22/1986
[1. 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 occurrence 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 ]
[on priam disk. ]
Solution SMR Number: [1064 ]
Fix will be included in: 3.4u1 and u5
Description:
Fix added for 3.3 update 5, and 3.4 update 1.
-----
SMR Number: [1066 ] ROS Version: [3.3 ]
Keyword: [troff/display ]
Status: on hold Target Release: 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 ]
Keyword: [stty tostop set ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[A user running with csh and tostop tty mode set sends mail to an unknow ]
[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: on hold Target Release: Last Reviewed: 04/22/1986
[using vi on a display without mousemgr or windowmgr 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-m1) ]
-----
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.u1 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.u1
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> ]
[: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 ]
Keyword: [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 ]
[groups. ]
Solution SMR Number: [1099 ]
Fix will be included in: ROS3.4
Description:
All ATT and BSD tty modes are now saved and restored.

```

```

-----
SMR Number: [1105 ] ROS Version: [3.3 ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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 guaranteed 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 ]
Keyword: [signal #117 ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[Signal #117 SIGINTDIVZERO is ignored (by default) by 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 ]
[be 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: [cat ]
Status: open Target Release: Last Reviewed: 04/22/1986
[cat doesn't work when input and output are sockets, eg: ]
[ rsh ridge cat < /etc/hosts > /tmp/junk ]
[returns: ]
[ cat: input is output ]
[This rsh command works fine on other bsd systems ]
[and other programs (eg hexdump) work with input and output on a socket. ]

```

```

-----
SMR Number: [1125 ] ROS Version: [3.3 ]
Keyword: [cc constants ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[The -a option of cc does not work if constants are used in expressions. ]
[Since rc -z does the same thing and works properly, we will not fix ]
[the cc problem. One workaround is to use a variable instead of a ]
[constant. The complete solution is to use rc. ]

```

```

-----
SMR Number: [1127 ] ROS Version: [3.3 ]
Keyword: [-L option ]
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 ]
[is: ]
[ format('bug:/' ]
[ + ' xxx ]
[ + ' xxx') ]
[Should insert commas. ]
[Also see spr#416. MJ 9/10/85 ]

```

```

-----
SMR Number: [1138 ] ROS Version: [3.3 ]
Keyword: [modem ]
Status: closed Target Release: ros3.4 Last Reviewed: 05/06/1986
[login shell is /bin/sh ]
[login over modem ]
[run 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 ]
[of 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 cpu ]
Status: closed Target Release: ros3.4.u1 Last Reviewed: 04/22/1986
[/usr/bin/realdial goes into debug when run on a system that has waterfall ]
[cpu boards. ]
Solution SMR Number: [1144 ]
Fix will be included in: 3.4.u1
Description:
Added line in cleanup script that removes /usr/bin/realdial if it exists.

```

```

-----
SMR Number: [1147 ] ROS Version: [3.3u2 ]
Keyword: [ns panics ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[network panic: no more big buffers ]
[ns then goes into debug with SIGUSR1 ]
Solution SMR Number: [1147 ]
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 accommodate 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.

```

-----
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: on hold Target Release: 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: on hold Target Release: Last Reviewed: 04/22/1986
[Mail received from root has ')' in 'from' line that causes the replies ]
[to generate errors. The ')' comes from /etc/passwd. ]

```

```

-----
SMR Number: [1154 ] ROS Version: [3.3 ]
Status: on hold Target Release: 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
[Modify 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.

```

-----
SMR Number: [1158 ] ROS Version: [3.3u2 ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[If 'ld' encounters an error such as an unresolved reference, it leaves ]
[the 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:
Description:
Will not be fixed, that's the way it works.

```

```

-----
SMR Number: [1161 ] ROS Version: [3.3 ]
Keyword: [drand48(3C) ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[man drand48 changes terminal settings. For instance, on a tvi950 it turns ]
[on smooth scroll. On a ridge display, lightening bolts appear. ]
Solution SMR Number: [1161 ]
Fix will be included in: ros3.4
Description:
changed 'fixup' script to run all pages with eqn, tbl through col.

```

```

-----
SMR Number: [1162 ] ROS Version: [3.3 ]
Keyword: [echo ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[The cshell builtin command 'echo' should be enhanced so that it understands ]
[the 'backslash escapes' of the /bin/echo command. ]
[Note from mikej: 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 getenv() 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: on hold Target Release: Last Reviewed: 04/22/1986

```

[Desire an option in ps to display processes by user. ]

-----  
 SMR Number: [1164 ] ROS Version: [3.3 ]  
 Keyword: [cshell ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [Request modification of at/batch to work with cshell scripts. ]

-----  
 SMR Number: [1165 ] ROS Version: [3.3 ]  
 Keyword: [time ]  
 Status: open Target Release: Last Reviewed: 04/22/1986  
 [cron and ftp always report time as PST. ]  
 [1. What version of ROS is running? 2. In ftp, how is the user getting the ]  
 [time from the ridge? a) when ftp connects to a remote system, the ftpd on ]  
 [that system sends message which includes time it was built. This does not ]  
 [change to reflect local time zone. b) ftp calls gettimeofday() in order to ]  
 [do transfer rate calculations in verbose mode. c) ftpd calls time() and ]  
 [ctime() when connection times out, and if loggin is enabled, prints on std ]  
 [err. d) ftpd calls time() and ctime() when a user connects to system, and ]  
 [if logging is enabled, prints on std err. e) ftpd calls time() to update ]  
 [wtmp when a user connects or disconnects. No other time accesses are done. ]  
 [ftp and ftpd are 4.2 programs, loaded with the 4.2 libraries for 3.3 releas ]  
 [3. sounds like either a library or 4.2bsd ftpd problem. More likely the ]  
 [former since user has same complaint for cron. Perhaps MR 1023 on time ]  
 [zones with UUCP is related. ]

-----  
 SMR Number: [1168 ] ROS Version: [3.3u2 ]  
 Keyword: [signals ]  
 Status: on hold 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. Eg, /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 "even|odd" to the Usage messages to  
 reflect the new enhancement.

-----  
 SMR Number: [1173 ] ROS Version: [3.3 ]  
 Keyword: [libc ]  
 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: strcspn does work. ]  
 Solution SMR Number: [1173 ]  
 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: on hold 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. ]

[I viewed this problem as a documentation problem, and have changed the ]  
 [cshell man pages and tutorial to explain that with new windows, a new ]  
 [shell is started, and therefore, stty commands must be placed in the ]  
 [.cshrc file. ]

-----  
 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! ]  
 Solution SMR Number: [1175 ]  
 Fix will be included in:  
 Description:  
 Added OS specific processing to chown in UM. Also updated crt1.h for libc  
 changes to set the OS field in the message header.  
 [True. This is system V semantics. ]

-----  
 SMR Number: [1176 ] ROS Version: [3.3u2 ]  
 Keyword: [fortran/crt0.o ]  
 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. ]  
 Solution SMR Number: [1176 ]  
 Fix will be included in:  
 Description:  
 Not a problem. User error.

-----  
 SMR Number: [1178 ] ROS Version: [3.3 ]  
 Status: on hold Target Release: 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: on hold Target Release: 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: on hold Target Release: Last Reviewed: 04/22/1986  
 [the command: ]  
 [ cat filename | head -2 | tail -1 ]  
 [with the file "ABCDE ]  
 [ FGHIJ ]  
 [ KLMNO ]  
 [ PQRST" ]  
 [produces "GHIJ". The "F" is missing. This is intermittent. If it doesn't ]  
 [happen, try it with a big file first, then with this file a few times. ]

-----  
 SMR Number: [1185 ] ROS Version: [3.3u2 ]  
 Keyword: [Record Locking ]  
 Status: closed Target Release: 3.4u3 Last Reviewed: 04/22/1986  
 [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 mandatory locking mode. ]  
 Solution SMR Number: [1185 ]  
 Fix will be included in: ros3.3

-----  
 SMR Number: [1188 ] ROS Version: [3.3u2 ]  
 Keyword: [ERQUEUEFULL ]  
 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? ]
Solution SMR Number: [1188 ]
Fix will be included in:
Description:
cannot reproduce

```

```

-----
SMR Number: [1189 ] ROS Version: [3.3u2 ]
Keyword: [ruptime ]
Status: closed Target Release: enet3.4 Last Reviewed: 04/22/1986
[runtime doesn't work on ridge with a remote vax at UCSB. runtime 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 Target Release: Last Reviewed: 04/22/1986
[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 ]
Keyword: [dbx, ^z ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[Dbx gets confused after it has been suspended with ^z (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 0xfffff 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. ]

```

```

Solution SMR Number: [1191 ]
Fix will be included in:
Description:
Fixed in ROS 3.4 Update 1.

```

```

-----
SMR Number: [1192 ] ROS Version: [3.3u2 ]
Keyword: [ns ]
Status: closed Target Release: enet3.4 Last Reviewed: 04/22/1986
[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. ]

```

```

Solution SMR Number: [1192 ]
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 ]
Keyword: [um, getpriority ]
Status: closed Target Release: ros3.3.u3 Last Reviewed: 04/22/1986

```

```

[The um gets stuck in a loop that hangs the system when getpriority is ]
[called with the which parameter=PRIO_USER. Mike J. 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 ]
Status: open Target Release: ros3.5 Last Reviewed: 04/22/1986
[1) mkdir test1 ]
[2) cd test1; pwd ]
[3) mv ../test1 ../test2 ]
[ cd 'pwd' fails ]

```

```

-----
SMR Number: [1200 ] ROS Version: [3.3 ]
Keyword: [lint ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[Lint uses 'cc' to preprocess a C file. New customers don't have 'cc'! ]
[Lint must be changed to use 'rc' instead. This problem happened at a ]
[customer site. ]

```

```

-----
SMR Number: [1201 ] ROS Version: [3.3u2 ]
Keyword: [stty, autoflow ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[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).

```

```

-----
SMR Number: [1202 ] ROS Version: [3.3u2 ]
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. ]

```

```

Solution SMR Number: [1202 ]
Fix will be included in: ros3.4.u1
Description:
Repaired curses.h file

```

```

-----
SMR Number: [1203 ] ROS Version: [3.3u2 ]
Keyword: [4.2 libraries ]
Status: on hold 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: rp1.8 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: rp1.8
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: [1206 ] ROS Version: [3.3u2 ]
Keyword: [eof pascal ]
Status: closed Target Release: rp1.8 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 ]  
 Status: closed Target Release: 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. ]  
 Solution 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 \*name(). 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: on hold Target Release: Last Reviewed: 04/22/1986  
 [The following shell script: ]  
 [ mt rew ]  
 [ 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 ]  
 [and give a command to print it out. I submit huge batch jobs through a ]  
 [front-end switch and check on it from time to time. If the job 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: [3.3u1 ]  
 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: [emacs ]  
 Status: on hold Target Release: 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. I was able to execute one successful shell escape, but the ]  
 [rest failed. ]

-----  
 SMR Number: [1453 ] ROS Version: [3.3 ]  
 Keyword: [emacs ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [Prefix character with terminator does not throw away the ctl-] at the ]  
 [end for query replace and search commands. ]

-----  
 SMR Number: [1454 ] ROS Version: [3.3 ]  
 Keyword: [emacs ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [View Syntax Table output format truncates the display. I could not ]  
 [reproduce this. ]

-----  
 SMR Number: [1455 ] ROS Version: [3.3 ]  
 Keyword: [emacs ]  
 Status: on hold Target Release: 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 ]  
 [problem. ]

-----  
 SMR Number: [1456 ] ROS Version: [3.3 ]  
 Keyword: [emacs ]  
 Status: on hold Target Release: 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 ]  
 Keyword: [tar ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [tar 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? ]  
 [The AT&T version works fine. Customer was probably using the Berkley ]  
 [version which does not maintain the original modification times. ]

-----  
 SMR Number: [1458 ] ROS Version: [3.3 ]  
 Program: [rp ] Version: [1.6 ]

Keyword: [rp ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [End of file test fails with attempt to read last end of file when called ]  
 [twice at the end of the file. Here's an example: ]

```

program essfic1(input,output);
type
  elem=record
  il:integer;
  end;
var
  f1:file of elem;
  i:integer;
begin
rewrite (f1, 'ficpas');
  f1^.il:=1;
  put (f1);
  f1^.il:=2;
  put (f1);
reset (f1);
  writeln('record 1, value:',f1^.il);
  get (f1);
  writeln('end-of-file =',eof(f1));
  writeln('record 2, value:',f1^.il);
  get (f1);
  writeln('end-of-file =',eof(f1));
  writeln('end-of-file =',eof(f1));
end.

```

Solution SMR Number: [1458 ]  
 Fix will be included in:  
 Description:  
 This is a duplicate of smr 1206.

SMR Number: [1459 ] ROS Version: [3.3 ]  
 Program: [rp ] Version: [1.6 ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [reset does not work when several pascal files are connected to the same ]  
 [physical file. Here's an example: ]

```

program essf2(input,output);
type
  elem=record
  il:integer;
  end;
var
  f1:file of elem;
  f2:file of elem;
  i:integer;
begin
rewrite (f1, 'ficpas');
  for i:=1 to 10
  do
  begin
    f1^.il:=i;
    put (f1);
  end;
reset (f2, 'ficpas');
  for i:=1 to 10
  do begin
    writeln('record ',i, ' value:',f2^.il);
    get (f2);
  end;
end.

```

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 ]  
 Status: closed Target Release: rp1.9 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 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 ]  
 Status: open Target Release: Last Reviewed: 04/22/1986  
 [Compiler does not check constant sets. ]  
 [Example: ]  
 [ 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 ]  
 Program: [rp ] Version: [1.6 ]  
 Status: closed Target Release: rp1.8 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: rp1.8  
 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 ]  
 Program: [tapedriver ] Version: [1.50 ]



SMR Number: [1476 ] ROS Version: [3.3u2 ]  
 Keyword: [scanrange ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [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 ]  
 Status: closed Target Release: emacs1.1 Last Reviewed: 12/15/1986  
 [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. ]  
 Solution SMR Number: [1477 ]  
 Fix will be included in: emacs1.1  
 Description:  
 Added code that will cause the terminal to be correctly reset into cooked  
 mode. (/usr/src/cmd/emacs/src/e\_io.c).

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 properly checked when the  
 variable was being printed.

SMR Number: [1479 ] ROS Version: [3.3u2 ]  
 Keyword: [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 obscure with  
 possibly several unnecessary moves. Changed local2.c so that the result  
 of MOD or DIV is left in left node and added a check for discontinuous  
 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: ccl.3  
 Description:  
 Changed cc code generater to make it compatible with rc.

SMR Number: [1481 ] ROS Version: [3.3u2 ]  
 Keyword: [field \$1 ]  
 Status: closed Target Release: ros3.4 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. ]  
 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 ]  
 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: [1484 ]  
 Fix will be included in:  
 Description:

SMR Number: [1485 ] ROS Version: [3.3 ]  
 Keyword: [/usr/lib/xcpp ]  
 Status: open Target Release: 3.5 Last Reviewed: 04/22/1986  
 [cxref or /usr/lib/xcpp apparently has a couple 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 ] Version: [1.11 ]  
 Status: on hold 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: [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 ]  
 Status: closed Target Release: rfl.9 Last Reviewed: 04/22/1986  
 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.

SMR Number: [1490 ] ROS Version: [3.3u2 ]  
 Keyword: [truly zero ]  
 Status: closed Target Release: rfl.9 Last Reviewed: 04/22/1986  
 [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: rfl.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

SMR Number: [1491 ] ROS Version: [3.3 ]  
 Keyword: [prototype file ]  
 Status: closed Target Release: ros3.4.u1 Last Reviewed: 04/22/1986  
 [In the prototype file for sendmail, the line for local mail (llocal) ]  
 [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.u1

## Description:

The ridge.cf and trinity.cf files look ok. Changed 'P=' line in uucpproto.cf to 'P=/bin/binmail'.

SMR Number: [1492 ] ROS Version: [3.3u3 ]  
 Program: [string.h ] 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 ]  
 Keyword: [bad ifdef ]  
 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

## Description:

This is fixed in the lab and will be in release 1.9 of the compilers.

SMR Number: [1495 ] ROS Version: [3.3 ]  
 Program: [rc ] Version: [1.8 ]  
 Keyword: [error messages ]  
 Status: on hold Target Release: rcl.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. ]

SMR Number: [1496 ] ROS Version: [3.3u3 ]  
 Program: [vi ] Version: [1.18 ]  
 Keyword: [ctrl c ]  
 Status: on hold Target Release: Last Reviewed: 04/22/1986  
 [Get into 'vi', but before it has started up, type ^C. It goes into ]  
 [the debugger. ]

SMR Number: [1497 ] ROS Version: [3.3u2 ]  
 Program: [fdlp ] Version: [1.20 ]  
 Keyword: [ctrl O ]  
 Status: on hold Target Release: 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 ]  
 Program: [ns ] Version: [1.26 ]  
 Status: closed Target Release: enet3.4 Last Reviewed: 04/22/1986  
 [At least once a day the system hangs, all terminals stop responding. When ]  
 [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. ]  
 Solution SMR Number: [1498 ]

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).

SMR Number: [1499 ] ROS Version: [all ]  
 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: [cron ]  
 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. ]
Solution SMR Number: [1501 ]
```

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 ]
Keyword: [date prompt ]
Status: open Target Release: Last Reviewed: 04/22/1986
[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. ]
Solution SMR Number: [1503 ]
```

Fix will be included in:

Description:

I changed the while in function "execat" in module "misc.c" from:  
while (\*s1 && \*s1 != KOLON && \*s1 != MINUS)  
to:  
while (\*s1 && \*s1 != KOLON)  
as suggested in code fix sheet from AT&T.

```
-----
SMR Number: [1504 ] ROS Version: [3.3 ]
Keyword: [pg ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[This fix was suggested by the AT&T customer support "newsletter". ]
Solution SMR Number: [1504 ]
```

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: on hold 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 oalloc. 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 ]
```

```
Keyword: [shutdown ]
Status: open Target Release: 3.4 Last Reviewed: 04/22/1986
[Manual indicates that we have Sys V shutdown(1). This is not true. ]
-----
```

```
SMR Number: [1508 ] ROS Version: [3.3u3 ]
Keyword: [/etc/rc ]
Status: open Target Release: 3.4 Last Reviewed: 04/22/1986
[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 ]
Program: [rc ] Version: [1.6 ]
Status: closed Target Release: rc1.9 Last Reviewed: 04/22/1986
[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) ]
[ 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.

```
-----
SMR Number: [1510 ] ROS Version: [3.3u2 ]
Keyword: [ctrl-x ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[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: on hold Target Release: 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 consistent 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: on hold Target Release: 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, ioctl 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 ]
[states "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 ]
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 -> "aaaaaaaaabbbbbbb" 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: rf1.9 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 already 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.

```
-----
SMR Number: [1518 ] ROS Version: [3.3u3 ]
Keyword: [getpgrp ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[Getpgrp should be added to the system V libc. ]
Solution SMR Number: [1518 ]
Fix will be included in:
Description:
Added getpgrp to libc. Added OS specific operation to UM.
-----
```

```
SMR Number: [1519 ] ROS Version: [3.3u2 ]
Program: [rf ] Version: [1.6 ]
Keyword: [rf without rc ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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 incompatibility) ]
[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 accommodate both compilers.

```
-----
SMR Number: [1520 ] 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 & rcv, 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 ]
-----
```

Keyword: [cu LOCK files ]  
 Status: open Target Release: ros3.4 Last Reviewed: 04/22/1986  
 [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" ]

-----  
 SMR Number: [1523 ] ROS Version: [3.3u3 ]  
 Keyword: [fseek bad status ]  
 Status: closed Target Release: rfl.8A Last Reviewed: 04/22/1986  
 [A call to fseek at Danford caused a bad status to be returned. This code ]  
 [worked with the previous version of libI77. ]  
 Solution SMR Number: [1523 ]  
 Fix will be included in: rfl.8A

Description:  
 The libI77.a included with rf 1.8 contained Bull's 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.

-----  
 SMR Number: [1524 ] ROS Version: [3.3u3 ]  
 Keyword: [conversion ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [The rc compiler generates incorrect code when the program tries to compare ]  
 [an unsigned short to a signed short. 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"); ]  
 [ else ]  
 [ printf ("not equal\n"); ]  
 [ should print "not equal". It prints "equal". ]  
 Solution SMR Number: [1524 ]  
 Fix will be included in: rcl.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: [1525 ] 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 ]  
 Status: closed Target Release: Last Reviewed: 04/22/1986  
 [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: rfl.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.

-----  
 SMR Number: [1527 ] ROS Version: [3.3u2 ]  
 Status: closed Target Release: Last Reviewed: 12/08/1986  
 [Customer is strongly requesting that we support the berkeley netstat ]  
 [command. ]  
 Solution SMR Number: [1527 ]  
 Fix will be included in:  
 Description:  
 Duplicate of SMR# 858. See solution there.

-----  
 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. ]  
 Solution SMR Number: [1528 ]  
 Fix will be included in: ros3.4u1  
 Description:  
 moved location of /usr/msgs/msgs to /usr/bin/msgs.

-----  
 SMR Number: [1529 ] ROS Version: [3.3u3 ]  
 Program: [rp ] Version: [1.8 ]  
 Keyword: [preprocessor ]  
 Status: closed Target Release: rp2.0 Last Reviewed: 07/28/1986  
 [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. Dave C. reported ]  
 [the problem. ]  
 Solution SMR Number: [1529 ]  
 Fix will be included in: rp 2.0  
 Description:  
 Preprocessor symbols are now always case sensitive in rp.

-----  
 SMR Number: [1530 ] ROS Version: [all ]  
 Keyword: [getcwd ]  
 Status: closed Target Release: rfl.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 ]  
 [nodes 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: on hold Target Release: Last Reviewed: 04/22/1986  
 [About 75% of the time, shutdown never exits. A ctrl-z is typed and ]  
 [a ps shows that the daemons have been killed, but shutdown never ]  
 [returns. ]

-----  
 SMR Number: [1533 ] ROS Version: [3.3 ]  
 Program: [rf ] Version: [1.8 beta ]  
 Status: closed Target Release: rfl.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? ]
[This is problem with rf. F77 works correctly. The problem is in how the ]
[external specification is handled. If you leave out the external, then ]
[the program compiles fine. The problem has been reported to Green Hills. ]
[In the meantime, as a workaround, you can take out the external statement. ]
Solution SMR Number: [1533 ]
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 ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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 ]
Program: [rf ] Version: [1.8 ]
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
is fixed.
```

```
-----
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]
[instead 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 offset
was added to the load/store address.
```

```
-----
SMR Number: [1537 ] ROS Version: [all ]
Keyword: [common stabs ]
```

```
Status: closed Target Release: rf1.9 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
an offset of 0.
```

```
-----
SMR Number: [1538 ] ROS Version: [all ]
Status: on hold Target Release: ros3.4 Last Reviewed: 04/22/1986
[If a floppy that is currently in the drive has no file with the name 'f1' ]
[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 ]
[reboot or put a floppy in the drive that has an 'f1' file. ]
-----
```

```
SMR Number: [1539 ] ROS Version: [3.3u3 ]
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. ]
Solution 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
[In ROS 3.3U3 processes were separated into interactive and batch processes.]
[The processes doing I/O to the DR-11 graphics device were not adjusted ]
[in priority, which caused them to migrate to batch class. Since interactive]
[processes get priority, the graphics class were competing directly with ]
[the other batch processes. So DR-11 graphics performed worse than tty ]
[I/O and worse than it did in ROS 3.3P2. ]
-----
```

```
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. ]
Solution SMR Number: [1540 ]
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
```

vmn - vmn.p 3.7, vmmasm.s 3.3  
fm - 3.4

a

-----  
SMR Number: [1542 ] ROS Version: [3.3u3 ]  
Keyword: [ROS 3.3u4 ]  
Status: closed 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]  
[appear: ]  
[ 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.
- 3) 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. [The system calls fork and spawn were causing the newly created child ]  
[process to be traced as well as the parent. Since the parent was not ]  
[expecting this the child processes were being suspended and never ]  
[activated. This tied up data space in the UM. If enough of these children]  
[were created, the UM would crash. ]

-----  
SMR Number: [1546 ] ROS Version: [3.3 ]

Keyword: [date ]  
Status: open Target Release: ros3.4 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: [env variables ]  
Status: closed Target Release: Last Reviewed: 04/22/1986  
[Example: if TZ=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

-----  
SMR Number: [1548 ] ROS Version: [3.3 ]  
Keyword: [assembler files ]  
Status: closed Target Release: rcl.9 Last Reviewed: 04/22/1986  
[rc -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 cpp 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: rcl.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. ]

Solution SMR Number: [1549 ]

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 ]  
Status: open Target Release: 1.10 Last Reviewed: 04/22/1986  
[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. ]  
[This is a known problem and should be documented in the manual page. ]

-----  
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: on hold Target Release: Last Reviewed: 04/22/1986

SMR Number: [1554 ] ROS Version: [3.3 ]  
 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 ] ROS Version: [3.3 ]  
 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: ]  
 [received signal SIGSEGV (illegal memory reference) ]  
 [illegal memory reference at address 6E00800 in the data segment ]  
 Solution 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 ]  
 Keyword: [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:  
 Bull fixed this.  
 Requested code from bull on May 12 (paw).

SMR Number: [1557 ] ROS Version: [none ]  
 Keyword: [getfd, getfp ]  
 Status: closed Target Release: rf1.9 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, rfcorn 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 mode. ]  
 [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: [none ]  
 Keyword: [tapeio ]  
 Status: closed Target Release: rf1.9 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 ]  
 Program: [rf ] Version: [1.8 ]  
 Keyword: [implicit undefined ]  
 Status: closed Target Release: rf1.9 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: rf1.9

Description:

The problem reported in this smr actually shows two problems in the FORTRAN compiler. One  
 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 ]  
 Keyword: [struct copy ]  
 Status: closed Target Release: rc1.9 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: rc1.9

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 ]  
 Keyword: [startup ]  
 Status: closed Target Release: ros3.4 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 ]  
 [1 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: rf1.9 Last Reviewed: 04/22/1986  
 [ subroutine suba(i) ]  
 [ external subb ]  
 [ i=1 ]  
 [ return ]  
 [ 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 ]  
 [ensure that block data subroutines are included when loading with a library] ]  
 Solution SMR Number: [1568 ]

Fix will be included in: rf1.9

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 ] Version: [1.8 ]  
 Keyword: [implicit undefined ]  
 Status: closed Target Release: rf1.9 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. ]  
 Solution SMR Number: [1569 ]

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 ]  
 Program: [rf ] Version: [1.8a ]  
 Status: closed Target Release: rf1.9 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: rf1.9  
 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: on hold Target Release: 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 ]

-----  
 SMR Number: [1572 ] ROS Version: [none ]  
 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 separate 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 rfcorn 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: rfl.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 precedes 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 n1,n ]
[ ia(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: rfl.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 ]
Status: closed Target Release: next lang Last Reviewed: 04/22/1986
[It 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:
Mike has modified dbx 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 ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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: [1576 ] ROS Version: [3.3u3 ]
Program: [4.2 libc ] Version: [10/9/85 ]
Keyword: [ftruncate missing ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[ftruncate missing from the library ]
Solution SMR Number: [1576 ]
Fix will be included in:
Description:
Fixed in ROS 3.4.
-----
```

```
-----
SMR Number: [1577 ] ROS Version: [3.4a ]
Keyword: [laser writer ]
Status: open Target Release: Last Reviewed: 04/22/1986
[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 print 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.
-----
```

```
SMR Number: [1580 ] ROS Version: [3.3 ]
Keyword: [spelling ]
Status: closed Target Release: ros3.4.u1 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 appropriate ]
[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 ]
[of our work. ]
Solution SMR Number: [1580 ]
Fix will be included in: ros3.4.u1
Description:
Corrected spelling of appropriate.
-----
```

```
SMR Number: [1581 ] ROS Version: [3.3u3 ]
Program: [lf ] Version: [1.8 ]
Keyword: [loop index ]
Status: closed Target Release: rfl.9 Last Reviewed: 04/22/1986
[ do 10 i=1,10 ]
[ if(i.gt.5) go to 10 ]
[ do 10 j=1,10 ]
[ if(i.gt.5) print *, "DO LOOP ERROR" ]
[10 continue ]
[The 'j' 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: [as ]
Status: closed Target Release: rfl.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: rfl.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 ]
Program: [rccom ] Version: [1.8 ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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
Description:
```

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 Target Release: Last Reviewed: 04/22/1986
[The example in /usr/beth/exp/1584.c generates bad as code. ]
Solution SMR Number: [1584 ]
Fix will be included in: rc 1.8
Description:
```

Bull was using rc 1.8 alpha, but this problem was fixed in the released version of rc 1.8.

```
-----
SMR Number: [1585 ] ROS Version: [3.3u3 ]
Keyword: [fputc into debug ]
Status: open Target Release: 1.9 Last Reviewed: 04/22/1986
[ read *,i ]
[ 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. ] ]
Solution SMR Number: [1585 ]
Fix will be included in:
Description:
```

[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.

```
-----
SMR Number: [1586 ] ROS Version: [3.3 ]
Status: closed Target Release: rfl.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 i/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: [1587 ] ROS Version: [3.3u3 ]
Keyword: [sdiff pipe page ]
Status: on hold Target Release: 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 ] ]
Solution SMR Number: [1587 ]
Fix will be included in:
Description:
```

```
[time so I am keeping the files around to demonstrate the problem. I tried ]
[it 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 Tektronix4014 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: [1589 ] ROS Version: [3.4a ]
Keyword: [drll ]
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). ] ]
Solution SMR Number: [1589 ]
Fix will be included in: ROS3.4
Description:
updated drll drivers: metheus, rastertech, lexicdata
-----
```

```
SMR Number: [1590 ] ROS Version: [3.4a ]
Keyword: [windowmgr ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[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). ] ]
Solution SMR Number: [1590 ]
Fix will be included in: ROS3.4
Description:
modified libwindows.a
-----
```

```
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 ]
[windowmgr. ] ]
Solution SMR Number: [1591 ]
Fix will be included in: ROS3.4
Description:
modified libwindows.a
-----
```

```
SMR Number: [1592 ] ROS Version: [3.4a ]
Keyword: [libwgraf.a ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[Added GetPenColor, GetPenWidth routines to library. ] ]
Solution SMR Number: [1592 ]
Fix will be included in: ROS3.4
Description:
modified libwgraf.a
-----
```

```
SMR Number: [1593 ] ROS Version: [3.4a ]
Keyword: [libdriver.a ]
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. ] ]
Solution SMR Number: [1593 ]
Fix will be included in: ROS3.4
Description:
added /usr/lib/libdriver.a
-----
```

```
SMR Number: [1594 ] ROS Version: [3.4a ]
Keyword: [ciotty ]
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: [driverMsgs.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 (drll,tapedriver, ]  
 [cioct,ciolp,ciotty,timer), so modified appropriate makefiles -- This ]  
 [probably shouldn't require an SMR, but this seemed like a good "audit trail"]  
 [for 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 cioc (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/cioc/s.cioc\_dev.c  
 /usr/src/sys/drivers/cioc/s.cioc\_soft.c  
 /usr/src/sys/drivers/cioc/s.cioc.h  
 /usr/src/sys/drivers/cioc/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 ]

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: [new file ]

Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986

[added ctio.h to the system for 3.4. This file describes the ioc1 commands]

[for the cartridge tape drive ]

Solution SMR Number: [1602 ]

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.

-----  
 SMR Number: [1603 ] ROS Version: [3.4b ]

Keyword: [new file ]

Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986

[added this new header file to the system ]

Solution SMR Number: [1603 ]

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 ]

Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986

[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 ]

Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986

[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 ] ROS Version: [3.3u3 ]

Program: [rp ] Version: [1.8 ]

Keyword: [diagnostic ]

Status: closed Target Release: rpl.9 Last Reviewed: 04/22/1986

```
[If f is defined to be a function, the Pascal compiler flags the statement ]
[ f(x); ]
[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.
- \* Filemgr 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: on hold Target Release: 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 ]
[for 3.4. ]
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: [new 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 ] ROS Version: [3.4a ]
Keyword: [new 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 ]
Keyword: [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.ioddev.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 ]
Keyword: [ASYNC ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[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: on hold Target Release: Last Reviewed: 04/22/1986
[Please make the break given by ~%b in cu to two times what it ]
[currently 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 1 2 0 ]
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 ]
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. ]
Solution:
[The addition of a wizard password line in the sendmail.cf file will ]
[prevent this. ]
[ ]
[ OWencrypted_password ]
[ ]
[However, this workaround is insufficient since the user can start ]
[sendmail with any file specified as the configuration file (see also ]
[SMR 1619). The solution is probably to delete the feature. This can ]
[be done by undefining DEBUG. The side effects of this are unknown at ]
[this time. ]
-----
SMR Number: [1619 ] ROS Version: [3.3 ]
Keyword: [security break ]
Status: on hold Target Release: 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 rje program sources in /usr/src/cmd/rje directory.
< subdirectories are gath/lib, gath/src, lib, src, and util >
-----
SMR Number: [1621 ] ROS Version: [3.3u3 ]
Keyword: [status ]
Status: closed Target Release: 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 queued ]
[up 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 ]
[anything, and it is not reproducible on demand. Sometimes it is possible ]
[to get away 'cleanly' by typing '~.'. ]
-----
SMR Number: [1623 ] ROS Version: [3.3 ]
Keyword: [exception signal ]
Status: on hold Target Release: 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 ]
[gets 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
boundary.
-----
SMR Number: [1625 ] ROS Version: [3.3u3 ]
Keyword: [address constant ]
Status: closed Target Release: rcl.9 Last Reviewed: 04/22/1986
[In the following code, the function f should return 4. It returns 32 ]
[instead. ]
[struct x {short s; long l}; ]
[f() ]
[ { ]
[ return( (int) &(((struct x *)0)->l) ); ]
[ ] ]
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.
-----
SMR Number: [1626 ] ROS Version: [3.3 ]
Program: [rf ] Version: [1.8 ]
Keyword: [character string ]
Status: closed Target Release: rfl.9 Last Reviewed: 04/22/1986
[The program ]
[ PARAMETER (I=2) ]
[ CHARACTER A*I ]
[ END ]
[does not compile with rf. It DOES compile with f77. ]
Solution SMR Number: [1626 ]
Fix will be included in: rfl.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.
-----
SMR Number: [1627 ] ROS Version: [all ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[Add the Sys V 'shl' (shell layering) utility to implement some kind ]
[of job control in the Bourne shell. ]
-----
SMR Number: [1628 ] ROS Version: [3.3 ]
Status: closed Target Release: ros3.5 Last Reviewed: 04/22/1986
[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 ]
Program: [rp ] Version: [1.8 ]
Keyword: [file pointer ]
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 ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[Release ciodebug program, for use in downloading cioboard. ]
-----
```

```
SMR Number: [1632 ] ROS Version: [3.4a ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[ciodiag, cstream, ifet, readlr, rnumber, rstream, systest.ex, lance.h, test_case.h ]
-----
```

```
SMR Number: [1633 ] ROS Version: [3.4a ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[fsys.ct.c, fsys.ctmdir.c ]
-----
```

```
SMR Number: [1634 ] ROS Version: [3.4b ]
Keyword: [new scripts ]
Status: open Target Release: ros3.4u1 Last Reviewed: 04/22/1986
[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 ]
-----
```

```
SMR Number: [1635 ] ROS Version: [3.3 ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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 ]
[ftabs 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 ]
Status: open Target Release: Last Reviewed: 04/22/1986
[/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. ]
-----
```

```
SMR Number: [1637 ] ROS Version: [3.3 ]
Status: on hold Target Release: Last Reviewed: 04/22/1986
[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 ]
Status: open Target Release: Last Reviewed: 04/22/1986
[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 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 04/22/1986
[A user logged into local over modem, and from there logged 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 be ]
[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). ]
-----
```

```
SMR Number: [1640 ] ROS Version: [3.3 ]
Status: open Target Release: 3.5 Last Reviewed: 04/22/1986
[Example: ]
[ #define ABCDEFGH 0 ]
[ #define ABCDEFGHI 1 ]
[cxref prints 'ABCDEFGH redefined', and doesn't give ]
[correct cross reference. ]
-----
```

```
SMR Number: [1641 ] ROS Version: [3.3u3 ]
Status: closed Target Release: ros3.4 Last Reviewed: 04/22/1986
[dbx prints stored, opcode b8, as an indexed stored. it is not an indexed ]
[stored. this problem exists in debug also, since debug is where I lifted ]
[the dis-assembly code from originally. ]
Solution SMR Number: [1641 ]
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. ]
Solution SMR Number: [1642 ]
Fix will be included in: ros3.4
Description:
Checked in new code.
-----
```

```
SMR Number: [1643 ] ROS Version: [3.3 ]
-----
```

```

Program: [rp ] Version: [1.8c ]
Status: closed Target Release: Last Reviewed: 04/22/1986
[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 ]
[their final character. ]

```

```

Solution SMR Number: [1643 ]

```

```

Fix will be included in: rpl.9

```

```

Description:

```

The Pascal compiler aligns strings on double word boundaries. 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 concatenation 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 Target Release: 3.5 Last Reviewed: 04/22/1986
[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. ]

```

```

-----
SMR Number: [1645 ] ROS Version: [all ]
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 tv1950'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): ]

```

```

[ get.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 Target Release: Last Reviewed: 04/22/1986
[See examples in /usr/beth/exp/1646*. When a subscript is 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 ]
Keyword: [debug ]

```

```

Status: open Target Release: 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: [error ]
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. ]

```

Solution SMR Number: [1649 ]

```

```

Fix will be included in: ROS3.4u2

```

```

Description:

```

Error now recognizes error messages from rp, and inserts Pascal style error messages into the Pascal source. In addition, error now knows when rc or rf have been used, and prints 'rc' or 'rf' in the error text instead of 'cc' or 'f77'.

```

-----
SMR Number: [1650 ] ROS Version: [3.3 ]
Status: closed Target Release: 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 ] 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 ]

```

```

Status: open Target Release: Last Reviewed: 04/07/1986
[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. ]

```

```

-----
SMR Number: [1654 ] ROS Version: [3.3 ]
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/exp/1654.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 SMR Number: [1654 ]

```

```

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(1M) 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 fixed.

SMR Number: [1656 ] ROS Version: [3.3 ]  
Keyword: [umask ]  
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 ] ROS Version: [3.3u3 ]  
Keyword: [shift by constant 0 ]  
Status: closed Target Release: rcl.9 Last Reviewed: 04/21/1986  
[rccom generates the illegal code "load r0," from the following program.  
[main()  
[  
[ int i;  
[ i >>= 0;  
[ ]  
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: [ciotty ]  
Status: closed Target Release: ros3.4u1 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: ROS3.4u1  
Description:  
checked in new sources for ciotty and libdriver.a

SMR Number: [1659 ] ROS Version: [3.3 ]  
Status: closed Target Release: ros3.4u1 Last Reviewed: 05/19/1986  
[Cpio 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).  
Solution SMR Number: [1659 ]  
Fix will be included in: 3.4u1  
Description:  
Closed by smr 1064. Fixed for 3.4 update 1 and 3.3 update 5.

SMR Number: [1660 ] ROS Version: [3.3u3 ]  
Program: [ftp ] Version: [1.7 ]  
Status: open Target Release: Last Reviewed: 04/21/1986  
[In ftp, connected to an apollo, if we do a remtoshelp command, the apollo  
[sends a multi-line reply formatted as follows:  
[ 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  
[user must exit ftp to recover.

SMR Number: [1661 ] ROS Version: [3.3u3 ]  
Program: [telnet ] Version: [1.7? ]  
Status: closed Target Release: Last Reviewed: 04/21/1986  
[telnet has problems mapping cr to cr-lf and vice versa when talking with  
[a UNIVAC  
Solution SMR Number: [1661 ]  
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.  
Solution SMR Number: [1662 ]  
Fix will be included in:  
Description:  
modified login to use 32 character hostnames instead of 16 characters.  
<login.c>

SMR Number: [1663 ] ROS Version: [3.3 ]  
Keyword: [kermit ]  
Status: open Target Release: Last Reviewed: 04/21/1986  
[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.

SMR Number: [1664 ] ROS Version: [3.3 ]  
Status: open Target Release: 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  
[persist. I have logfiles and the crontab file for reference, if  
[necessary.

SMR Number: [1665 ] ROS Version: [3.3 ]  
Status: open Target Release: Last Reviewed: 04/28/1986  
[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 ] ROS Version: [3.3 ]  
Program: [rf ] Version: [1.8d ]  
Status: closed Target Release: Last Reviewed: 07/21/1986  
[When this example is run:  
[ double precision a  
[ a=1.0D-100  
[ print \*,a  
[ write(\*,10) a  
[10 format(lpd20.10)  
[the D is dropped, but should be printed in both cases.  
Solution SMR Number: [1666 ]  
Fix will be included in:  
Description:  
The fortran 77 standard (page 13-11) specifies that if the absolute value  
of the exponent is in the range 100 through 999, the 'D' will not be

printed.  
There is no problem.

-----  
SMR Number: [1667 ] ROS Version: [3.4b ]  
Keyword: [status ]  
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.

-----  
SMR Number: [1668 ] ROS Version: [3.4a ]  
Program: [rc ] Version: [1.8d ]  
Status: closed Target Release: rcl.9 Last Reviewed: 04/28/1986  
[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 ]  
[ not 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 ../scs' causes scs 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 ../scs/\*f' if fortran programs ]  
[ need editing, for instance. ]

-----  
SMR Number: [1670 ] ROS Version: [3.3 ]  
Keyword: [skip ]  
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: [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 i:8; ]  
[ j:16; ]  
[ k:8; ]  
[ ] \*x,y; ]  
[f( ]

-----  
[[ ]  
[ x->] += 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 ]  
Status: closed Target Release: rcl.9 Last Reviewed: 05/05/1986  
[A bad argument list to rc, i.e. ]  
[rc -o foo.c 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 ld 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 ]  
Keyword: [.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: on hold Target Release: Last Reviewed: 05/19/1986  
[The 'script' program needs to be ported. ]

-----  
SMR Number: [1677 ] ROS Version: [all ]  
Keyword: [tapedriver ]  
Status: open Target Release: Last Reviewed: 05/19/1986  
[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) ]

-----  
SMR Number: [1678 ] ROS Version: [3.3 ]  
Program: [rf ] Version: [1.8d ]  
Status: closed Target Release: rfl.9 Last Reviewed: 05/19/1986  
[Bad code is generated for the loop ]  
[ do 10 j=1,0 ]  
[10 write(6,\*) ]  
[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 j=1,n-1 ]  
[However, the loop ]  
[ do 10 j=10,0 ]  
[10 write(6,\*) j ]  
[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 Target Release: rfl.9 Last Reviewed: 05/19/1986
[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 Target Release: rfl.9 Last Reviewed: 05/19/1986
[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 machops, 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.u1 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,
*.c>>
-----
```

```
-----
SMR Number: [1682 ] ROS Version: [all ]
Program: [ls ] Version: [1.25 ]
Status: open Target Release: Last Reviewed: 05/19/1986
[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: open Target Release: Last Reviewed: 06/02/1986
[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}*. ]
-----
```

```
-----
SMR Number: [1685 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 06/02/1986
[When the following define is in a program ]
[ #define NAME "=" ]
[the rc gives an 'illegal symbol' error. ]
-----
```

```
-----
SMR Number: [1686 ] ROS Version: [3.4 ]
Program: [rc ] Version: [1.8d ]
Keyword: [cast ]
Status: closed Target Release: rc1.9 Last Reviewed: 06/02/1986
[The following function shows the problem. *u gets the high half word from ]
[(unsigned short) 1, instead of the low half word. ]
[fun(u) ]
[unsigned short *u; ]
[ ]
[ { ]
[ unsigned long l = 13; ]
[ donothing(&l); ]
[ *u = (unsigned short) 1; ]
[ printf("%d %d\n", *u, l); ]
[ ]
[ ]
Solution SMR Number: [1686 ]
Fix will be included in: rc 1.9
Description:
There were already a series of cases which had this same problem, so this
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 ]
Status: open Target Release: Last Reviewed: 06/02/1986
[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 ] Version: [1.8d ]
Keyword: [pascal type-cast ]
Status: closed Target Release: rpl.9 Last Reviewed: 06/09/1986
[This problem was reported by Bull. The type cast causes the error ]
[mentioned in the comment. ]
[ type GENERIC_FILE = text; ]
[ ftype = file of integer; ]
[ var f3: ftype; ]
[ i,j: 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); ]
-----
```

```

[end;
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: [3.4u1 ]
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 ]           ROS Version: [3.4 ]
Keyword: [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) by Dave C.

```

```

-----
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: [3.4u1 ]
Program: [login ] Version: [1.30 ]
Status: closed Target Release: ros3.4.u1 Last Reviewed: 06/16/1986
[rlogin to a remote 3.4u1 beta system, and you get a login prompt rather
[than being automatically logged in. This is true despite the /etc/hosts.
[equiv and .rhosts files being correct.
Solution                               SMR Number: [1692 ]
Fix will be included in: 3.4u1
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>

```

-----
SMR Number: [1693 ]           ROS Version: [3.4u1 ]
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 accommodate 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: [3.4u1 ]
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.
Solution                               SMR Number: [1694 ]
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 ]           ROS Version: [3.3 ]
Keyword: [magic ]
Status: open 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 remotel, the username in the ftp login prompt for
[remote2 is the hostname of remote2, rather than the user's username.

```

```

-----
SMR Number: [1697 ]           ROS Version: [all ]
Status: open Target Release: Last Reviewed: 06/16/1986
[rlogin 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
[gone down.
[This may be related to part of the pseudo tty running batch rather than
[interactive.

```

```

-----
SMR Number: [1698 ]           ROS Version: [3.3 ]
Keyword: [dwb ]
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 manually with kill -9.

```

```

-----
SMR Number: [1700 ]           ROS Version: [3.3 ]
Status: closed Target Release: Last Reviewed: 06/16/1986
[Including /usr/include/ndir.h and /usr/include/sys/types.h results
[in 'incompatible types' message. Repeat by creating foo.c:
[ #include <ndir.h>
[ #include <sys/types.h>
[cc -c foo.c
[The reason for the error message is that ndir.h uses #define lines for
[u_short and u_long rather than including types.h. There is a fix for
[this... see the solution form.

```

```

Solution                               SMR Number: [1700 ]
Fix will be included in:
Description:

```

```

In ndir.h, change #define lines for u_short and u_long to:
#ifdef ridge
#include <sys/types.h>
#else
#define u_short unsigned short
#define u_long unsigned long
#endif

```

This is safe against multiple includes of types.h because types.h uses a #define and #ifdef to make sure its body is not included more than once.  
This has been closed by smr 1710

```

-----
SMR Number: [1701 ]           ROS Version: [all ]
Program: [telnetd ] Version: [1.18 ]
Status: closed Target Release: Last Reviewed: 06/30/1986

```

[telnet to a significantly faster system (e.g., a headwall), and sometimes ]  
 [the /etc/issue file and login prompt don't get output. ]  
 Solution SMR Number: [1701 ]  
 Fix will be included in:  
 Description:  
 Change TIOCSETP to TIOCSETN so input is not flushed.  
 <telnetd.c>

-----  
 SMR Number: [1702 ] ROS Version: [3.3 ]  
 Status: open Target Release: Last Reviewed: 06/30/1986  
 [Several standard system maintenance operations require one to reboot the ]  
 [system. This is a frequent cause of major problems (particularly when ]  
 [we try to run long jobs (>100 cpu hours), which constitute a significant ]  
 [part of our machine usage). Specifically, it would be a great improvement ]  
 [if the following operations could be carried out without rebooting: ]  
 [1) restarting the networking software, 2) restarting hung terminal drivers, ]  
 [3) disk verify and possibly minor repair, and 4) disk compaction. More ]  
 [details are provided on each of these cases in /usr/beth/exp/1702. ]

-----  
 SMR Number: [1703 ] ROS Version: [3.3 ]  
 Status: open Target Release: Last Reviewed: 06/30/1986  
 [rc, cc, and lint do not allow structure/union references of the form: ]  
 [(struct a = struct b).field ]  
 [See the longer example in /usr/beth/1703.c ]  
 [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 ]

-----  
 SMR Number: [1704 ] ROS Version: [3.3 ]  
 Status: open Target Release: Last Reviewed: 06/30/1986  
 [Using newgrp to change to a group you don't have permission to change ]  
 [to prints the error message 'Sorry', but starts a new shell anyway. ]  
 [The new shell is not associated with the new group, but either where ]  
 [the user started from, or the user's login group. ]

-----  
 SMR Number: [1705 ] ROS Version: [all ]  
 Status: open Target Release: Last Reviewed: 06/30/1986  
 [2 rloginds can get the same pseudo tty at the same time, if their timing ]  
 [is just right. As expected, the 2 remote users get confused. Neither can ]  
 [do much of anything, but they can see some of each other's typing. ]  
 [If one user types ~. then both connections appear to be closed. ]

-----  
 SMR Number: [1706 ] ROS Version: [3.4 ]  
 Status: open Target Release: Last Reviewed: 06/30/1986

-----  
 SMR Number: [1707 ] ROS Version: [3.4u1 ]  
 Keyword: [tape problem ]  
 Status: closed Target Release: ros3.4.u2 Last Reviewed: 06/30/1986  
 [When using the -c (create tape) option of ctcat:xistant or zero length ]  
 [if it is passed filenames that correspond to non-existent or zero length ]  
 [files, the tape that ctcat writes is bad. ]  
 Solution SMR Number: [1707 ]  
 Fix will be included in: ros3.4u2

Description:  
 Fixed bugs in /usr/src/cmd/ctcat/ctcat.c that caused it to write  
 bad tapes if given filenames that were non-existent or corresponded to  
 files that were zero in length. Now, ctcat checks before writing directory  
 on the tape to make sure all files are accessible and lets the user  
 know when it wasn't able to write a requested file.

-----  
 SMR Number: [1708 ] ROS Version: [3.4 ]

Keyword: [Source Release ]  
 Status: closed Target Release: ros3.4.u2 Last Reviewed: 07/07/1986  
 [Previously, only a CIO download file (/ros/bootcio) was released. ]  
 [At this time, all of the 8086 assembler source, and the source for ]  
 [some related utility programs is being released. ]  
 Solution SMR Number: [1708 ]  
 Fix will be included in: ros3.4.u2  
 Description:  
 The 8086 assembler is now resident on 'hood' so that the 'bootcio' file  
 can be created there.

-----  
 SMR Number: [1709 ] ROS Version: [3.4u1 ]  
 Keyword: [RF compiler test ]  
 Status: closed Target Release: ros3.4.u2 Last Reviewed: 07/07/1986  
 [Systest can now test the RF compiler. ]  
 Solution SMR Number: [1709 ]  
 Fix will be included in: ros3.4.u2  
 Description:  
 ffff.f file added to source area on 'hood'.

-----  
 SMR Number: [1710 ] ROS Version: [all ]  
 Keyword: [ndir.h ]  
 Status: closed Target Release: ros3.4.u2 Last Reviewed: 07/21/1986  
 [including /usr/include/ndir.h and /usr/include/sys/types.h ]  
 [results in "incompatible types" message. ]  
 Solution SMR Number: [1710 ]  
 Fix will be included in: ros3.4.u2  
 Description:  
 Changed /usr/src/include/s.ndir.h to conditionally include sys/types.h  
 instead of defining u\_short and u\_long.

-----  
 SMR Number: [1711 ] ROS Version: [3.3u3 ]  
 Program: [rp ] Version: [1.8 ]  
 Status: closed Target Release: rp2.0 Last Reviewed: 07/21/1986  
 [With declarations like: type eight\_bits=0..255; ]  
 [ var mem: packed array[1..100000] of eight\_bits; ]  
 [array mem takes full 400000 bytes of memory rather than 100000 that ]  
 [it needs. On the other hand, packed records are indeed packed: a ]  
 [declaration type eight\_bits=0..255; ]  
 [ four\_bytes=record b0,b1,b2,b3: eight\_bits; end; ]  
 [ var stuff: array[1..100000] ]  
 [each member of the array stuff occupies 4 bytes & the whole array occupies ]  
 [40000 bytes. Packed arrays of characters also work properly. This bug ]  
 [makes it very hard to share variables between pascal and c. However, even ]  
 [the waste of memory may be more than annoying if an array is large. Also, ]  
 [arrays declared in the main program are treated as static rather than ]  
 [global C-arrays: the space is allocated at compilation time rather than ]  
 [run time. They end up occupying too much disc sp ]  
 Solution SMR Number: [1711 ]  
 Fix will be included in: rp2.0

Description:  
 In rp 1.9 packed array of subrange will be packed to 8 or 16 bits if  
 possible. Rp 1.9 will also provide a means to allow variables declared in  
 the main program to be static or global, as the programmer wishes.

-----  
 SMR Number: [1712 ] ROS Version: [3.3u3 ]  
 Program: [rp ] Version: [1.8 ]  
 Status: closed Target Release: none Last Reviewed: 07/28/1986  
 [Pascal high level I/O functions write and read are too sensitive to the ]  
 [types of their arguments. ]  
 [1) Files that are acceptable to read/write have to be declared as in ]  
 [ 'f:Text;'. 'Text' supposedly means 'packed file of char'; however, when a ]  
 [file variable is declared as in 'fl:packed file of char;', rp does not ]  
 [accept statements like 'write(fl,...)'. 2) write does not accept as ]  
 [arguments character strings declared as 'packed array of char' if such a ]  
 [declaration occurs in a function or procedure rather than in main program. ]

[The problem appears to be related to the fact that variables declared in a ]  
 [procedure are automatic, while constants & variables declared in main pgm ]  
 [are static. These problems are only relevant to the high level I/O that ]  
 [uses read and/or write. Lower level I/O using constructions like ]  
 ['a:=f^get(f)' or 'f^:=a;put(f)' appear to work properly. ]

Solution SMR Number: [1712 ]

Fix will be included in:

Description:

1) I believe this is a user misunderstanding. Section 6.4.3.5 of the Pascal standard indicates that 'textfile' and 'packed file of char' are not equivalent. However 'write' does accept a file of char, given an expression of type char. 'Packed file of char' is not the same as 'file of packed array of char', so a packed array of char may not be written in a 'packed file of char'.

2) I could not duplicate this complaint. It seems to work fine for me.

SMR Number: [1713 ] ROS Version: [3.3u3 ]  
 Program: [rp ] Version: [1.8 ]

Status: closed Target Release: rp2.0 Last Reviewed: 07/21/1986

[File variables declared in pascal procedures or functions are incorrectly ]  
 [initialized, causing program to fail with data alignment violation. Pascal ]  
 [files are 20-byte records that should be aligned at word boundaries, but ]  
 [not necessarily double word boundaries. Consequently, the save space for ]  
 [all files in a procedure (pascal files always static) is allocated in one ]  
 [continuous block in data space. When the procedure is called, the content ]  
 [of this save space is copied into the procedure's frame. For each file or ]  
 [array of files rp issues a string of load-store command pairs. When the ]  
 [compiler thinks that the save area of a file is aligned at a double-word ]  
 [boundary, it tries to shorten the load-store chain by replacing it with a ]  
 [chain of double-word load-store commands (followed by a single load-store ]  
 [pair if necessary). Unfortunately, the compiler's idea of whether or not ]  
 [a particular file record has a double-aligned save area is often incorrect. ]  
 [See /usr/beth/exp/1713 for a continuation of this ]

Solution SMR Number: [1713 ]

Fix will be included in: rp1.9

Description:

Fixed in fixups.p/malignment at the textreloc subcase. Forced the compiler to regard this type of data item as having byte alignment.

SMR Number: [1714 ] ROS Version: [3.3u3 ]  
 Program: [rp ] Version: [1.8 ]

Status: closed Target Release: rp2.0 Last Reviewed: 07/21/1986

[Statements of the form ]  
 [ "integer" := round( "real valued expression" ) ]  
 [generate illegal and meaningless assembly code, causing the assembly ]  
 [stage of compilation to fail. The code produced by rp contained a line ]  
 [ dfixr r15,-20,r1 ]  
 [instead of what should have been something like: ]  
 [ dfixr r1,r6 ]  
 [ store r1,r15,-20 ]  
 [The problem occurs only when a rounded expression is immediately assigned ]  
 [rather than being part of a bigger expression. ]  
 [See /usr/beth/exp/1714 for a continuation of this report. ]

Solution SMR Number: [1714 ]

Fix will be included in: rp1.9

Description:

The fixr instruction had been omitted from the list of instructions which might need to be fixed up after code generation. The change is in fixups.p procedure fixmachops.

SMR Number: [1715 ] ROS Version: [3.4 ]  
 Keyword: [VMS bit functions ]

Status: closed Target Release: rf2.0 Last Reviewed: 07/21/1986

[Add the VMS bit functions to libF77.a as part of the VMS extension project. ]  
 [The files are bit.h, bitsIRTF.s, bitsR2V2.s, mvbits.c. ]

Solution SMR Number: [1715 ]

Fix will be included in: rf1.9

Description:

The files have been checked in.

SMR Number: [1716 ] ROS Version: [3.4 ]

Status: open Target Release: Last Reviewed: 07/21/1986

[Double-buffering on reads by tapedriver results in tape being incorrectly ]  
 [positioned after a read. Demonstrate by creating a file with fixed-length ]  
 [records of length=x, contents of record could contain string indicating ]  
 [record number. Issue command ]  
 [ dd if=/dev/rmt0 count=1 bs=x ]  
 [gets first record. Tape should be positioned at beginning of record 2. ]  
 [Another command as above returns record number 3! ]

SMR Number: [1717 ] ROS Version: [3.4 ]

Status: open Target Release: Last Reviewed: 07/21/1986

[flush(3f) is not documented, yet is present in the library. ]  
 [It is called from within ioinit.f. ]

Solution SMR Number: [1717 ]

Fix will be included in:

Description:

I have given Gordon Furbush the man page from the UCB 4.2 manual.

SMR Number: [1718 ] ROS Version: [3.4u1 ]

Status: open Target Release: Last Reviewed: 07/21/1986

[Check in new files from GreenHills 1.8 release, and integration with Bull ]  
 [in June, 1986. ]

Solution SMR Number: [1718 ]

Fix will be included in: version 1.9

Description:

Files are checked in.

SMR Number: [1719 ] ROS Version: [3.4u1 ]

Keyword: [VAX/VMS extensions ]

Status: closed Target Release: rf2.0 Last Reviewed: 07/21/1986

[Misc. changes to fortran i/o library for VAX/VMS extensions. ]

Solution SMR Number: [1719 ]

Fix will be included in: rf1.9

Description:

The makefile has been changed to allow VAX extension code to be compiled.

Bull fixes in two assembly code files.

Add new types for VAX extensions.

Modify open for consistency with previous rf, and f77.

Several changes from Bull for VAX extensions.

SMR Number: [1720 ] ROS Version: [3.4u1 ]

Program: [rc ] Version: [v2.0 (beta) ]

Keyword: [load from wrong byte]

Status: closed Target Release: rc2.0 Last Reviewed: 07/21/1986

[rc loads the wrong byte from the stack on the following example: ]

```
[main(
  ]
  [ { char c; unsigned short s = 10;
  ]
  [ { c = s;
  ]
  [ { func(&s, c);
  ]
  [ ]
  ]
  [ func(s,c)
  ]
  [ unsigned short *s; char c;
  ]
  [ {
  ]
  [ { if (c != *s) printf("bad\n");
  ]
  [ ]
  ]
```

Solution SMR Number: [1720 ]

Fix will be included in: rc 2.0

Description:

Another problem arising from the byte ordering differences between the

Ridge and VAX (the original code generator was a VAX code generator).

Fixed in procedure mov (nested in movemm), file codegen.p.

```

-----
SMR Number: [1721 ] ROS Version: [3.3 ]
Program: [rc ] Version: [1.8 ]
Status: closed Target Release: rc1.8d Last Reviewed: 07/21/1986
[here are the examples: ]
[double foo(x) | #include <stdio.h> ]
[double x; | extern double foo(); ]
[{| | main() ]
[{| | { ]
[float y; | | ]
[| y = x; | double in, out; ]
[return((double)y); | in = 1.0; ]
[{| | out = foo(in); ]
[{| | printf("in=%f, out=%f\n", in, out); ]
[{| | } ]
[{| | } ]
[The results of in and out do not match as they should. ]
Solution SMR Number: [1721 ]
Fix will be included in:
Description:
This is fixed in rc 1.8d.

```

```

-----
SMR Number: [1722 ] ROS Version: [3.3u5 ]
Status: open Target Release: Last Reviewed: 07/21/1986
[Example in /usr/beth/exp/1722.c prints 'worked' when run normally, ]
[but when run 'a.out > file' error message 14 is printed (bad address), ]
[when it should actually be error message 25 (not a typewriter). ]

```

```

-----
SMR Number: [1723 ] ROS Version: [3.3u3 ]
Program: [rf ] Version: [1.8d ]
Keyword: [char ]
Status: closed Target Release: rf2.0 Last Reviewed: 07/21/1986
[ character*1 var ]
[ do 1 i=65,85 ]
[ var=char(i) ]
[ print *,i,var ]
[ 1 continue ]
[ The upper case letters 'A' through 'U' should be returned in 'var' ]
[through execution of the loop. Instead, a 'null' is returned. Removing ]
[the 'i' from the print statement corrects the problem. Appears to have ]
[been fixed in version 2.0. This SMR logged for informational purposes. ]
Solution SMR Number: [1723 ]
Fix will be included in: rf2.0
Description:
This is fixed already in rf 2.0. Same problem as described in SMR #1720

```

```

-----
SMR Number: [1724 ] ROS Version: [3.4u1 ]
Program: [rccom ] Version: [2.0 (beta) ]
Keyword: [peephole optimizer ]
Status: closed Target Release: rc2.0 Last Reviewed: 07/28/1986
[The peephole optimizer optimizes out the loadh from a store/loadh sequence]
[[operands are equivalent). This shouldn't be done; the upper 16 bits may ]
[[be non-zero in the register which is stored, and will be zeroed on the ]
[[loadh. The test program: ]
[[ unsigned short us; int i; ]
[[ main() ]
[[ { ]
[[ us = -30; i = us; printf("i=%d\n", i); ]
[[ ] ]
Solution SMR Number: [1724 ]
Fix will be included in: rc 2.0
Description:
The peephole optimizer tried to optimize away the load from a store/load
sequence where the operands are identical, regardless of the size of the
load and store instructions (as long as the sizes are the same). I have
changed the peephole optimizer so that byte and halfword sequences will not
have this optimization applied to them. The functions loadMove and
redundantLoadOrStore have been modified.

```

```

-----
SMR Number: [1725 ] ROS Version: [3.4u1 ]
Program: [rccom ] Version: [2.0 (beta) ]
Keyword: [extra store / extv ]
Status: closed Target Release: rc2.0 Last Reviewed: 07/28/1986
[An extra store is generated in the following test program. The first store]
[stores the correct value, the second overwrites the correct value with a ]
[bad value. The test program: ]
[typedef struct { unsigned x1:8; unsigned x2:16; unsigned x3:8 } bits; ]
[ int x; ]
[ main() ]
[{| ]
[{| bits ioword; ]
[{| x = ioword.x2; ]
[{| ]
[{| ]
Solution SMR Number: [1725 ]
Fix will be included in: rc 2.0
Description:
The code generator routine mov did not realize that the extv and extzv
routines do the store into the destination, and did another store with a
bad machop. The extra store has been eliminated.

```

```

-----
SMR Number: [1726 ] ROS Version: [3.4u1 ]
Keyword: [open mode specifier ]
Status: closed Target Release: rf2.0 Last Reviewed: 07/28/1986
[The new fortran open mode specifier doesn't work. The compiler needs to ]
[call f_openx instead of f_open. f_open is left in the library for ]
[compatibility with f77 and code compiled with pre-v2.0 versions of rf. ]
Solution SMR Number: [1726 ]
Fix will be included in: rf v2.0
Description:
In rf, the call to f_open has been changed to f_openx to accomodate the
new mode specified. The entry point f_openx has been added to libi77.a

```

```

-----
SMR Number: [1727 ] ROS Version: [all ]
Keyword: [hpd ]
Status: closed Target Release: ros3.4u2 Last Reviewed: 07/28/1986
[When you issue the command 'whatis hpd', it gives you information ]
[about the 'hpd' command as expected. We don't support this command, ]
[though. 'whatis hpd' should produce verbage to that effect. ]
Solution SMR Number: [1727 ]
Fix will be included in: ros3.4.u2
Description:
Changed message to say that we don't support the 'hpd' command.

```

```

-----
SMR Number: [1728 ] ROS Version: [3.3u3 ]
Status: closed Target Release: Last Reviewed: 07/28/1986
[On page 23 of the csh section in the Programmer's Guide, the manual says ]
[that it's possible to put a '#' as the first character of a csh script ]
[so that it can be run from a Bourne sh as 'script' instead of ]
[ '/bin/csh script'. It doesn't work. ]
Solution SMR Number: [1728 ]
Fix will be included in:
Description:
Closed by smr 1047 (duplicate).

```

```

-----
SMR Number: [1729 ] ROS Version: [3.3u3 ]
Program: [rc ] Version: [1.8d ]
Status: open Target Release: Last Reviewed: 07/28/1986
[The following example should give 3 as the result, but instead gives 4: ]
[ main() ]
[{| ]
[{| integer i; ]
[{| i = 8; ]
[{| i /= 2.5; ]
[{| printf("i = %d\n", i); ]

```

```

]
-----
SMR Number: [1730 ] ROS Version: [none ]
Keyword: [new program ]
Status: closed Target Release: ros3.4u2 Last Reviewed: 07/28/1986
['talk' needs to be added to the system to distribute with ROS3.4.u2. ]
Solution SMR Number: [1730 ]
Fix will be included in: ros3.4.u2
Description:
Added the source for 'talk' to /usr/src/cmd/talk on 'hood'.
-----
SMR Number: [1732 ] ROS Version: [3.4 ]
Program: [dbx ] Version: [5.2 ]
Keyword: [print doubles ]
Status: open Target Release: Last Reviewed: 07/28/1986
[ real*8 var ]
[ var=1.23456789012 ]
[ print *,var ]
[dbx 'print var' returns 1.23457 ]
[print statement returns 1.2345678901200 ]
[All possible significant digits should be displayed by dbx. ]
-----
SMR Number: [1733 ] ROS Version: [3.4 ]
Program: [dbx ] Version: [5.2 ]
Keyword: [do-loop variables ]
Status: closed Target Release: rf2.0 Last Reviewed: 08/11/1986
[Do loop variables are turned into register variables by the rf compiler. ]
[This results in the user being unable to print, index into arrays with, ]
[or test the actual do-loop variable. ]
Solution SMR Number: [1733 ]
Fix will be included in: rf2.0
Description:
The rf compiler now does not create an alternate location for a do loop
variable if the -g flag is specified and optimization has not been
requested. This allows dbx to find the correct location of the do loop
variable, and print out the correct value.
-----
SMR Number: [1734 ] ROS Version: [3.4 ]
Program: [dbx ] Version: [5.2 ]
Keyword: [parameters ]
Status: open Target Release: Last Reviewed: 07/28/1986
[A program expecting "aaa!bbb!ccc" as a parameter (i.e. mail) can't ]
[be easily debugged with dbx. ]
[ex: ]
[ dbx mail ]
[ >run rclex!walt ]
[dbx will only pass the rclex to mail. ]
-----
SMR Number: [1735 ] ROS Version: [3.4u1 ]
Keyword: [output file name ]
Status: closed Target Release: 3.4.u2 Last Reviewed: 08/11/1986
[as -o 123456.o file.s ]
[If the output file name is 8 characters, the file gets created with junk ]
[characters on the end. ]
Solution SMR Number: [1735 ]
Fix will be included in:
Description:
A necessary null was not being appended to the end of the file name. Also
made changes to accomidate the Bull Pascal changes for strings and modules.
-----
SMR Number: [1736 ] ROS Version: [3.3u5 ]
Keyword: [lockf ]
Status: open Target Release: ros3.5 Last Reviewed: 08/11/1986
[The value returned upon successful completion (for fcntl) is vague, ]
[and since lockf is done by fcntl, the same holds true for it. Either ]
[fix fcntl to return something meaningful, or change the documentation ]

```

```

[for flock to say that on successful completion, something other than ]
[0 or -1 will be returned. ]
-----
SMR Number: [1737 ] ROS Version: [3.3u3 ]
Status: closed Target Release: ros3.4.u2 Last Reviewed: 08/18/1986
[There's a man page for setworigin, but the program itself wasn't ]
[included in the release (3.3 or 3.4). ]
Solution SMR Number: [1737 ]
Fix will be included in: ros3.4.u2
Description:
Setworigin should be linked to /usr/bin/setwsize. This was not happening.
Changed /usr/src/sys/display/windows/makefile to do the link.
-----
SMR Number: [1738 ] ROS Version: [3.4u1 ]
Keyword: [nbparr ]
Status: closed Target Release: rf2.0 Last Reviewed: 08/18/1986
[Add code for the nbpar function for FORTRAN. This also requires changes ]
[to the C and Pascal front ends. ]
Solution SMR Number: [1738 ]
Fix will be included in: rf2.0
Description:
The code (from Bull) to make the nbpar function work has been added to the
compilers.
-----
SMR Number: [1739 ] ROS Version: [3.4 ]
Status: closed Target Release: Last Reviewed: 08/19/1986
[This command: ]
[ echo hello | tr "[a-z] [A-Z]" ]
[should produce 'HELLO', but tr doesn't recognize the range. ]
Solution SMR Number: [1739 ]
Fix will be included in:
Description:
Actually, this was a problem with the documentation. An example
like this was given: tr "[a-z] [A-Z]", but the syntax really needs
to be: "[a-z]" "[A-Z]". The tr(1) man page should be fixed.
-----
SMR Number: [1740 ] ROS Version: [3.4u1 ]
Keyword: [optimizer bug ]
Status: closed Target Release: rc2.0 Last Reviewed: 08/25/1986
[The optimizer pulls an incorrect base address out of a loop. Example: ]
[ char str[10]; ]
[ p() { ]
[ int i, j; ]
[ i = 3; j = 0; ]
[ i += 2; ]
[ while (j < 8) { ]
[ str[i] = 'b'; ]
[ j++; i++; ]
[ } ]
[ ]
[ (Bug filed for rc, but is also in rp and and rf). ]
Solution SMR Number: [1740 ]
Fix will be included in: rc2.0
Description:
The procedure findinitial in indepopt.p finds the initial value of a
variable. The value does not get invalidated if an operation is found
which would modify the initial value. I have added code to invalidate
the initial value when a modification of that value is found.
-----
SMR Number: [1741 ] ROS Version: [3.4u2 ]
Keyword: [sulog ]
Status: closed Target Release: Last Reviewed: 08/25/1986
[With the distribution of the backup scripts in /usr/adm/examples. the ]
[directory /usr/adm is created. This causes 'su' to create a file ]
[named 'sulog' which keeps a log of each time someone uses 'su'. This ]
[file is ever-increasing in length and could be annoying. ]

```

```

[The scripts should not be distributed in this directory (perhaps
[they should be moved to somewhere in /usr/man) which would cause
[the /usr/adm directory not to be made.
Solution SMR Number: [1741 ]
Fix will be included in:
Description:
No action will be taken. A note will be put into the SRD.

```

```

-----
SMR Number: [1742 ] ROS Version: [3.4u1 ]
Keyword: [extended address ]
Status: closed Target Release: ros3.4.u2 Last Reviewed: 08/25/1986
[The current 1/2" tapedriver does not work with the extended address
[tape board.
Solution SMR Number: [1742 ]
Fix will be included in: ros3.4.u2
Description:

```

I changed the driver so on each write, it calculates a full 32 bit DMA address and byte count (i.e., it does not use DMAaddrMask or ByteCount Mask as in previous versions). On each read, it uses old masks for DMA address and byte count. In this way, the driver now works with the new board but does not take advantage of the new functionality that the hardware offers.

```

-----
SMR Number: [1743 ] ROS Version: [all ]
Keyword: [wc ]
Status: open Target Release: Last Reviewed: 08/25/1986
[For very large files ( >= 10Mb), wc output does not have spaces
[between words and characters.

```

```

-----
SMR Number: [1744 ] ROS Version: [3.4u1 ]
Keyword: [entry / common ]
Status: closed Target Release: rf2.0 Last Reviewed: 08/25/1986
[the following code causes the fortran compiler to complain. it shouldn't.
[
[ subroutine sub
[ integer a0(n)
[ common / xxx / n
[c
[ entry cindi(a0)
[ return
[ end
Solution SMR Number: [1744 ]
Fix will be included in: rf2.0
Description:

```

The fix from GreenHills is in forpro.p/fixbound. The following change was made.

```

if bound^.objcase = variable then
gets changed to
if (bound^.objcase = variable) and (bound^.paramid = nil) then

```

```

-----
SMR Number: [1745 ] ROS Version: [3.4u1 ]
Keyword: [-m option ]
Status: open Target Release: Last Reviewed: 08/25/1986
[The -m (mapping) option of tset doesn't seem to work.

```

```

-----
SMR Number: [1746 ] ROS Version: [3.4u2 ]
Keyword: [volmgr-RemoveFreeBlk]
Status: open Target Release: Last Reviewed: 09/02/1986
[Volmgr-RemoveFreeBlock error , ChunkLen <> TempLength
[Flip Load enable to continue..
[Error occurs when system automatically switches file allocation algorithms
[at 60% full disc or avg. chunk length of 128k. Switch involves changing
[from linear search to maintaining a linked FreeList at this point. When
[system crosses this boundary multiple times, the FreeList becomes
[inaccurate, occasionally producing the above error message.

```

```

-----
SMR Number: [1747 ] ROS Version: [3.4u2 ]

```

```

Program: [rf ] Version: [v2.0 ]
Keyword: [rf library search ]
Status: closed Target Release: rf2.1 Last Reviewed: 09/02/1986
[The f77 compiler, though not recognizing libraries of the form 'SIMLIB',
[passes the names on to 'ld', which then searches them as libraries.
[The 'rf' driver program spits out an error message and does not pass
[the names on to 'ld'.
Solution SMR Number: [1747 ]
Fix will be included in: rf2.1
Description:
rc, rf and rp will now pass unknown names to the 'ld'. This is the way
both Sys V and UCB cc and f77 commands work.

```

```

-----
SMR Number: [1748 ] ROS Version: [all ]
Program: [whet ] Version: [1.1 ]
Keyword: [systest ]
Status: closed Target Release: ros3.5 Last Reviewed: 09/02/1986
[The whetstone benchmark has been added to the systest directory for
[more system testing.
Solution SMR Number: [1748 ]
Fix will be included in: ros3.5
Description:
added whetstone.f to hood:/usr/src/sys/diag/sys/src.

```

```

-----
SMR Number: [1749 ] ROS Version: [all ]
Program: [dwhet ] Version: [1.1 ]
Keyword: [systest ]
Status: closed Target Release: ros3.5 Last Reviewed: 09/02/1986
[Added dwhetstone to systest directory for additional system testing.
Solution SMR Number: [1749 ]
Fix will be included in: ros3.5
Description:
added whetstone.f to hood:/usr/src/sys/diag/test/sys/src.

```

```

-----
SMR Number: [1750 ] ROS Version: [all ]
Program: [runtime ] Version: [1.1 ]
Keyword: [systest ]
Status: closed Target Release: ros3.5 Last Reviewed: 09/02/1986
[Subroutine needed for compiling whetstone.f and dwhetstone.f .
Solution SMR Number: [1750 ]
Fix will be included in: ros3.5
Description:
added runtime.o subroutine to hood:/usr/src/sys/diag/test/sys/src.

```

```

-----
SMR Number: [1751 ] ROS Version: [3.4u2 ]
Program: [as ] Version: [1.3 ]
Keyword: [bad list file ]
Status: open Target Release: Last Reviewed: 09/02/1986
[as -l file.l file.s
[produces list file named 'fi'.
Solution SMR Number: [1751 ]
Fix will be included in:
Description:

```

The list file was of a type 'string', which has a length field, and a ptr to a packed array of char field. The packed array of char is dynamically allocated. This packed array of char is declared with a length of [1..1] for convience (this is the historical Ridge string type in Pascal). When rewrite is called with this packed array of char, the compiler passes along the length of the packed array, which it determines to be 1 (from [1..1]). The rewrite routine uses this length, plus 1 for a null, when opening the file. So, the file was truncated to 2 chars. Now a temp packed array of char with a reasonable length is used for the rewrite call.

```

-----
SMR Number: [1752 ] ROS Version: [3.4u2 ]
Keyword: [new programs ]
Status: closed Target Release: ros3.5 Last Reviewed: 09/02/1986

```

[Added /etc/shutdown and /etc/halt for ROS 3.5. ]  
 Solution SMR Number: [1752 ]  
 Fix will be included in: ros3.5 ]  
 Description:

Added source files for /etc/shutdown and /etc/halt. They live in  
 hood:/usr/src/cmd/shutdown.

-----  
 SMR Number: [1753 ] ROS Version: [3.4u2 ]  
 Keyword: [modem support ]  
 Status: open Target Release: Last Reviewed: 09/12/1986 ]  
 [The fact that modems cannot be used as both in-coming and outgoing needs ]  
 [to be documented and explained. ]

-----  
 SMR Number: [1754 ] ROS Version: [3.4u2 ]  
 Keyword: [tvi925 missing ]  
 Status: open Target Release: Last Reviewed: 09/12/1986 ]  
 [On pinecrest after login the terminal prompts with a default term type ]  
 [and if needed expects the new term type to be entered. If tvi925 is ]  
 [entered the response is terminal type unknown. ]

-----  
 SMR Number: [1755 ] ROS Version: [3.4u2 ]  
 Keyword: [pipes w/ large bufs ]  
 Status: open Target Release: Last Reviewed: 09/12/1986 ]  
 [The following command produces corrupt cpio archives: ]  
 [find "something" -print|cpio -ov|dd bs=5120 of=file ]  
 [Reading "file" back with the following command gets "Out of Phase" ]  
 [dd if=file bs=5120|cpio -itvb ]  
 ["something" should be > than n\*5120 (n >= 2 ?). During the initial file ]  
 [write, dd indicates that more than 1 partial records are created. ]  
 [The above commands have been verified to work on pure Sys V systems. ]  
 [This limits the functionality of remote backups, i.e. ]  
 [find . -print|cpio -ov|rsh remote dd bs=5120 of=/dev/rmt0 ]  
 [produces corrupt backup tapes. 512 bytes is too ]

-----  
 SMR Number: [1756 ] ROS Version: [3.4u2 ]  
 Keyword: [driver hangs ]  
 Status: closed Target Release: ros3.4.u3 Last Reviewed: 12/15/1986 ]  
 [When I issue the command 'mt -f /dev/rmt1 weof' the whole system ]  
 [hangs. Pushing switch 0 displayed some output that looked like ]  
 [the tapedriver had hung. The system was alright after reboot. ]  
 [Note: using '/dev/rmt0' instead of '/dev/rmt1' works fine! ]  
 Solution SMR Number: [1756 ]

Fix will be included in: ros3.4.u3

Description:

Fixed bug in /usr/src/sys/drivers/tapedriver/tapedriver.c and  
 /usr/src/cmd/mt/mt.c.

-----  
 SMR Number: [1757 ] ROS Version: [3.4 ]  
 Keyword: [tapedrive ]  
 Status: closed Target Release: ros3.4.u3 Last Reviewed: 12/15/1986 ]  
 [When trying to do a 'weof'/'eof' command to the 1/2" raw tape device, ]  
 [the 'mt' complains that it is an 'inappropriate command'. Also, the ]  
 [word 'inappropriate' is misspelled in the error message that is displayed. ]  
 Solution SMR Number: [1757 ]

Fix will be included in: ros3.4.u3

Description:

Fixed bug in /usr/src/cmd/mt/mt.c

-----  
 SMR Number: [1758 ] ROS Version: [all ]  
 Program: [rf ] Version: [2.0 ]  
 Keyword: [non-ascii chars ]  
 Status: closed Target Release: rf2.1 Last Reviewed: 09/12/1986 ]  
 [(from Nissho Electronics) ]  
 [Non-ascii characters are not allowed in character strings. F77 does allow ]  
 [non-ascii characters in character strings. ]  
 Solution SMR Number: [1758 ]

Fix will be included in: rf2.1

Description:

Rf now allows non-ascii characters within character strings.

-----  
 SMR Number: [1759 ] ROS Version: [all ]  
 Program: [rc ] Version: [2.0 ]  
 Keyword: [commas in arrays ]  
 Status: open Target Release: Last Reviewed: 09/12/1986 ]  
 [Commas in array initializations are optional according to rc, but ]  
 [shouldn't really be.... lint complains. ]

-----  
 SMR Number: [1760 ] ROS Version: [3.3 ]  
 Keyword: [gin mode ]  
 Status: open Target Release: Last Reviewed: 09/12/1986 ]  
 [In order to fully emulate a TEK terminal, it should be possible to have ]  
 [the 'gin mode' readout of cursor position append a return (or line feed) ]  
 [to the five character string. This would permit an easy fortran read ]  
 [of the five characters without changing stty, etc. It could be invoked ]  
 [as an option of settek or an escape sequence. ]

-----  
 SMR Number: [1761 ] ROS Version: [all ]  
 Keyword: [alignment ]  
 Status: closed Target Release: ros3.5 Last Reviewed: 09/12/1986 ]  
 [When 'as' sees an align directive in the code section, it currently ]  
 [generates illegal instructions to pad to the alignment boundry. It should ]  
 [generate nop-type instructions instead. ]  
 Solution SMR Number: [1761 ]

Fix will be included in:

Description:

'as' now pads with 'move r15,r15' instructions while padding to the  
 requested alignment. The 'nop' instruction was not used because it is  
 commonly used by some people to trigger logical analyzer traces (or some  
 such thing).

-----  
 SMR Number: [1762 ] ROS Version: [all ]  
 Program: [tapedriver ] Version: [all ]  
 Keyword: [file marks ]  
 Status: closed Target Release: ros3.5 Last Reviewed: 12/01/1986 ]  
 [In a C program, read a tape, block by block and stop after reading the ]  
 [last block of the file. Then have the program skip forward one file ]  
 [mark, you are now positioned at the beginning of the third file of ]  
 [the tape instead of the second. ]  
 [This has to be done from a program. Simulating with 'dd' does not ]  
 [reproduce the problem. ]  
 Solution SMR Number: [1762 ]

Fix will be included in: ros3.5

Description:

Added necessary code to /usr/src/sys/drivers/tapedriver/tapedriver.c so  
 that file mark processing would be correct in this instance.

-----  
 SMR Number: [1763 ] ROS Version: [3.4 ]  
 Program: [config ] Version: [u2 ]  
 Keyword: [download ]  
 Status: closed Target Release: ros3.5 Last Reviewed: 10/07/1986 ]  
 [The proms on an enet only board are not compatible with the downloaded ]  
 [file from ridge. The error generated is seen when using ciodiag and trying ]  
 [to test enet from shared memory. The download is not needed so the easy ]  
 [fix is to remove the download line for enet boards from the config file. ]  
 Solution SMR Number: [1763 ]

Fix will be included in: ros3.5

Description:

Removed line in /usr/src/etc/config which caused download for enet only  
 boards.

-----  
 SMR Number: [1764 ] ROS Version: [3.4u2 ]  
 Status: open Target Release: Last Reviewed: 09/22/1986 ]

```
[From your local system (L) rlogin to a remote system (R1) which has its ]
[pseudo ttys controlled by the ciotty driver rather than the fdlp driver. ]
[From there (R1), telnet to another remote system (R2). Telnet prints the ]
[/etc/issue file, and a login prompt, and that is all you ever see on your ]
[terminal again. If the middle system (R1) has an fdlp controlling its ]
[pseudo ttys, then this works fine. ]
[Note: typing at your terminal results in the rlogind on R1 accumulating ]
[run time, but the telnet process also on R1 does not accumulate run time. ]
```

```
-----
SMR Number: [1765 ] ROS Version: [none ]
Program: [libU77.a ] Version: [1.31 ]
Status: closed Target Release: rf2.1 Last Reviewed: 09/22/1986
[libU77.a was built with the wrong "CFLAGS" definition for the v2.0 compiler]
[release. "CFLAGS" for libU77 should match "CFLAGS" for libI77. ]
Solution SMR Number: [1765 ]
Fix will be included in:
Description:
```

In libU77.mk, "CFLAGS" has been changed to match "CFLAGS" in libI77.mk.

```
-----
SMR Number: [1766 ] ROS Version: [3.3 ]
Keyword: [setvbuf() ]
Status: open Target Release: Last Reviewed: 10/07/1986
[The setvbuf() function of stdio doesn't work. In particular, the by-line ]
[buffering mode cannot be turned on. The bug is in the code distributed ]
[by AT&T in System V release 2. It has been fixed in release 3. ]
```

```
-----
SMR Number: [1767 ] ROS Version: [3.4u2 ]
Keyword: [sendmail.cf ]
Status: open Target Release: Last Reviewed: 10/07/1986
[Local mail will not work on a freshly formatted system because the ]
[installation procedure puts the sendmail program in the /usr/lib ]
[directory. The user must either fully install sendmail or move the ]
[sendmail program to down to the /usr/lib/sendmail.info directory. ]
Solution:
[The lack of a sendmail.cf file is causing the problem. ]
```

```
-----
SMR Number: [1768 ] ROS Version: [none ]
Program: [rf ] Version: [2.0 ]
Keyword: [destruction ]
Status: closed Target Release: rf2.1 Last Reviewed: 10/07/1986
[rf may destroy the source file when given the -L, -H or -n option. ]
Solution SMR Number: [1768 ]
Fix will be included in: rf2.1
Description:
```

When the -L, -H or -n options are seen, getfname did not do the necessary rchar(c) to move past the current character.

```
-----
SMR Number: [1769 ] ROS Version: [3.4 ]
Program: [tar ] Version: [1.28 ]
Status: open Target Release: Last Reviewed: 10/07/1986
[On one system without any kind of tape device configured, tar behaves ]
[strangely. Given the command 'tar cvf outfile file1 file2', tar replies, ]
['/dev/nct0: No such file or directory'. On the other system the customer ]
[has, this command works fine (and I cannot reproduce the error message ]
[here). The system that it doesn't work on has a very full disk and has ]
[a lot of oddities that cannot be explained so far. The particular system ]
[has no /dev/rtape defined, and in fact, nothing in /dev that concerns ]
[tapes. The customer makes the tar file on this system and then uses the ]
[tape drive on the other system. ]
```

```
-----
SMR Number: [1770 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 10/07/1986
[Our mknd(1) man page wasn't updated when we mknd became capable ]
[of making fifo's. Fifo's are documented in the SysV mknd(1) man ]
[page, so we just need to pull it from there. May need to check ]
[mkndo(2) as well. ]
```

```
-----
SMR Number: [1771 ] ROS Version: [none ]
Program: [rp ] Version: [v2.0 ]
Keyword: [uplevel reference ]
Status: closed Target Release: rp2.1 Last Reviewed: 10/13/1986
[An uplevel reference to a character parameter generates a load/store to the]
[wrong address on the stack from 2 or more nesting levels down. Example: ]
[program p; ]
[var c: char; ]
[ procedure pl(c1: char); ]
[ procedure p2; begin c := c1; end; ]
[ begin p2; end; ]
[begin ]
[ c := 'X'; pl('a'); if c <> 'a' then writeln('bad'); ]
[end. ]
Solution SMR Number: [1771 ]
Fix will be included in: v2.1
```

Description:

The extra 3 byte offset does not get added to the source field because the compiler can't recognize this as a parameter reference, due to the use of a register other than r14/r15 as the base register. Code has been added to fixmachops to recognize when a nested procedure loads a stack frame pointer from an uplevel procedure, and when this register is used as a base register in a load/store of a char/halfword parameter to add the necessary offset in.

```
-----
SMR Number: [1772 ] ROS Version: [3.4u2 ]
Status: closed Target Release: ros3.5 Last Reviewed: 10/13/1986
[Ifet needs to be modified to run on all Ridge models. ]
Solution SMR Number: [1772 ]
Fix will be included in: ROS 3.5
Description:
```

Changed release date and way in which IFET use to determine the machine model in feature bits.

```
-----
SMR Number: [1773 ] ROS Version: [3.4u2 ]
Status: closed Target Release: ros3.5 Last Reviewed: 10/13/1986
[Realdiaig needs to run on all Ridge models, (hardware independent). ]
Solution SMR Number: [1773 ]
Fix will be included in: 3.5
Description:
```

Modified Realdiaig to run on all Ridge models. Removed files realasm.s and drealm.s. Converted everything into "C". Wrote new files "test\_case.", which include all test cases used by realdiaig, and "realasm.s", which contains all assembly routines call by realdiaig.c. All error reports are passed to stderr.

```
-----
SMR Number: [1774 ] ROS Version: [3.5A ]
Program: [xsys ] Version: [1.1 ]
Keyword: [test ]
Status: closed Target Release: ros3.5 Last Reviewed: 10/20/1986
[This program will print out CPU type, machineID, and size of memory of ]
[system. ]
```

```
-----
SMR Number: [1779 ] ROS Version: [3.4 ]
Program: [rc ] Version: [2.0 ]
Status: closed Target Release: rc2.1 Last Reviewed: 10/27/1986
[When running only the C preprocessor, the results come out fine to ]
[standard out, but at the end a bunch of garbage is also spit out. ]
[(That's the -E option) ]
Solution SMR Number: [1779 ]
Fix will be included in: rc2.1
```

Description:

In procedure lcomm\_cleanup, don't call combine files if we aren't producing an assembly file. This was causing a nil file pointer to be dereferenced.

```

SMR Number: [1781 ] ROS Version: [3.4u2 ]
Program: [rf ] Version: [2.0 ]
Keyword: [secnds function ]
Status: open Target Release: Last Reviewed: 10/20/1986
[The secnds function as documented on page 27 of the Sept 9 edition of
[the "Fortran Compiler Enhancements" document is missing from the libraries.]
Solution SMR Number: [1781 ]
Fix will be included in: rf2.1
Description:
secnds.f has been added to libU77.a

```

```

SMR Number: [1782 ] ROS Version: [3.4u2 ]
Keyword: [telnet ]
Status: closed Target Release: Last Reviewed: 10/27/1986
[Logging in on a pc emulator terminal and then trying to use telnet doesn't ]
[work; it just hangs at the login prompt. This also happens when already ]
[telnet'ed to one system and attempting to telnet to another system. ]
Solution SMR Number: [1782 ]
Fix will be included in:
Description:
Found out this is actually a duplicate of 1764.

```

```

SMR Number: [1783 ] ROS Version: [3.4u2 ]
Keyword: [stty echol ]
Status: open Target Release: Last Reviewed: 10/27/1986
[When using telnet or rlogin from a cio-based machine, stty echol ]
[is set, and backspace in vi does not work. ]

```

```

SMR Number: [1784 ] ROS Version: [3.4u2 ]
Keyword: [query screen color ]
Status: open Target Release: Last Reviewed: 10/27/1986
[Customer would like the ability to query the display driver to determine ]
[which color (white chars on black or inverse) programatically. ]
[This capability should also be provided by the invert program. ]

```

```

SMR Number: [1785 ] ROS Version: [none ]
Program: [rc ] Version: [2.0 ]
Keyword: [signed chars ]
Status: closed Target Release: rc2.1 Last Reviewed: 10/27/1986
[In the following example, the 32 bit int 'i' gets signed extended as a byte]
[quantity for the comparison with 0. The expression should be evaluated as]
[an int expression. This must be compiled with signed chars as default. ]
[main() ]
[ { ]
[ char c; ]
[ int i = 1000; ]
[ c = (i > 0); ]
[ if (c) ]
[ printf("pass\n"); ]
[ else ]
[ printf("fail\n"); ]
[ } ]
Solution SMR Number: [1785 ]
Fix will be included in: rc2.1
Description:
The variable 'c', although being a char, was a register variable (32 bits).
The compiler optimized the evaluation of the expression by evaluating
directly into the result register. The code generator tried to make all
data going into this register conform to the 'signed 8 bit quantity in a
32 bit register' description of 'c', so it did a 'seb' on 'i'.

```

```

SMR Number: [1788 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/03/1986
[When a user name 8 characters or greater is logged in from a remote system,]
[the user command garbles the name, such as this: ]
[% who ]

```

```

[ beth tty0 ]
[ kochanek ttypl (crater) ]
[ % users ]
[ beth kochaneka@crater ]
[A character is appended before the @ sign. ]

```

```

SMR Number: [1789 ] ROS Version: [3.4 ]
Status: closed Target Release: ros3.5 Last Reviewed: 11/03/1986
[On occasion a mail message comes over ethernet partway, and then a line ]
[is repeated until the system crashes with disk i/o error because the ]
[df* file associated with the bad mail has expanded to fill the disk. ]
[(System running ROS 3.4.u1 and enet 1.5) ]
Solution SMR Number: [1789 ]
Fix will be included in:
Description:
Modified code to read incoming message such that it will terminate reading
of the message when it gets an error. It used to check for only feof(),
but now it checks for ferror() as well on the file descriptor for the
incoming message.
<collect.c>

```

```

SMR Number: [1791 ] ROS Version: [3.4u2 ]
Program: [rf ] Version: [2.0A ]
Status: closed Target Release: rf2.1 Last Reviewed: 11/03/1986
[Run this test and you will see no data in the resulting output file: ]
[ integer*4 ret ]
[ character*1 data ]
[ data='A' ]
[ open(10,file='output',status='new') ]
[ do 100 i=1,10 ]
[ ret=fputc(10,data) ]
[100 continue ]
[ close(10) ]
[ end ]
Solution SMR Number: [1791 ]
Fix will be included in: rf2.1
Description:
libU77.a has been completely rebuild, solving this problem.

```

```

SMR Number: [1792 ] ROS Version: [3.4u2 ]
Program: [rf ] Version: [2.0A ]
Status: open Target Release: Last Reviewed: 11/03/1986
[The following example generates an I/O error when trying to write a ]
[floppy disc file: ]
[ open(10,file='/dev/f1/file',status='new') ]
[ write(10,("test of floppy write")) ]
[ close(10) ]
[ end ]

```

```

SMR Number: [1794 ] ROS Version: [all ]
Program: [rc,rf,rp ] Version: [2.0 ]
Keyword: [new program ]
Status: closed Target Release: rc,rf,rp2.1 Last Reviewed: 11/03/1986
[Need to add /usr/lib/peep to suite of programs shipped with the compilers. ]
Solution SMR Number: [1794 ]
Fix will be included in: rc,rf,rp2.1
Description:
Added the new peephole optimizer to the /usr/src/cmd/rtc area.

```

```

SMR Number: [1795 ] ROS Version: [3.3 ]
Status: closed Target Release: emacs1.1 Last Reviewed: 12/15/1986
[Emacs goes into debug with divide by zero at 19.2. ]
Solution SMR Number: [1795 ]
Fix will be included in: emacs1.1
Description:
Now the code ignores the SIGINTDIVZERO signal and it doesn't go into debug

```

any more. With ROS 3.4, the handling of this signal changed from being ignored by default to putting the process into debug. Changed /usr/src/cmd/emacs/src/e\_init.c.

```
-----
SMR Number: [1796 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 11/03/1986
[Sometimes when telneting to a vms system and then ftp'ing back to the ridge]
[the network server prints out a message about garbled packets. It works ]
[on other systems (to telnet to vms and then ftp back to itself), and ]
[sometimes works correctly on the ridge, but not always. ]
-----
```

```
SMR Number: [1798 ] ROS Version: [all ]
Status: open Target Release: Last Reviewed: 11/03/1986
[Customer would like either a command line option to turn verbose mode ]
[off, or change the default to be off, since there exists an option ]
[to turn it on. ]
-----
```

```
SMR Number: [1799 ] ROS Version: [all ]
Program: [rc,rf,rp ] Version: [2.0 ]
Keyword: [optimizations,bugfix]
Status: closed Target Release: rc,rf,rp2.1 Last Reviewed: 11/03/1986
[Add misc optimizations and bug fixes collected over the last couple of ]
[weeks. ]
Solution SMR Number: [1799 ]
Fix will be included in: rc,rf,rp 2.1
Description:
Done.
-----
```

```
SMR Number: [1800 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/03/1986
[Customer would like to be able to restart crashed device drivers (in ]
[particular, the tapedriver) without having to reboot. ]
-----
```

```
SMR Number: [1801 ] ROS Version: [3.5A ]
Program: [mail ] Version: [ ? ]
Keyword: [names ]
Status: open Target Release: Last Reviewed: 11/03/1986
[When a mail message is replied to, the new destination user names are ]
[set to the real-life name of the original sender. ]
[eg: ]
[ mail ]
[ ? r ]
[ <now the preformatted reply names contain the real-life name of ]
[ sender ]
-----
```

```
SMR Number: [1802 ] ROS Version: [none ]
Keyword: [compiler error ]
Status: closed Target Release: rc2.1 Last Reviewed: 11/10/1986
[rc gets a compiler error when compiling the following code: ]
[char rt(xp) ]
[short *xp; ]
[ ]
[ char buf[5]; ]
[ *xp=(short*)(buf +1); ]
[ ]
Solution SMR Number: [1802 ]
Fix will be included in: rc2.1
Description:
```

The compiler was calling extv with a dotmode machop as the destination. Extv generated a load into this destination, which caused the compiler error (compiler expected a register as the destination for the load). This fix was in codegen.p/movemm/mov. A secondary problem (when the above one was fixed) was the compiler was generating a load from "r15,-5", which would cause a data alignment violation. This was fixed in fixups.p/fixload.

```
-----
SMR Number: [1803 ] ROS Version: [all ]
Keyword: [examine page error ]
Status: open Target Release: Last Reviewed: 11/10/1986
[VMM: Cannot examine in-use page, error = messages appear sporadically ]
[on all types of Ridges, running all versions of ROS. The error number ]
[returned is either 15 (ErBadFile) or 16 (ErNoPage). The system then ]
[says "Flip load enable....". In some cases, it is possible to continue ]
[by doing this. In most cases, it won't. ]
-----
```

```
SMR Number: [1805 ] ROS Version: [none ]
Keyword: [nint ]
Status: closed Target Release: rf2.1 Last Reviewed: 11/10/1986
[Create single precision versions of the fortran nint intrinsic functions. ]
Solution SMR Number: [1805 ]
Fix will be included in: rf2.1
Description:
Rf now uses the single precision nint functions whenever possible. Also,
s_modf, s_floor and s_cell single precision functions were added to libm.a.
-----
```

```
SMR Number: [1806 ] ROS Version: [3.4u2 ]
Program: [xsys.h ] Version: [1.0 ]
Keyword: [systest ]
Status: Target Release: Last Reviewed:
[General routines for getting system information about system configuration ]
[(i.e. type of cpu ,memsize, and machine id). ]
-----
```

```
SMR Number: [1807 ] ROS Version: [all ]
Status: closed Target Release: Last Reviewed: 11/10/1986
[The -n option of echo, which is supposed to omits trailing newline ]
[character, doesn't work with Bourne shell. The '-n' is echoed. ]
Solution SMR Number: [1807 ]
Fix will be included in:
Description:
Not a problem.
-----
```

```
SMR Number: [1809 ] ROS Version: [none ]
Keyword: [complex assignment ]
Status: closed Target Release: rf2.1 Last Reviewed: 11/10/1986
[User has test program that shows failure of an assignment of an element of ]
[a three dimensional double complex array to a six dimensional double ]
[complex array. Test in in muir:/usr/tst/f/reed/SMR.1809. ]
Solution SMR Number: [1809 ]
Fix will be included in: rf2.1
Description:
Change peep.p/reduce to look for machop mode = dotmode, with bitoffset=0
and byteoffset=0. Reduce to the basevar.
-----
```

```
SMR Number: [1810 ] ROS Version: [none ]
Program: [rf ] Version: [2.0 ]
Keyword: [initializers ]
Status: open Target Release: Last Reviewed: 11/17/1986
[problems with fortran octal and binary initializers. examples: ]
[ character c1,c2 ]
[ data c1/o'141' / ]
[ data c2/b'01000001' / ]
[ end ]
[c compiles but prints incorrect values ]
[ character*1 (2) ]
[ data c / o'141', o'142' / ]
[ print*,c ]
[ end ]
-----
```

```
SMR Number: [1811 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[If there are a large number of routes defined, netstat -r will not ]
-----
```

```
[display all of them, and route -f will not flush all of them. ]
-----
SMR Number: [1812 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[On a system that has been up for 50-60 days, anything that reports ]
[times (uptime, runtime, time(2), etc) reports times approximately ]
[4000 times too small when running a Bourne shell. Times seem to ]
[be reported correctly for cshell. ]
-----
SMR Number: [1813 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[I haven't quite had a chance to verify this yet, but a customer claims ]
[that when you're connected with kermit, if your finger slips and hits ]
[the del key, that something happens to the system which requires a ]
[reboot. ]
-----
SMR Number: [1814 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[When an ftp user logs in, the information is recorded in /etc/wtmp, ]
[but if you do a 'last ftp' it reports that the last ftp user is ]
[still logged in, even if that person had already ended the ftp session. ]
-----
SMR Number: [1815 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[The existence of an /etc/nologin file does not keep ftp users from ]
[logging in. It does work for rlogin and telnet, but not for ftp. ]
-----
SMR Number: [1816 ] ROS Version: [all ]
Status: closed Target Release: enet1.6 Last Reviewed: 11/17/1986
[ns periodically prints out an error message on the console: ]
[ ns: m_get: buffer usage over 200 ]
[The customer wondered if this was cause for concern. ]
Solution SMR Number: [1816 ]
Fix will be included in:
Description:
Deleted error message; changed buffer allocation scheme to take command
line parameters for number of mbufs and number of big bufs to allocate;
deleted the scheme of allocating up to 3 additional chunks of buffers when
we run out. The user can use 'netstat -m' to determine what his buffer
utilization is, and base his buffer allocation on that. As in earlier
releases, if ns runs out of mbufs or big bufs it will panic, and try to
go into debug.
</usr/4.2/include/sys/mbuf.h, /usr/src/cmd/netstat/mbuf.c>
<ns.c, uipc_mbuf.c, syscall.c>
-----
SMR Number: [1817 ] ROS Version: [3.4u2 ]
Keyword: [second tapedriver ]
Status: closed Target Release: ros3.4.u3 Last Reviewed: 12/15/1986
[Using mt to rewind the first tape drive connected to the second tape ]
[board causes the system to hang. The not-paused and kernel leds are on. ]
[You can not login to another port. The system must be rebooted. ]
[ mknod /dev/rtm00 c 9 133 /* make first node for first drive ]
[ second controller */ ]
[ mt -f /dev/rmt00 rew /* try to rewind drive */ ]
Solution SMR Number: [1817 ]
Fix will be included in: ros3.4.u3
Description:
Found and fixed a bug in the tapedriver where it would loop forever if
it received a bogus command. It turned out that the 'mt' command was
sending the 1/2" driver a command for the cartridge tape. Fixed
the bug in /usr/src/sys/drivers/tapedriver/tapedriver.c.
-----
SMR Number: [1818 ] ROS Version: [none ]
Program: [rc ] Version: [2.0 ]
Keyword: [data alignment error]
Status: closed Target Release: rc2.1 Last Reviewed: 11/17/1986
```

```
[Rc generates a load from an odd word address. In this case it can tell at]
[compile time that the address is an odd word address and should try to ]
[replace the load with two single word loads. Example: ]
[part32() ]
[ [ ]
[ [ double d1=0.0, d2=0.0, d3=0.0, d4=0.0, d5=0.0; ]
[ [ int l[2]; float f; double d; ]
[ [ l[0] = 1; f = *(float *)l; l[0] = 0; l[1] = 1; d = *(double *)l; ]
[ [ {int i; for(i=0; i<10; i++) d1 += d2 += d3 += d4 += d5; } ]
[ [ dummy_fun(d, &f, d1, d2, d3,d4, d5); ]
[ ]
Solution SMR Number: [1818 ]
Fix will be included in: rc2.1
Description:
In file fixups.p, procedure fixload do the replacement of the double word
load from the odd word address with two single word loads.
-----
SMR Number: [1819 ] ROS Version: [3.3 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[If a window is named 'shell1' and the command 'settitle ""' is given, ]
[when the window is moved, the old 'shell1' title remains on the ]
[screen. ]
-----
SMR Number: [1820 ] ROS Version: [all ]
Keyword: [log file ]
Status: open Target Release: Last Reviewed: 11/17/1986
[The sendmail documentation describes an option to log transactions ]
[and errors. Please implement this feature. ]
Analysis:
[4.2 BSD does support this, so the original code is in our sources. However]
[it needs a "-DLOG" during the compilation of the sources. We have not ]
[attempted to compile the code. It requires the libc routine syslog(3) ]
[which we seem to release. It also requires the syslog(8) daemon, which we ]
[do not release, as well as an entry in either /etc/services or ]
[/etc/protocols. It seems to be able to consume a lot of cpu time and disc ]
[space (not necessarily on the local system), for some amount of logging ]
[which may be affected by numerous compile time constants. (Note that even ]
[to log on the local host, it opens a socket to 'localhost', so it is going ]
[through ns to get to disc!!) ]
-----
SMR Number: [1824 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[The following command generates an I/O error: ]
[ cat /bin/cat | tee tmp | dd bs=512 of=/dev/nct0 ]
[If a text file is substituted for /bin/cat, it works, or if ]
[obs=512 is used instead of bs=512, and finally, this command ]
[(the way it is written above) works for mag tape. ]
-----
SMR Number: [1825 ] ROS Version: [3.4 ]
Program: [getty ] Version: [1.29 ]
Status: open Target Release: Last Reviewed: 11/17/1986
[On a headwall with a Wyse 85 terminal, when the terminal is turned ]
[off and on, getty does not correctly recalculate the baud rate and ]
[the terminal hangs. Killing the getty (with -9) corrects the problem. ]
-----
SMR Number: [1826 ] ROS Version: [3.4 ]
Keyword: [doprint ]
Status: closed Target Release: ros3.5 Last Reviewed: 11/17/1986
[Speed up output by special casing a few popular formats in doprint. ]
Solution SMR Number: [1826 ]
Fix will be included in: ROS 3.5
Description:
Doprint now processes %d, %c, %s and text much faster than before.
The coding was done by Mike Dolan, I just checked the file in.
-----
SMR Number: [1827 ] ROS Version: [3.4 ]
```

```

Program: [ftp ] Version: [3.7 ]
Status: closed Target Release: Last Reviewed: 11/17/1986
[Customer gets CIOEnet: resetting interface error message. When he gets
[this, and if the interface is reset between the open of the ftp
[connection and the reception of the server greeting message, ftp hangs.
[The problem is reasonably reproducible (one every third time). Note
[also that the system is receiving far more messages than customer was
[told to expect. When performing an rcp, he sees the message every
[5-10 seconds.
Solution SMR Number: [1827 ]
Fix will be included in:
Description:
The problem was fixed when the CIO board was put first in the
priority chain. It had been second behind the SMD board, but
once the switch was made, things started behaving better.

```

```

SMR Number: [1828 ] ROS Version: [3.4 ]
Program: [ns ] Version: [1.44 ]
Status: closed Target Release: Last Reviewed: 11/17/1986
[If the CIOEnet: resetting interface error occurs while ftpd is sending
[a file, the connection is closed without sending any data. The remote
[side assumes that a zero byte file was sent. Because of this, no
[errors on the remote side of ftp will be reported. The only way to
[realize that the ftp failed is to notice that the statistics line was
[not regenerated.
Solution SMR Number: [1828 ]
Fix will be included in:
Description:
The problem was fixed when the CIO board was put first in the priority
chain. It had been second after the SMD board, but once they were
switched things behaved properly.

```

```

SMR Number: [1829 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 11/24/1986
[The example in /usr/beth/exp/1829 goes into debug with
[ received signal SIGSEGV (illegal memory reference)
[ illegal memory reference at address 74000800
[ in the data segment - hard memory limit exceeded
[ when you try to deroff the file.

```

```

SMR Number: [1830 ] ROS Version: [3.4u2 ]
Status: open Target Release: Last Reviewed: 11/24/1986
[Readnews has printed 'no news' for about a month now.

```

```

SMR Number: [1831 ] ROS Version: [3.4u2 ]
Keyword: [common alignment ]
Status: closed Target Release: ros3.5 Last Reviewed: 11/24/1986
[Ld may allocate the beginning of the common data area on an odd word
[boundary. All common data items are supposed to be double word aligned.
[In this case, the loader starts the common area in an odd word boundary,
[so all common data items end up odd word aligned.
Solution SMR Number: [1831 ]
Fix will be included in: ROS 3.5
Description:
Ld has been fixed to start the common area on a double word boundary.

```

```

SMR Number: [1837 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 12/08/1986
[Shutdaemon continually generates the error message:
[ kill:1234567: no such process
[Shutdaemon is attempting to kill the egrep which it used to
[determine what processes to kill. Since the egrep is no longer
[alive, the kill fails.
Solution:
[Change the awk command from
[ awk '{print $1}'

```

```

[to ]
[ awk '{if ($4 != "egrep") print $1}' ]
-----
SMR Number: [1838 ] ROS Version: [3.4 ]
Status: closed Target Release: Last Reviewed: 12/08/1986
[According to the man page for open(2), a O_WRONLY (write-only) open of a
[fifo will delay returning until another process opens the file for reading.
[Under ROS, however, the open returns immediately. Compile the file in
[/usr/beth/exp/1838.c and invoke with a single argument (file foobar is
[created). Run a second time with no arguments. On a system V machine,
[the process hangs because no process has the fifo open for reading. The
[del key can be used to break out of the program. If you run it the second
[time (with no arguments) on ROS, the program returns immediately.
Solution SMR Number: [1838 ]
Fix will be included in:
Description:
Duplicate of 902.

```

```

SMR Number: [1844 ] ROS Version: [3.4 ]
Program: [rf ] Version: [2.1beta ]
Status: closed Target Release: rf2.1 Last Reviewed: 12/15/1986
[The following example should generate an error message when compiled, but
[does not:
[ real*4 x, big
[ parameter (big = 1.0e + 99)
[ namelist / fact / x
[ read (5, fact)
[ write (6, *) x, big
[ end
Solution SMR Number: [1844 ]
Fix will be included in: rf2.1
Description:
The compilers now flag too large/small floating point constants as errors.

```

```

SMR Number: [1845 ] ROS Version: [3.4 ]
Program: [rf ] Version: [2.1beta ]
Status: forwarded Target Release: Last Reviewed: 12/08/1986
[The following example, when compiled with the -f option (and -Bn), gives
[an error message for namelist.
[ real*4 x, big
[ parameter (big = 1.0 + 99)
[ namelist / fact / x
[ read (5, fact)
[ write (6, *) x, big
[ end

```

```

SMR Number: [1848 ] ROS Version: [none ]
Program: [rf ] Version: [2.0 ]
Status: closed Target Release: rf2.1 Last Reviewed: 12/15/1986
[The mini/maxi intermediate code nodes (objectcase) have no entry in the
[cost function. This may result in a compiler error.
Solution SMR Number: [1848 ]
Fix will be included in: rf2.1
Description:
Entries have been added to the cost function for mini and maxi.

```

```

SMR Number: [1849 ] ROS Version: [none ]
Program: [rf ] Version: [2.0 ]
Keyword: [peephole loops ]
Status: closed Target Release: rf2.1 Last Reviewed: 12/15/1986
[The fortran benchmark 'mflop8.f' causes the old (builtin to the compilers)
[peephole optimizer to loop.
Solution SMR Number: [1849 ]
Fix will be included in: rf2.1
Description:
When the XgetNextInstruction function tries to return the instruction it

```

was given, then it calls itself again, this time with an updated current block pointer (procPtr).

```
-----
SMR Number: [1852 ] ROS Version: [3.4 ]
Program: [rc ] Version: [2.1 ]
Status: open Target Release: Last Reviewed: 12/15/1986
[The following example ]
[ #include <stdio.h> /* ]
[ */ ]
[generates the following error messages: ]
[ line3: No name given for declaration ]
[ line 3: expected: ';' got: '/' ]
[ line 3: Unexpected end of file. ]
[Rc 1.8 and cc generate the error message: ]
[ Undefined: ]
[ _main ]
-----
```

```
-----
SMR Number: [1853 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 12/15/1986
[When dbx prints floats, it uses a format which does not allow printing ]
[of small values. A value which should be 2.0x10-10 is printed as 0.000000.]
[The format strings used in dbx to print out floats in the machine-level ]
[commands need to be changed to either always use scientific notation ]
[or to check the value and use scientific notation when appropriate. ]
[For a longer explanation of this and an example, see the file ]
[/usr/beth/exp/1853.]
-----
```

```
-----
SMR Number: [1854 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 12/15/1986
[User ftp'ed to a vax VMS system, and did a dir, but misspelled the name ofr ]
[the directory. After that command, everything else he tried to do was done]
[incorrectly. When he spelled the name of the directory properly, he got ]
[a message that said ftp can't access that directory. When he did a dir on ]
[his default directory, it didn't print out any file names. When he typed ]
['bye', he got a transfer complete message, and then it logged him out. I ]
[tried this from ridge to ridge, and couldn't reproduce it, but the user ]
[thinks the problem he had was on the ridge side.]
-----
```

```
-----
SMR Number: [1855 ] ROS Version: [3.3 ]
Program: [rf ] Version: [2.0a ]
Status: open Target Release: Last Reviewed: 12/15/1986
[With version 1.31 of libU77, an example generates incorrect output. ]
[(but with rf 2.1 and 1.34 libU77, things *seem* to work). ]
[See examples /usr/beth/exp/1855.f and /usr/beth/exp/density. The last ]
[line that's generated when 1855 is run should be the first line of ]
[the density file, but it is not with the older compiler and library.]
-----
```

```
-----
SMR Number: [1856 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 12/29/1986
[When one tries to redirect output to a file with either '~>:' or '~>>:', ]
[the error message, "use '~' to start line with ~" is displayed, and ]
[no file is created, thus no output redirected.]
-----
```

```
-----
SMR Number: [1857 ] ROS Version: [3.4 ]
Program: [rf ] Version: [2.1beta ]
Status: open Target Release: Last Reviewed: 12/29/1986
[Calling ioinit can cause a fortran unformatted file to be incorrectly ]
[written for long records. See the examples in /usr/beth/1857.f and 1857.c. ]
[If the array length is <= 1023, the first and last integers of the ]
[formatted file are 4* array length, which is correct. But if the array ]
[length is >= 1024, the first integer is zero, and the last one is 4* ]
[array length. This makes the resulting record unreadable by fortran.]
-----
```

```
-----
SMR Number: [1858 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 12/29/1986
[Create a local dictionary for spell, and then use the command spell +dict ]
-----
```

```
-----
[ (if the dictionary is called dict). If you've put awk, mips, and vedit ]
[ in the file dict, but your file contains these words with uppercase ]
[ letters, the spell program flags them as misspelled when it shouldn't. ]
-----
```

```
-----
SMR Number: [1859 ] ROS Version: [3.4 ]
Program: [rc ] Version: [2.1 ]
Status: open Target Release: Last Reviewed: 01/05/1987
[When trying to compile the example in /usr/beth/exp/1859.c with the ]
[following options: rc -g -Demacs -c 1859.c, with either rc 2.1 or rc2.0, ]
[a compiler error is generated. Compiling with the same way using rc 1.8 ]
[or cc works.]
-----
```

```
-----
SMR Number: [1860 ] ROS Version: [all ]
Keyword: [waterfall ]
Status: open Target Release: Last Reviewed: 01/05/1987
[In trying to compile either hood:/usr/src/sys/rtl/prtl.p or ../lang/as.p ]
[with /bin/pp, the compiler goes into debug with a floating point overflow. ]
[This happens on a system with a waterfall board with fetch microcode ]
[at level 260 and 501.]
-----
```

```
-----
SMR Number: [1861 ] ROS Version: [3.4 ]
Status: open Target Release: Last Reviewed: 01/05/1987
[When more than 1000 different points are given to plot, the error message, ]
["plot: too many data elements, first 1000 used" is generated. Please ]
[expand this limitation so that plot will work when given more than 1000 ]
[points.]
-----
```

```
-----
SMR Number: [1862 ] ROS Version: [all ]
Program: [cloct ] Version: [all ]
Status: open Target Release: Last Reviewed:
[Issue a command such as 'fsf' to the ct drive, then, as soon as the ]
[cursor appears, issue another command. If the tape is still moving ]
[as a result of the first command, the second command will give an ]
[error message because the drive is not available.]
-----
```

### 3. 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.

### 4. 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.

#### 4.1 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.**

#### 4.2 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 prompts, 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: 2

Enter disc unit to use: 0

Read bad block map from media (N) ? [RETURN]

Map out bad spots on disc (Priam and Fujitsu) (N) ? [RETURN]

Write bad block map to media (N) ? [RETURN]

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.