Solaris Common Messages and Troubleshooting Guide

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Part No: 805-4036–10
October, 1998

Contents

Preface

System administrators and advanced users can use the *Common Messages and Troubleshooting Guide* to find explanations of some of the more common error messages in the Solaris system.

Look up the messages and explanations here when you see a system message that you don't understand. If the message you're searching for is fairly common, it might be documented in this book.

How This Book Is Organized

Chapter 1," explains how to find messages in both the AnswerBook Navigator and in the printed book.

Chapter 2," lists messages alphabetically, with troubleshooting information following each message listing.

Special Symbols

Three special symbols are used with the message explanations in this book.

See Also

When further reading is suggested for a topic mentioned in the message explanation, the v symbol appears next to the first mention of the topic. This tells you to look in the message “See Also” section for sources of more information.

New Line

This symbol means that the part of this multi-line message following ¿ appears on a separate line.

Deciphering Type Changes And Prompt Symbols

The following table describes the typographic changes used in this book.

AaBbCc123	Variables, book titles, words to be emphasized	To delete a file, type `rm` *filename.* Read Chapter 6 in *User's Guide.*

TABLE P–1 Typographic Conventions

Typeface or Symbol	Meaning	Example
`AaBbCc123`	Functions, commands, filenames, code, screen displays	Edit your `.login` file. Use `ls -a` to list all files. The setlogmask() function sets...
`AaBbCc123`	What you type, contrasted with screen displays	`machine_name%` **`su`** `Password:`
name(num)	The manual page in the *Solaris 2.7 Reference Manual AnswerBook*	See ls(1).
%	C shell prompt	**`% ls -a`**

TABLE P–1 Typographic Conventions *(continued)*

Typeface or Symbol	Meaning	Example
$	Bourne or Korn shell prompt	$ **ls -a**
#	Superuser prompt	# **ls -a**

CHAPTER 1

About Error Messages

This book covers some of the more common error messages in the Solaris 7operating environment. Most messages covered here come from the operating system and the window system, but some come from commands, networking, and system administration (the section 1 and section 1M man pages).

Searching for Messages

Choosing What To Look For

How you choose to look up a particular message depends on

- how the message is constructed
- whether you are searching in a printed book or in the AnswerBook documentation

Variable Words and Numbers

Remember as you are searching that some words and numbers in messages vary when the messages are displayed. For example, the following message uses the name of the server affected, `b5server` in this case:

```
NFS read failed for server b5server
```

When message words or numbers vary, this book uses the words *variable* and *number* in the italics type face. So the previous message is listed in this book as:

`NFS read failed for server` *variable*

Variable words and numbers can appear anywhere in a message, even at the beginning. Because of this, messages are alphabetized by the first nonreplaced word or number in the message.

Frequently Duplicated Parts of Messages

Many messages you see are actually combined messages, often beginning with a program name. The five error messages in the following example are basically the same even though the command names are different.

- `find: out of memory`
- `grep: out of memory`
- `ls: out of memory`
- `mount: out of memory`
- `fsck: out of memory`

Rather than document this message at least five times, it appears in this book as the message "out of memory." Messages that contain colons (:) are often combined messages, and you might find that explanations of message sections are available separately.

So, if you don't find the beginning of a message in the book, and the message contains colons, search for other parts of the message.

In the Printed Book

Methods for finding a particular message vary depending on whether you are looking at a printed book or are searching online with the AnswerBook Navigator.

To find a message in the printed book, you can search the table of contents (which is an alphabetical listing of the messages) or the main body of the manual, Chapter 2.

In the AnswerBook Navigator

While print search methods work in AnswerBook, too, it's much faster to search for messages through the search utility in the AnswerBook Navigator.

1. Bring up AnswerBook

   $ **answerbook**

2. Click Select on the Search button
3. Enter the words or pattern to search for in the "Search Library For:" pane

4. Double-click Select on an entry in the resulting list. Although any of the entries might contain the information you're looking for, those from this book are most likely to be what you want.

If your first search doesn't find the message, consider altering the search pattern. Remember that this book contains only a small percentage of possible messages.

In general, you are most likely to find a documented message in the AnswerBook search pane when you enclose the searched-for words in quotation marks ("") or in parentheses ().

Using Pattern Matching

You can search in the AnswerBook Navigator for text containing specific single words, phrases that contain spaces, words near one another, and word variations.

See"Using the AnswerBook Software" in *OpenWindows User's Guide* for more detailed information about the AnswerBook search.

TABLE 1–1 AnswerBook Search Pattern Matching

To search for	Such as	Use
Single words	installing, le0, group	The words
Phrases with spaces	Installing Packages	Quotation marks ("") around the phrase
Words near one another	Installing...Server	Parentheses (( ))
Word variations	delete, deleting, deletion	Asterisks (*) and hyphens (-)

The following example shows some of the possible matches for specific AnswerBook Navigator searches.

TABLE 1–2 AnswerBook Search Results

Searching With	Finds These (for Example)
Installing	Installing XIL Device Handlers (XIL Device Porting and Extensibility Guide)
	Installing Packages on a Server for... (Application Packaging Developer's Guide)
"Installing Packages"	Installing Packages on a Server for... (Application Packaging Developer's Guide)
	Installing Packages for Clients on a Server (Software and AnswerBook Packages...)
(Installing Server)	Installing Packages on a Server for... (Application Packaging Developer's Guide)
	Creating an Install Server (SPARC Installing Solaris Software)
Delet*	Delete All Silence (Solaris Advanced User's Guide)
	Deleting a Line (Solaris Advanced User's Guide)
	Deletion of the New Selection (OLIT Reference Manual)

If you are unable to find an error message documented, please report it to us by sending e-mail to `msgdoc@Eng.Sun.COM` (this address is an autoresponder alias, not an actual person).

Combining Search Techniques

Combine the above search techniques to further refine your search. For example, "chang* mail-tool" finds documents containing phrases such as "change mailtool," "change mail tool," "change mail-tool," "changing mailtool," and so on.

Understanding the Message Explanations

Each message contains at least one of the following areas:

- *Cause*: What might have happened to cause the message
- *Action*: What you can do to fix the problem or, to continue with your work

- *Technical Notes*: Background information that might be interesting or helpful to a technical audience. This often contains information specifically for programmers

  Whenever you see part of a message that says “errno=” and then a number, look up the number on the **Intro**(2) man page to see what it indicates. System error messages on the **Intro**(2) man page are organized numerically.

- *See Also*: Suggests further reading

CHAPTER 2

Alphabetical Message Listing

Messages listed here are in the current Solaris 7 system. Many were also present in earlier Solaris 2 systems.

Messages are listed alphabetically.

Numbers and Symbols

***** FILE SYSTEM WAS MODIFIED *****

Cause

This comment from the **fsck**(1M) command tells you that it changed the filesystem it was checking.

Action

If **fsck**(1M) was checking the root filesystem, reboot the system immediately to avoid corrupting the / partition. If **fsck**(1M) was checking a mounted filesystem, unmount that filesystem and run **fsck**(1M) again, so that work done by **fsck**(1M) is not undone when in-memory file tables are written out to disk.

** Phase 1-- Check Blocks and Sizes

Cause

The **fsck**(1M) command is checking the filesystem shown in the messages that are displayed before this one. The first phase checks the inode list, finds bad or duplicate blocks, and verifies the inode size and format.

Action

If more than a dozen errors occur during this important phase, you might want to restore the filesystem from backup tapes. Otherwise it is fine to proceed with **fsck**(1M).

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

** Phase 1b-- Rescan For More DUPS

Cause

The **fsck**(1M) command detected duplicate blocks while checking a filesystem, so **fsck**(1M) is rescanning the filesystem to find the inode that originally claimed that block.

Action

If **fsck**(1M) executes this optional phase, you will see additional DUP/BAD messages in phases 2 and 4.

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

** Phase 2-- Check Pathnames

Cause

The **fsck**(1M) command is checking a filesystem, and **fsck**(1M) is now removing directory entries pointing to bad inodes that were discovered in phases 1 and 1b. This phase might ask you to remove files, salvage directories, fix inodes, reallocate blocks, and so on.

Action

If more than a dozen errors occur during this important phase, you might want to restore the filesystem from backup tapes. Otherwise it is fine to proceed with **fsck**(1M).

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

** Phase 3-- Check Connectivity

Cause

The **fsck**(1M) command is checking a filesystem, and **fsck**(1M) is now verifying the integrity of directories. You might be asked to adjust, create, expand, reallocate, or reconnect directories.

Action

You can usually answer yes to all these questions without harming the filesystem.

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

** Phase 4-- Check Reference Counts

Cause

The **fsck**(1M) command is checking a filesystem, and **fsck**(1M) is now checking link count information obtained in phases 2 and 3. You might be asked to clear or adjust link counts.

Action

You can usually answer yes to all these questions without harming the filesystem.

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

** Phase 5-- Check Cyl groups

Cause

The **fsck**(1M) command is checking a filesystem, and **fsck**(1M) is now checking the free-block and used-inode maps. You might be asked to salvage free blocks or summary information.

Action

You can usually answer yes to all these questions without harming the filesystem.

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

29a00 illegal instruction

Cause

When trying to boot a client from a boot/jumpstart server to install/upgrade a workstation, it fails with the following message:

```
boot net - install
Rebooting with command: net - install
Boot device: /iommu/sbus/ledma@f, 400010/le@f, 8c0000 File and args: -
install
29a00  Illegal Instruction
(0) ok
```

Action

The problem lies in the `/tftpboot` directory of the boot server. Confirm that the `HOSTID` and `HOSTID.ARCH` files are linked to the correct inetboot file for your architecture. The following is an example of how a symbolic link should look:

```
# cd /tftpboot
# ls -l 81971904*
81971904 -> inetboot.sun4m.Solaris_2.4
81971904.SUN4M -> inetboot.sun4m.Solaris_2.4
```

The following is an example of an incorrect entry for a sun4m system:

```
C753002F -> inetboot.axil4m.Solaris_2.5.1
C753002F.AXIL4M -> inetboot.axil4m.Solaris_2.5.1
```

If the entries are not correct, remove the entry for the particular client in this directory, using `rm_install_client` or `rm_client` commands, and re-add the client with the **`add_install_client`**(1M) or *add_client* command or through `Solstice` giving the correct architecture.

451 timeout waiting for input during *source*

Cause

When **sendmail**(1M) reads from anything that might time out, such as an SMTP connection, it sets a timer to the value of the `r` processing option before reading begins. If the read doesn't complete before the timer expires, this message appears and reading stops. (Usually this is during RCPT.) The mail message is then queued for later delivery.

Action

If you see this message often, increase the value of the `r` processing option in the `/etc/mail/sendmail.cf` file. If the timer is already set to a large number, look for hardware problems such as poor network cabling or connections.

See Also

For more information about setting the timer, see the section describing the **sendmail**(1M) configuration options in the *Mail Administration Guide*. If you are using the AnswerBook, the term "timeouts" is a good search string.

550 *hostname*... Host unknown

Cause

This **sendmail**(1M) message indicates that the destination host machine, specified by the address portion after the @ (at-sign), was not found during DNS (Domain Naming System) lookup.

Action

Use the **nslookup**(1M) command to verify that the destination host exists in that or other domains, perhaps with a slightly different spelling. Failing that, contact the intended recipient and ask for a proper address.

Sometimes this return message indicates that the intended host is down, rather than unknown. If a DNS record contains an unknown alternate host, and the primary host is down, **sendmail**(1M) returns a "Host unknown" message from the alternate host.¤

For **uucp**(1C) mail addresses, the "Host unknown" message probably means that the destination hostname is not listed in the `/etc/uucp/Systems` file.

Technical Notes

¤ This is a known **sendmail**(1M) version 8.6.7 bug.

See Also

For information on how **sendmail**(1M) works, see the *Mail Administration Guide*.

550 *username*... User unknown

Cause

This **sendmail**(1M) message indicates that the intended recipient, specified by the address portion before the @ (at-sign), could not be located on the destination host machine.

Action

Check the e-mail address and try again, perhaps with a slightly different spelling. If this doesn't work, contact the intended recipient and ask for a proper address.

See Also

For information on how **sendmail**(1M) works, see the *Mail Administration Guide*.

554 *hostname* ... Local configuration error

Cause

This **sendmail**(1M) message usually indicates that the local host is trying to send mail to itself.

Action

Check the value of the `$j` macro in the `/etc/mail/sendmail.cf` file to ensure that this value is a fully-qualified domain name.

Technical Notes

When the sending system provides its hostname to the receiving system (in the `SMTP HELO` command), the receiving system compares its name to the sender's name. If these are the same, the receiving system issues this error message and closes the connection. The name provided in the `HELO` command is the value of the `$j` macro.

See Also

For information on how **`sendmail`**(1M) works, see the *Mail Administration Guide.*

"A"

Accessing a corrupted shared library

Cause

Trying to **`exec`**(2) an `a.out` that requires a static shared library (to be linked in) and **`exec`**(2) could not load the static shared library. The static shared library is probably corrupted.

Technical Notes

The symbolic name for this error is `ELIBBAD`, `errno=84`.

access violation unknown host IP address

Cause

Solstice Backup Utility fails displaying the error:
`access violation unknown host IP address` on Networker 4.2.2. This is usually caused by corrupted host name in the host NIS/NIS+ map/table.

Action

Check the Networker client configuration for an incorrect host name. If all else fail, a workaround is to add the entry to `/etc/hosts`.

A command window has exited because its child exited.

Cause

The argument to a *cmdtool(1)* or a *shelltool(1)* window looks like it is supposed to be a command, but the system cannot find the command.

Action

To run this command inside a *cmdtool(1)* or a *shelltool(1)*, make sure the command is spelled correctly and is in your search path (if necessary, use a full path name). If you intended this argument as an option setting, use a minus sign (-) at the beginning of the option.

Technical Notes

Both the *cmdtool(1)* and the *shelltool(1)* are OpenWindows terminal emulators.

Address already in use

Cause

User attempted to use an address already in use, and the protocol does not allow this.

Technical Notes

The symbolic name for this error is `EADDRINUSE`, `errno=125`.

Address family not supported by protocol family

Cause

An address incompatible with the requested protocol was used.

Technical Notes

The symbolic name for this error is `EAFNOSUPPORT`, `errno=124`.

admintool: Received communication service error 4

Cause

AdminTool could not start a display method because a remote procedure call timed out, so it can't send the request. This error results when **`admintool`**(1M) tries to access the NIS or NIS+ tables when networking is not enabled.

Action

Verify the system network status with `ifconfig -a` to make sure the system is connected to the network. Make sure the ethernet cable is connected and the system is configured to run NIS or NIS+.

Advertise error

Cause

This error is RFS specific. It occurs when users try to advertise a resource already advertised, try to stop RFS while there are resources still advertised, or try to force unmount a resource when it is still advertised.

Technical Notes

The symbolic name for this error is `EADV`, `errno=68`.

answerbook: XView error: NULL pointer passed to xv_set

Cause

The AnswerBook navigator window comes up, but the document viewer window does not. This message appears on the console, and the message "Could not start new viewer" appears in the navigator window. This situation indicates that you have an unknown client or a problem with the network naming service.

Action

Run the **`ypmatch`**(1) or **`nismatch`**(1) command o determine if the client hostname is in the hosts map. If it isn't, add it to to NIS hosts map on the NIS master server. Then make sure the `/etc/hosts` file on the client contains an IP address and entry for that hostname followed by `loghost` (reboot if you changed the `/etc/hosts` file). Check that the **`ypmatch`**(1) or **`nismatch`**(1) *client* `hosts` command returns the same IP host address as in the `/etc/hosts` file. Finally, quit all existing AnswerBooks and restart.

See Also

For more information on the NIS hosts map, see the section on the default search criteria in the *NIS+ and FNS Administration Guide*. If you are using the AnswerBook, "NIS hosts map" is a good search string.

Arg list too long

Cause

The system could not handle the number of arguments given to a command or program when it combined those arguments with the environment's exported shell variables. The argument list limit is the size of the argument list plus the size of the environment's exported shell variables.

Action

The easiest solution is to reduce the size of the parent process environment by unsetting extraneous environment variables. (See the man page for the shell you're using to find out how to list and change your environment variables.) Then run the program again.

Technical Notes

An argument list longer than `ARG_MAX` bytes was presented to a member of the **`exec`**(2) family of system calls.

The symbolic name for this error is `E2BIG`, `errno=7`.

Argument out of domain

Cause

This is a programming error or a data input error.

Action

Ask the program's author to fix this condition, or supply data in a different format.

Technical Notes

This indicates an attempt to evaluate a mathematical programming function at a point where its value is not defined. The argument of a programming function in the math package (3M) is out of the domain of the function. This could happen when taking the square root, power, or log of a negative number, when computing a power

to a non-integer, or when passing an out-of-range argument to a hyperbolic programming function.

To help pinpoint a program's math errors, use the **matherr**(3M) facility.

The symbolic name for this error is `EDOM`, `errno=33`.

Arguments too long

Cause

This C shell error message indicates that there are too many arguments after a command. For example, this can happen by invoking `rm *` in a huge directory. The C shell cannot handle more than 1706 arguments.

Action

Temporarily start a Bourne shell with **sh**(1) and run the command again. The Bourne shell dynamically allocates command line arguments. Return to your original shell by typing `exit`.

`assertion failed:` *string*`, file` *name*`, line` *int*

Cause

An unexoected condition in the program has happened.

Action

Contact the vendor or author of the program to ask why it failed. If you have the source code for the program, you can look at the file and line number where the assertion failed. This might give you an idea of how to run the program differently.

Technical Notes

This message results from a diagnostic macro called **assert**(3C) that a programmer inserted into the specified line of a source file. The expression that evaluated untrue precedes the file name and line number.

Attempting to link in more shared libraries than system limit

Cause

Trying to **exec**(2) an `a.out` that requires more static shared libraries than is allowed on the current configuration of the system.

Technical Notes

The symbolic name for this error is `ELIBMAX`, `errno=86`.

automountd[*int*]: server *hostname* responding

Cause

This automounter message indicates that the system tried to mount a filesystem from an NFS server that is either down or extremely slow to respond. In some cases this message indicates that the network link to the NFS server is broken, although that condition produces other error messages as well.

Action

If you are the system administrator responsible for the non-responding NFS server, check to see whether the machine needs repair or rebooting. Encourage your user community to report such problems quickly but only once. When the NFS server is back in operation, the automounter will be able to access the requested filesystem.

See Also

For more information on NFS failures, see the section on NFS troubleshooting in the *NFS Administration Guide*. If you are using the AnswerBook, a good search string is "NFS Service."

automount[*int*]: *name*: Not a directory

Cause

The file specified after the first colon is not a valid mount point because it is not a directory.

Action

Ensure that the mount point is a directory and not a regular file or a symbolic link.

"B"

Bad address

Cause

The system encountered a hardware fault in attempting to access a parameter of a programming function.

Action

Check the address to see if it resulted from supplying the wrong device or option to a command. If that is not the problem, contact the vendor or author of the program for an update.

Technical Notes

This error could occur any time a function that takes a pointer argument is passed an invalid address. Because processors differ in their ability to detect bad addresses, on some architectures passing bad addresses can result in undefined behaviors.

The symbolic name for this error is `EFAULT`, `errno=14`.

BAD/DUP FILE I=i OWNER=o MODE=m SIZE=s MTIME=t CLEAR?

Cause

While checking inode link counts during phase 4, **fsck**(1M) found a file (or directory) that either does not exist or exists somewhere else.

Action

To clear the inode of its reference to this file or directory, answer yes. With the `-p` (preen) option, **fsck**(1M) automatically clears bad or duplicate file references, so answering yes to this question seldom causes a problem.

Bad file number

Cause

Generally this is a program error, not a usage error.

Action

Contact the vendor or author of the program for an update.

Technical Notes

Either a file descriptor refers to no open file, or a **read**(2) (or **write**(2)) request is made to a file that is open only for writing (or reading).

The symbolic name for this error is `EBADF`, `errno=9`.

block no. BAD I=*inode no.*

Cause

Upon detecting an out-of-range block, **fsck**(1M) prints the bad block number and its containing inode (after I=).

Action

In **fsck**(1M) phases 2 and 4, you decide whether or not to clear these bad blocks. Before committing to repair with **fsck**(1M), you could determine which file contains this inode by passing the inode number to the **ncheck**(1M) command:

```
# ncheck -inum filesystem
```

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

BAD_MESSAGE (error code 100) from X.400

Cause

X.400 software was working fine. Suddenly message exchanges failed in `ma_start_delivery()`. It was returning an error code of 100 (BAD_MESSAGE).

`ma_start_delivery()` call fails when trying to exhange file of more than 900 bytes.

Action

X.400 was restarted with the wrong `umask`.

et the umask to 0022 and restart software to fix.

bad module/chip at: *position*

Cause

This message from the memory management system often appears with parity errors, and indicates a bad memory module or chip at the position listed. Data loss is possible if the problem occurs other than at boot time.

Action

Replace the memory module or chip at the indicated position. Refer to the vendor's hardware manual for help finding this location.

Bad request descriptor

Cause

Apparently used only in NIS+ to indicate corrupted or missing tables.

Technical Notes

The symbolic name for this error is `EBADR`, `errno=51`.

BAD SUPER BLOCK: *string*

Cause

This message from **`fsck`**(1M) indicates that a filesystem's super-block is damaged beyond repair and must be replaced. At boot time (with the `-p` option) this message is prefaced by the filesystem's device name. After this message comes the actual damage recognized (see Action). Unfortunately **`fsck`**(1M) does not print the number of the damaged super-block.

Action

The most common cause of this error is overlapping disk partitions. Do not immediately rerun **`fsck`**(1M) as suggested by the lines that display after the error message. First make sure that you have a recent backup of the filesystem involved; if not, try to back up the filesystem now using **`ufsdump`**(1M). Then run the **`format`**(1M) command, select the disk involved, and print out the partition information.

```
# format
: N
> partition
```

(continued)

(Continuation)

```
> print
```

Note whether the overlap occurs at the beginning or end of the filesystem involved. Then run **newfs**(1M) with the `-N` option to print out the filesystem parameters, including the location of backup super-blocks.

```
# newfs -N /dev/dsk/device
```

Select a super-block from a non-overlapping area of the disk, but note that in most cases you have only one chance to select the proper replacement super-block, which **fsck**(1M) soon propagates to all the cylinders. If you select the wrong replacement super-block, data corruption will probably occur, and you will have to restore from backup tapes. After you select a new super-block, provide **fsck**(1M) with the new master super-block number:

```
# fsck -o b=NNNN /dev/dsk/device
```

Technical Notes

Specific reasons for a damaged super-block include: a wrong magic number, out of range NCG (number of cylinder groups) or CPG (cylinders per group), the wrong number of cylinders, a preposterously large super-block size, and trashed values in super-block. These reasons are generally not meaningful because a corrupt super-block is usually extremely corrupt.

See Also

For more information on bad superblocks, see the sections on restoring bad superblocks in the *System Administration Guide, Volume I*. If you are using the AnswerBook, "superblock" is a good search string.

BAD TRAP

Cause

A bad trap can indicate faulty hardware or a mismatch between hardware and its configuration information. Data loss is possible if the problem occurs other than at boot time.

Action

If you recently installed new hardware, verify that the software was correctly configured. Check the kernel traceback displayed on the console to see which device generated the trap. If the configuration files are correct, you will probably have to replace the device.

In some cases, the bad trap message indicates a bad or down-rev CPU.

Technical Notes

A hardware processor trap occurred, and the kernel trap handler was unable to restore system state. This is a fatal error that usually precedes a panic, after which the system performs a sync, dump, and reboot. The following conditions can cause a bad trap: a system text or data access fault, a system data alignment error, or certain kinds of user software traps.

`/bin/sh: `*`file`*`: too big`

Cause

This Bourne shell message indicates a classic "no memory" error. While trying to load the program specified after the first colon, the shell noticed that the system ran out of virtual memory (swap space).

Action

See the message "Not enough space" for information on reconfiguring your system to add more swap space.

Block device required

Cause

A raw (character special) device was specified where a block device was required, such as during a call to the **mount**(1M) command.

Action

To see which block devices are available, use `ls -l` to look in `/devices`. Then specify a block device instead of a character device. Block device modes start with a `b`, whereas raw character device modes start with a `c`.

Technical Notes

The symbolic name of this error is `ENOTBLK`, `errno=15`.

Boot device: /iommu/sbus/ *directory*/directoryliteral> / sd@3,0

Cause

This message always appears at the beginning of rebooting. If there is a problem, the system hangs, and no other messages appear. This condition is caused by conflicting SCSI targets for the boot device, which is almost always target 3.

Action

The boot device is usually the machine's internal disk drive, target 3. Make sure that external and secondary disk drives are targeted to 1, 2, or 0, and do not conflict with each other. Also make sure that tape drives are targeted to 4 or 5, and CD drives to 6, avoiding any conflict with each other or with the disk drives. You can set a device's target number using pushbutton switches or a dial on the back near the SCSI cables. If the targeting of the internal disk drive is in question, check it by powering off the machine, removing all external drives, turning the power on, and running the `probe-scsi-all` or `probe-scsi` command from the PROM monitor.

boot error 13 | sun4m

Cause

Diskless client boot gave NFS mount error 13

Cause

Diskless client fails to boot, NFS error 13

Broadcast Message from root (pts/*int*) on server [date]

Cause

This message from the **wall**(1M) command is transmitted to all users logged into a system. You could see it during a **rlogin**(1) or **telnet**(1) session, or on terminals connected to a timesharing system.

Action

Carefully read the broadcast message. Often this broadcast is followed by a shutdown warning.

See the message "The system will be shut down in *int* minutes" for details about system shutdown.

See Also

For more information on bringing down the system, see the section on halting the system in the *System Administration Guide, Volume I*. If you are using the AnswerBook, "halting the system" is a good search string.

Broken pipe

Cause

This condition is often normal, and the message is merely informational (as when piping many lines to the **head**(1) program). The condition occurs when a write on a pipe does not find a reading process. This usually generates a signal to the executing program, but this message displays when the program ignores the signal.

Action

Check the process at the end of the pipe to see why it exited.

Technical Notes

The symbolic name of this error is `EPIPE`, `errno=32`.

Bus Error

Cause

A process has received a signal indicating that it attempted to perform I/O to a device that is restricted or that does not exist. This message is usually accompanied by a core dump, except on read-only filesystems.

Action

Use a debugger to examine the core file and determine what program fault or system problem led to the bus error. If possible, check the program's output files for data corruption that might have occurred before the bus error.

Technical Notes

Bus errors can result from either a programming error or device corruption on your system. Some common causes of bus errors are: invalid file descriptors, unreasonable I/O requests, bad memory allocation, misaligned data structures, compiler bugs, and corrupt boot blocks.

"C"

Cannot access a needed shared library

Cause

Trying to **exec**(2) an `a.out` that requires a static shared library and the static shared library doesn't exist or the user doesn't have permission to use it.

Technical Notes

The symbolic name for this error is `ELIBACC`, `errno=83`.

Cannot allocate colormap entry for " *string* "

Cause

This message from `libXt` (X Intrinsics library) indicates that the system colormap was full even before the color name specified in quotes was requested. Some applications can continue after this message. Other applications, such as Workspace Properties Color, fail to come up when the colormap is full.

Action

Exit the programs that make heavy use of the colormap, then restart the failed application and try again.

Cannot assign requested address

Cause

Results from an attempt to create a transport endpoint with an address not on the current machine.

Technical Notes

The symbolic name for this error is EADDRNOTAVAIL, errno=126.

cannot change passwd, not correct passwd

Cause

While running **yppasswd**(1) and trying to change a user's password, it responded with the message `cannot change passwd, not correct passwd`.

Also getting `yppasswd user` *string* `does not exist` on server console, but running `ypcat passwd | grep (user)` returns the username. Verified that **yppasswdd**(1M) is running.

Action

Check the **passwd**(4) file with **pwck**(1M) and verify that **yppasswdd**(1M) is running on the right server. Then verify where the **passwd**(4) file is located and if changed, check that **yppasswdd**(1M) has the location in the process line. The password located in `/etc/yp` should read `/usr/lib/yp/rpc.yppasswdd -D /etc/yp`. The `-D` option with the passwd files directory location tells **yppasswdd**(1M) where to update and verify password changes.

Cannot exec a shared library directly

Cause

Attempting to **exec**(2) a shared library directly.

Technical Notes

The symbolic name for this error is `ELIBEXEC`, `errno=87`.

Cannot find SERVER *hostname* in network database

Cause

A brief description: the user is on a different subnet and is running permanent licenses:

```
ultra1(50)% cc -o hello hello.c
License Error : Cannot find the license server (fry)
in the network database for product(Sun WorkShop Compiler C)
Cannot find SERVER hostname in network database (-14,7)
cc: acomp failed for hello.c
ultra1(51)%
```

Action

First, make sure that the server is up and running. Second, make sure that the server is in the `/etc/hosts` file of the client system by typing: `ping` *server name.* Third, check the license daemon on teh server to see if it is running. Fourth, make sure that there is an elementary license file on the client:

```
cd /etc/opt/licenses
more sunpro.loc
```

Fifth, in the `sunpro.loc` directory are there only text license files such as `sunpro.lic,1`? Sixth, on the client check:

```
 % cd /etc
% more nsswitch.conf | grep hosts
hosts:      nis [NOTFOUND=return] files
```

This says that it will use the nis server to look up the IP address. If it is set first for `nis` and the `/etc/hosts` file has the server listed by name, change the line to

```
hosts:      files nis
```

Then see if it can find it. If not, try truss and snoop to see what is going on.

Cannot open FCC file

Cause

When trying to send mail via Netscape, the message is displayed. The problem is that Netscape is trying to save the outbound message to a file that has been specified by the user, but does not exist.

Action

To correct this problem: go to `options Mail and News Preferences`, then go to `Compose`. A template pops up. There is a section that specifies where to save out-going mail and news files. Make sure that these files exist or remove them from the template, if you do not care about logging what messages are sent via Netscape.

Cannot send after transport endpoint shutdown

Cause

A request to send data was disallowed because the transport endpoint has already been shut down.

Technical Notes

The symbolic name for this error is `ESHUTDOWN`, `errno=143`.

Can’t create public message device (Device busy)

Cause

This message comes from the **`lp`**(1) print scheduler, indicating that it is either extremely busy or hung.

Action

If print jobs are coming out of the printer in question, wait until they are finished and then resubmit this print job. If you see this message again, the **lp**(1) system is probably hung.

See the message "lp hang" for a procedure to clear the queue.

Technical Notes

If **lp**(1) is unable to create a device for printer messages, the message FIFO could be already in use, or locked by another print job.

See Also

For more information on the print scheduler, see the section on administrating printers in the *System Administration Guide Volume II.*

Can't invoke /etc/init, error *int*

Cause

This message can appear while a system is booting, indicating that the **init**(1M) program is missing or corrupted. Note that `/etc/init` is a symbolic link to `/sbin/init`.

Action

Boot the miniroot so you can replace **init**(1M). Halt the machine by typing `Stop-A` or by pressing the reset button. Reboot single-user from CD-ROM, the net, or diskette. For example, type `boot cdrom -s` at the `ok` prompt to boot from CD-ROM. After the system comes up and gives you a # prompt, mount the device corresponding to the original / partition somewhere, with a command similar to the **mount**(1M) command below. Then copy the **init**(1M) program from the miniroot to the original / partition, and reboot the system.

```
# mount /dev/dsk/c0t3d0s0 /mnt
# cp /sbin/init /mnt/sbin/init
# reboot
```

If this doesn’t work, other files might be corrupted, and you might need to reinstall the entire system.

Technical Notes

The error number is 2 if `/sbin/init` is missing, or 8 if `/sbin/init` has an incorrect executable format. This is usually followed by a "panic: icode" message. The system tries to reboot itself, but goes into a loop, because rebooting is impossible without **`init`**(1M).

See Also

For more information on booting the system, see the section on halting and booting the system in the *System Administration Guide, Volume I*.

can’t open /dev/rdsk/*string*: (null): UNEXPECTED INCONSISTENCY

Cause

On SunOS 4.1.x, this message indicated that the device containing the /dev filesystem has become disconnected. Solaris behavior has not been confirmed.

can’t synchronize with hayes

Cause

This message sometimes appears when using a modem that the system regards as a "Hayes" type modem, which includes most modems manufactured today. The message can be caused by incorrect switch settings, by poor cable connections, or by not turning the modem on.

Action

Check that the modem is on and that the cables between the modem and your system are securely connected. Check the internal and external modem switch settings. Turn the modem off and then on again, if necessary.

cd: Too many arguments

Cause

The C shell's **cd**(1) command takes only one argument. Either more than one directory was specified, or a directory name containing a space was specified. Directory names with spaces are easy to create with File Manager.

Action

Use only one directory name. To change to a directory whose name contains spaces, enclose the directory name in double (") or single (') quotes, or use File Manager.

Channel number out of range

Cause

The system has run out of stream devices. This error results when a stream head attempts to open a minor device that does not exist or that is currently in use.

Action

Check that the stream device in question exists and was created with an appropriate number of minor devices. Make sure that the hardware corresponds to this configuration. If the stream device configuration is correct, try again later when more system resources might be available.

Technical Notes

The symbolic name for this error is `ECHRNG`, `errno=37`.

chmod: ERROR: invalid mode

Cause

This message from the **chmod**(1) command indicates a problem in the first non-option argument.

Action

If you are specifying a numeric file mode, you can provide any number of digits (although only the final one to four are considered), but all digits must be between 0 and 7. If you are specifying a symbolic file mode, use the syntax provided in the **chmod**(1) usage message to avoid the "invalid mode" error message:

```
Usage: chmod [ugoa][+-=][rwxlstugo] file ...
```

Some combinations of symbolic keyletters produce no error message but fail to have any effect. The first group, `[ugoa]`, is truly optional. The second group, `[+-=]`, is mandatory for **chmod**(1) to have an effect. The third group, `[rwxlstugo]`, is also mandatory for effect, and can be used in combination when that combination does not conflict.

Command not found

Cause

The C shell could not find the program you gave as a command.

Action

Check the form and spelling of the command line. If that looks correct, `echo $path` to see if the user's search path is correct. When communications are garbled, it is possible to unset a search path to such an extent that only built-in shell commands are available. Here is a command to reset a basic search path:

```
% set path = (/usr/bin /usr/ccs/bin /usr/openwin/bin .)
```

If the search path looks correct, check the directory contents along the search path to see if programs are missing or if directories are not mounted.

See Also

For more information about the C shell, see **csh**(1).

Communication error on send

Cause

This error occurs when the current process is waiting for a message from a remote machine, but the link connecting the machines breaks.

Technical Notes

The symbolic name for this error is `ECOMM`, `errno=70`.

Connection closed.

Cause

This message can appear when using **`rlogin`**(1) to another system if the remote host cannot create a process for this user, if the user takes too long to type the correct password, if the user interrupts the network connection, or if the remote host goes down. Data loss is possible if files were modified and not saved before the connection closed.

Action

Just try again. If the other system has gone down, wait for it to reboot first.

Connection closed by foreign host.

Cause

When a user **`telnet`**(1)s to another system, this message can appear if the user takes too long to type the correct password, if the remote host cannot create a login for this user, or if the remote host goes down or terminates the connection. Data loss is possible if files were modified and not saved before the connection closed.

Action

Just try again. If the other system has gone down, wait for it to reboot first.

[Connection closed. Exiting]

Cause

After using the **talk**(1) command to communicate with another user, the other person enters an interrupt (usually Control-c), and this message appears on your screen.

Action

Sending an interrupt like this is the usual way of exiting the `talk` program. The **talk**(1) session is over and you can return to your work.

Connection refused

Cause

No connection could be made because the target machine actively refused it. This happens either when trying to connect to an inactive service or when a service process is not present at the requested address.

Action

Activate the service on the target machine, or start it up again if it has disappeared. If for security reasons you do not intend to provide this service, inform the user community, possibly suggesting an alternative.

Technical Notes

The symbolic name for this error is `ECONNREFUSED`, `errno=146`.

Connection reset by peer

Cause

A connection was forcibly closed by a peer. This normally results from a loss of the connection on the remote host due to a timeout or a reboot.

Technical Notes

The symbolic name for this error is `ECONNRESET`, `errno=131`.

Connection timed out

Cause

This occurs either when the destination host is down or when problems in the network cause lost transmission.

Action

First check the operation of the host system, for example by using **`ping`**(1M) and **`ftp`**(1), then repair or reboot as necessary. If that doesn't solve the problem, check the network cabling and connections.

Technical Notes

No connection was established in a specified time. A connect or send request failed because the destination host did not properly respond after a reasonable interval. (The timeout period is dependent on the communication protocol.)

The symbolic name for this error is `ETIMEDOUT`, `errno=145`.

console login: ^J^M^Q^K^K^P

Cause

This usually occurs because OpenWindows exited abnormally, leaving the system's keyboard in the wrong mode. The characters that appear when someone attempts to login are garbage transliterations of what someone types.

Action

On a SPARC system: find another machine and remote login to this system, then run this command:

```
$ /usr/openwin/bin/kbd_mode -a
```

This puts the console back into ASCII mode. Note that `kbd_mode` is not a windows program, it just fixes the console mode.

On an x86 system: log in remotely and start, then kill the X server, or reboot the system.

Technical Notes

The usual reason for this problem occurring is an automated script run from **`cron`**(1M) that clears out the `/tmp` directory every so often. Ensure that any such scripts do not remove the `/tmp/.X11-pipe` or `/tmp/.X11-unix` directories, or any files in them.

`core dumped`

Cause

A **`core`**(4) file contains an image of memory at the time of software failure, and is used by programmers to find the reason for the failure.

Action

To see which program produced a **`core`**(4) file, run either the **`file`**(1) command or the **`adb`**(1)(1) command. The following examples show the output of the **`file`**(1) and **`adb`**(1) commands on a core file from the `dtmail` program.

```
$ file core
core: ELF 32-bit MSB core file SPARC Version 1, from ‘dtmail’
```

```
$ adb core
core file = core -- program ‘dtmail’
SIGSEGV  11: segmentation violation
^D       (use Control-d to quit the program)
```

Ask the vendor or author of this program for a debugged version.

Technical Notes

Some signals, such as `SIGQUIT`, `SIGBUS`, and `SIGSEGV`, produce a core dump. See the **`signal`**(5) man page for a complete list.

If you have the source code for the program, you can try compiling it with `cc -g`, and debugging it yourself using `dbx` or a similar debugger. The `where` directive of `dbx` provides a stack trace.

On mixed networks, it can be difficult to discern which machine architecture produced a particular core dump, since **`adb`**(1) on one type of system generally cannot read a **`core`**(4) file from another type of system, and will produce an "unrecognized file" message. Run **`adb`**(1) on various machine architectures until you find the right one.

The term "core" is archaic– ferrite core memory was supplanted by silicon RAM in the 1970s, although spaceships still employ core memory for its imperviousness to radiation.

See Also

For information on saving and viewing crash information see the *System Administration Guide, Volume II*. If you are using the AnswerBook, "system crash" is a good search string.

`corrupt label - wrong magic number` or `corrupt label - label checksum failed`

Cause

After a power cycle, the machine comes up with error messages saying:
`corrupt label - label checksum failed` or
`corrupt label - wrong magic number` . **`format`**(1M) showed:

```
  0 unassigned    wm       0              0         (0/0/0)          0
  1 unassigned    wm       0              0         (0/0/0)          0
  2     backup    wm       0 - 5460       4.2G    (5460/0/0)   4154160
  3 unassigned    wm       0              0         (0/0/0)          0
  4 unassigned    wm       0              0         (0/0/0)          0
  5 unassigned    wm       0              0         (0/0/0)          0
  6 unassigned    wm       0 - 2730       2.1G      (0/0/0)          0
  7 unassigned    wm       2730-5460      2.1G      (0/0/0)          0
```

The disks were using raw partitions beginning at block 0 (cylinder 0).

The disk label (VTOC) is kept on the block 0 of cylinder 0. The label will eventually get overwritten by database programs using raw partitions if the raw partition begins at cylinder 0. (Unix filesystems avoid this area of the partition.)

Action

The workaround is to go into format and get the backup label using the backup command. Relabel the disk using this backup label. You should then be able to access the disk.

Backup the data on this disk.

Go back to the disk and relabel it, starting the raw partition at cylinder 1 (This looses one cylinder, but prevents corrupting the VTOC).

Label again.

Restore the data from your backup.

could not grant slave pty

Cause

User gets the error message: `could not grant slave pty` when attempting a **`telnet`**(1), **`rlogin`**(1), or **`rsh`**(1) session (anything that requires a shell) or when trying to bring up an x-term.

Action

The user's file permissions were set wrong on `/usr/lib/pt_chmod`. The user had:

```
# ls -la /usr/lib/pt_chmod
---s--x--x   1 bin     bin         3120 May  3  1996
```

The permissions should be:

```
# ls -la /usr/lib/pt_chmod
---s--x--x   1 root     bin         3120 May  3  1996
```

Note that the owner should be `root`, user had `bin` as the owner. Also note that the `setuid` bit must be set. Once the user did a `chown root pt_chmod`, everything worked again.

Could not initialize tooltalk (tt_open): TT_ERR_NOMP

Cause

Various desktop tools display or print this message when the *ttsession(1)* process is not available. The TookTalk service generally tries to restart *ttsession(1)* if it is not running. So this error indicates that the ToolTalk service is either not installed or is not installed correctly.

Action

Verify that the *ttsession(1)* command exists in `/usr/openwin/bin` or `/usr/dt/bin`. If this command is not present, ToolTalk is not installed correctly. The packages constituting ToolTalk are the runtime `SUNWtltk`, developer support `SUNWtltkd`, and the manual pages `SUNWtltkm`. CDE ToolTalk packages have the same names with ".2" appended.

Technical Notes

The full TT_ERR_NOMP message string reads as follows: "No *ttsession(1)* is running, probably because *tt_open(3)* has not been called yet. If this is returned from *tt_open(3)* it means *ttsession(1)* could not be started, which generally means ToolTalk is not installed on the system."

Could not open ToolTalk Channel

Cause

Attempting to run `workshop` remotely, the error message is displayed.

The fix is the following: 1. Make sure workshop is no longer running; 2. In the `telnet/rlogin` session window, type `/bin/ps -ef | grep ttsession`. If there is one running that belongs to the user who has `telnet`ed into the system, type `kill` *pid_of_ttsession*; 3. In the `telnet rlogin` session, type `/usr/dt/bin/ttsession -s -d <machine_telnetting_from>:0.0`; 4. Start workshop.

Could not start new viewer

Cause

This message appears in the AnswerBook navigator window, along with an XView error message on the console.

Action

See the message "answerbook: XView error: NULL pointer passed to xv_set" for details.

cpio: Bad magic number/header.

Cause

A **cpio**(1) archive has either become corrupted or was written out with an incompatible version of **cpio**(1).

Action

Use the `-k` option to **cpio**(1) to skip I/O errors and corrupted file headers. This might permit you to extract other files from the **cpio**(1) archive. To extract files with corrupted headers, try editing the archive with a binary editor such as *emacs(1)*. Each **cpio**(1) file header contains a filename as a string.

See Also

For more information on magic numbers, see **magic**(4).

cpio : can’t read input : end of file encountered prior to expected end of archive.

Cause

When we try to read a multivolume floppy in bar format using the following command:

```
# cpio -id -H bar -I /dev/diskette0
```

It fails with the message.

Action

Kill `/usr/sbin/vold` by running `/etc/init.d/volmgt stop` and use the device name `/dev/rfd0`

Cross-device link

Cause

An attempt was made to make a hard link to a file on another device, such as on another filesystem.

Action

Establish a symbolic link using `ln -s` instead. Symbolic links are permitted across filesystem boundaries.

Technical Notes

The symbolic name for this error is `EXDEV`, `errno=18`.

"D"

data access exception

Cause

This message can result from running an old version of the operating system that does not support new hardware, or by running an operating system that is not configured for new hardware. It can also result from incorrectly installed DSIMMs or from a disk problem.

Action

Upgrade your operating system to a version that supports the new hardware or machine architecture. For example, upgrading a SPARCstation 2 (with sun4c kernel architecture) to a SPARCstation 20 (with sun4m kernel architecture) requires an operating system upgrade or reconfiguration.

See Also

For more information on upgrades, see the section describing system and device configuration in the *Solaris 1.x to Solaris 2.x Transition Guide.*

Data fault

Cause

This is a kind of bad trap that usually causes a system panic. When this message appears after a bad trap message, a system text or data access fault probably occurred.¤ In the absence of a bad trap message, this message might indicate a user text or data access fault. Data loss is possible if the problem occurs other than at boot time.

Action

Make sure the machine can reboot, then check the log file `/var/adm/messages` for hints about what went wrong.

¤ See the message "BAD TRAP" for more information.

Deadlock situation detected/avoided

Cause

A programming deadlock situation was detected and avoided.

Action

If the system had not detected and avoided a deadlock, a piece of software would have hung. Run the program again. The deadlock might not reoccur.

Technical Notes

This error usually relates to file and record locking, but can also apply to mutexes, semaphores, condition variables, and read/write locks.

The symbolic name for this error is `EDEADLK`, `errno=45`.

See Also

See the section on deadlock handling in the *System Interface Guide*. See the section on avoiding deadlock in the *Multithreaded Programming Guide*.

Destination address required

Cause

A required address was omitted from an operation on a transport endpoint. Destination address required.

Technical Notes

The symbolic name for this error is `EDESTADDRREQ`, `errno=96`.

/dev/fd/*int*: /dev/fd/*int*: cannot open

Cause

`setuid` and `setgid` shell scripts refuse to run - they simply return an error message similar to `/dev/fd/3: /dev/fd/3: cannot open`. (The number following `/dev/fd/` is not necessarily 3.) The first line of the script properly starts a shell, and the filesystem containing the script is not mounted with the `nosuid` option.

Running truss on the shell script reveals that a call to **open**(2) is failing with error number 6 (`ENXIO`):

```
open("/dev/fd/3", O_RDONLY)                    Err#6 ENXIO
```

Action

Setuid and setgid shell scripts use the file descriptors in `/dev/fd`. The contents of `/dev/fd` are a File Descriptor Filesystem (fdfs) on Solaris 2 and have no connection with floppy disks!

Ensure that the `fdfs` is mounted as `/dev/fd`. The following line should appear in `/etc/vfstab` exactly like this (with NO initial comment symbol):

```
fd  -  /dev/fd  fd - no -
```

before the machine is next rebooted.

It may be possible to remount `/dev/fd` without rebooting by running the following as root:

```
# mount fd /dev/fd
```

If this fails the machine must be rebooted after editing `/etc/vfstab` as detailed above, before setuid/setgid shell scripts are available.

Some administrators, unaware of what `/dev/fd` is for, comment out the entry in `/etc/vfstab` that mounts the fdfs (File Descriptor filesystem). This may go unnoticed until an attempt is made to run a setuid or setgid shell script.

/dev/rdsk/c0t6d0s2: No such file or directory

Cause

When attempting to eject a CD-ROM on a Ultra 450 system, the `eject cdrom` command fails, displaying the error message.

This is because the CD-ROM is on controller 1 not 0. For the **eject**(1) command, the cdrom "nickname" equates to `/dev/rdsk/c0t6d0s2`. On an Ultra 450, the CD-ROM is `/dev/rdsk/c1t6d0s2`. So, using `cdrom` does not work.

Action

Use the following command instead:

```
# eject cdrom0
```

If volume manager (`/usr/sbin/vold`) is not running, you can use:

```
# eject /dev/rdsk/c1t6d0s2
```

Note: Make sure that the front panel of the system is unobstructed so that the CD-ROM tray is not blocked. Otherwise, the **eject**(1) command appears to hang since the tray is trying to open but is physically blocked.

Device busy

Cause

An attempt was made to mount a device that was already mounted or to unmount a device containing an active file (such as an open file, a current directory, a mount point, or a running program). This message also occurs when trying to enable accounting that is already enabled.

Action

To unmount a device containing active processes, close all the files under that mount point, quit any programs started from there, and change directories out of that hierarchy. Then try to unmount again.

Technical Notes

Mutexes, semaphores, condition variables, and read/write locks set this error condition to indicate that a lock is held.

The symbolic name for this error is `EBUSY`, `errno=16`.

`device busy`

Cause

You `eject cdrom` and you receive the message `device busy`. This could be the result of a number of problems. Below is a list of things that you can check and do to allow ejection of the cd from the device.

Action

Ensure that the current directory is not somewhere in the CD:

```
% cd
%eject cdrom
```

Step B: As `root`

```
# cd /etc/init.d
# ./volmgt stop
# eject cdrom
```

If this works

```
# ./volmgt start
```

If this does not work go to step B.

Step C: As `root`

```
# fuser /cdrom
```

Kill any processes that you feel that you have already terminated. A note of caution: If this is a nfs-mounted cdrom and there are other users who access this drive, make sure you know what process you are killing and why.

```
# ./volmgt stop
#  ps -ef | grep vold
```

If vold still exists kill the process.

```
#  eject cdrom
```

If this does not work:

```
#  cd /vol
```

Make sure that `dev`, `dsk`, `rdsk`, `rmt` are in the directory. If not, most possibly your `/vol` directory is corrupt and a reboot may be needed for proper rebuild.

Step D: The last three options are: 1) Reboot. 2) If the cd drive is external to the system, try power cycling the drive and pressing the eject button. 3) If all else fails and the cdrom is external, on the right hand side of the eject button is a small hole into which you can insert a small straight device which forces manual ejection of the caddy.

/dev/rdsk/*string*: CAN'T CHECK FILE SYSTEM.

Cause

The system cannot automatically clean (preen) this filesystem because it appears to be set up incorrectly or is having hard disk problems. This message asks that you run `fsck`(1M) manually, since data corruption might already have occurred.

Action

Run `fsck` to clean the filesystem in question. See the message "/dev/rdsk/*int*: UNEXPECTED INCONSISTENCY; RUN fsck MANUALLY" for proper procedures.

/dev/rdsk/*string*: UNEXPECTED INCONSISTENCY; RUN fsck MANUALLY.

Cause

At boot time the `/etc/rcS` script runs the **`fsck`**(1M) command to check the integrity of filesystems marked "fsck" in `/etc/vfstab`. If **`fsck`**(1M) cannot repair a filesystem automatically, it interrupts the boot procedure and produces this message. When **`fsck`**(1M) gets into this state, it cannot repair a filesystem without losing one or more files, so it wants to defer this responsibility to you, the administrator. Data corruption has probably already occurred.

Action

First run `fsck -n` on the filesystem, to see how many and what type of problems exist. Then run **`fsck`**(1M) again to repair the filesystem. If you have a recent backup of the filesystem, you can generally answer "y" to all the **`fsck`**(1M) questions. It's a good idea to keep a record of all problematic files and inode numbers for later reference. To run **`fsck`**(1M) yourself, specify options as recommended by the boot script. For example:

```
# fsck /dev/rdsk/c0t4d0s0
```

Usually the files lost during **`fsck`**(1M) repair are these that were created just before a crash or power outage, and they cannot be recovered. If you lose important files, you can recover them from backup tapes.

If you don't have a backup, ask an expert to run **`fsck`**(1M) for you.

See Also

For more information on file checking, see the section on checking filesystem integrity in the *System Administration Guide, Volume I.*

Directory not empty

Cause

The directory operation that was attempted, such as directory removal with **`rmdir`**(1), can be performed only on an empty directory.

Action

To remove the directory, first remove all the files that it contains. A quick way to remove a non-empty directory hierarchy is with the `rm -r` command.

Technical Notes

The symbolic name for this error is `ENOTEMPTY`, `errno=93`.

diskN not unique

Cause

During boot, system displays `disk0 not unique`. The error happens before the kernel loads.

Action

There are more than 1 `devalias` entries for `disk0`. Use `devalias` at the `OK` prompt to see the entries.

To remove the duplicate, run the following command at the `OK` prompt:

```
nvunalias disk0
```

and reset the system.

Disc quota exceeded

Cause

The user's disk limit has been exceeded on a user filesystem, usually because a file was just created or enlarged beyond the limit. This almost always refers to a magnetic disk, and not to an optical disc. Any data created after this condition occurs will be lost.

Action

The user can delete files to bring disk usage under the limit, or the server administrator can use the **`edquota`**(1M) command to increase the user's disk limit.

Technical Notes

The symbolic name for this error is `EDQUOT`, `errno=49`.

driver is already installed

Cause

Added the Sunpc 4.1 package and then necessary patches (102924). When trying to run `sunpc_install`, got the error message. **`prtconf`**(1M) shows the driver is not attached, and **`modinfo`**(1M) displays 4 modules.

Tried to remove the package and back out the patch. Then reinstalled, but still received the same error.

Action

Sunpc had previously been installed on the system. When removing the package with the **`pkgrm`**(1M) command, not all components were removed, because **`pkgrm`**(1M) is not aware of changes made by the `sunpc_install` script.

To resolve this problem it is necessary to remove sections pertaining to Sunpc in the files: `/etc/devlink.tab`, `/etc/driver_aliases`, and `/etc/rc2.d/S10storekernname`, and then reinstall the package.

DUMP: Cannot open dump device ‘/dev/rdsk/c2t0d0s1’: Permission denied

Cause

When using **`ufsdump`**(1M) as user `sys` (UID 3) on a disk drive in a SSA, the **`ufsdump`**(1M) command fails with the message.

Action

The permissions on the ssd ’instance path’ for disk in an SSA are created with `600` permissions. They should be `0640` for a non-root user to be able to read them. For example,

```
# ls -lL /dev/rdsk/c2t0d0s1
crw-------   1 root     sys      192,241 Jul 10  1996 /dev/rdsk/c2t0d0s1
```

Change it so it reads:

```
crw-r-----   1 root     sys      192,241 Jul 10  1996 /dev/rdsk/c2t0d0s1
```

You might also want to add the following line

```
 ssd:* 0640 root sys
```

to the `/etc/minor_perm file`, so subsequently added arrays do not have the same problem.

dumptm: Cannot open '/dev/rmt/*string*': Device busy

Cause

During filesystem backup, the `dump` program cannot open the tape drive because some other process is holding it open.

Action

Find the process that has the tape drive open, and either **`kill`**(1) the process or wait for it to finish.

```
# ps -ef | grep /dev/rmt
# kill -9 processID
```

DUP/BAD I=i OWNER=o MODE=m SIZE=s MTIME=t FILE=f REMOVE?

Cause

During phase 1, **fsck**(1M) found duplicate blocks or bad blocks associated with the file or directory specified after FILE=whose inode number appears after I= (with other information).

Action

To remove this file or directory, answer yes. If you end up removing more than a few files in this manner, data loss will result, so it might be preferable to restore the filesystem from backup tapes.

See Also

For more information on checking filesystems, see the section on checking filesystem integrity in the *System Administration Guide, Volume I.*

int DUP I=*int*

Cause

Upon detecting a block that is already claimed by another inode, **fsck**(1M) prints the duplicate block number and its containing inode (after I=).

Action

In **fsck**(1M) phases 2 and 4, you will decide whether or not to clear these bad blocks. Before committing to repair with **fsck**(1M), you could determine which file contains this inode by passing the inode number to the **ncheck**(1M) command:

```
# ncheck -inum filesystem
```

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

"E"

ENOMEM The available data space is not large enough to accommodate the shared memory segment

Cause

`ENOMEM` errors occur after 80 segments have been allocated by Lotus Notes.

Action

The design and implementation of Solaris ISM (Intimate Shared Memory) is what caused the `ENOMEM` failures, from the Lotus Notes application, besause of the limit reached on the number of shared memory segments that can be attached to a particular process.

The limit occurs because all shared memory segments are attached in the Intimate Shared Memory (ISM) mode courtesy of a system variable they have set in the system file called `shmsys:share_page_table`.

When a shared memory segment is attached in ISM mode, the OS locks that segment into physical memory and arranges the virtual/physical address mappings such that only one copy of the mapping information is shared amongst all attaching processes. To accomplish this, the OS requires the virtual starting address of the segment be aligned on a 16 Meg (hex 0x1000000) = 16777216-bytes address boundary.

The NULL address lets the system decide what virtual address the segment should be attached at. The system also assigns addresses 0x3000000 apart unless forced to attach addresses at 0x1000000 apart.

Doing a few calculations, a sun4d could create and attach up to 220 1-Meg ISM segments and a sun4m could create and attach up to 235 1-Meg ISM segments, providing the segments were 0x1000000 apart.

Given that ISM is what causes the limit, what can we do about it?

First, the limit only gives Lotus Notes the ability to attach a total of 80 Meg of shared memory total. By increasing the segment size to 10 Meg, as Lotus has already recommended, 8 ISM segments will take care of the load previously needing 80 1-Meg segments. The load could conceivably grow to 800-meg now without running into the ISM addressing limit.

Secondly, we could have turned off the `share_page_table` (ISM) flag. This would give a sun4m the ability to create in excess of 3000 1-Meg segments. The problem here is that ISM does improve the performance of shared memory accesses and if your customer intends to move up to 2.5.x, ISM is required to get around another set of problems that were discovered with shared memory loads of this kind.

Thirdly, Lotus could change the Notes server so that it kept track of the attach addresses and always attached at 0x1000000 boundary addresses instead of letting the system default to the 0x3000000 address boundary. As I've already shown, this would allow a Notes server to grow to 235 segments on a sun4m.

error 13

Cause

Diskless client boot gave NFS mount error 13 Diskless client boot failed with error: nfs mount failed: permission denied error 13

Cause

Diskless client fails to boot, NFS error 13 Diskless client fails to boot giving the error message: nfs error 13

error 15 initializing

Cause

Bad /boot or 4.1 on ss2 - level 15 interrupt

Error 76

Cause

This error is RFS specific. This is a way for the server to tell the client that a process has transferred back from mount point.

Technical Notes

The symbolic name for this error is `EDOTDOT`, `errno=76`.

Error 88

Cause

Illegal byte sequence. Handle multiple characters as a single character.

Technical Notes

The symbolic name for this error is `EILSEQ`, `errno=88`.

error: DPS has not initialized or server connection failed

Cause

This message appears when trying to run AnswerBook with a generic X11 window server or on a generic X terminal.

Action

Running AnswerBook requires Display PostScript (DPS), or a NeWS server, or the Adobe DPS NS remote display software. In addition, a complete LaserWriterII Type-1 font set (including Palatino) should be installed on the X server. To find out if your X server has DPS, run *xdpyinfo(1)* to verify the presence of an "Adobe-DPS-Extension" line. X servers without this line don’t know about DPS.

Error: Error adding OS service Solaris 2.6 sparc sun4u:

Cause

While trying to add OS services to a newly installed Solaris 2.6 system using Solstice Adminsuite 2.3, the process fails with the following error message:

```
Error: Error adding OS service Solaris 2.6 sparc sun4u:
inconsistent revision, installed package SUNWpppk revision 3.0.1
does not match revision 11.6.0,REV=1997.07.15.21.46 for sparc
architecture.
```

This is caused by the optional Solstice PPP 3.0.1 packages from the "Solaris Server Intranet Extension" CD-ROM installed on the system.

Action

The workaround is to remove the PPP 3.0.1 packages and replace them with the PPP packages off of the Solaris 2.6 release CD-ROM. For example:

```
# pkgrm SUNWlicsw SUNWlit SUNWpppk SUNWpppm SUNWpppr SUNWppps SUNWpppu
:
:  {package remove info}
:
# cd /cdrom/cdrom0/s0/Solaris_2.6/Product
# pkgadd -d . SUNWapppr SUNWapppu SUNWpppk
:
:  {package add info}
:
```

then use adminsuite to add the OS services, which should then work without error.

NOTE: If the Solstice PPP 3.0.1 package is configured and currently in use on the system, the user should save any of the previously entered PPP configuration info so that it may be restored after the OS services have been installed. (**pkgrm**(1M)the 3 ppp packages installed from the 2.6 release CD, and **pkgadd**(1M) all of the ppp packages from the Intranet Extension cdrom again, then redo config.). If the Solstice PPP 3.0.1 package was not used on the system, there is no reason to reinstall it. Use `/usr/bin/pkginfo` to check the installed packages.

This is documented in Chapter 9 of the *Solaris Server Intranet Extension Installation and Release Notes Solaris 2.6* manual.

Error Host Unknown:

Cause

On Windows95, running PC-NFSpro2.0, use **ping**(1M) to reach another computer on the network. **ping**(1M) returns `Host Unknown`.

Cause: Name services are not set up correctly.

Action

1: Click the Windows 95 Start button, point to `Programs`, point to `PC-NFSpro`, then click `Configuration`.

2: Click `TCP/IP` and make sure all settings are entered correctly.

3: If NIS is enabled click `Configure NIS` and make sure the NIS domain and server names are correct.

4: If DNS is enabled, click `Configure DNS` and make sure the DNS domain and server names are correct.

5: Click on `edit hosts` and add the name and IP address of the machine you are trying to **ping**(1M), along with that of your authentication server.

If you make any changes, click `OK`, then click `Save` and `Exit` on the Configuration dialog box. Shut down and restart Windows95.

ERROR: missing file arg (cm3)

Cause

An attempt was made to run some **sccs**(1) operation that requires a filename, such as `create`, `edit`, `delget`, or `prt`.

Action

Supply the appropriate filename after the SCCS operation.

ERROR [SCCS/s.*string*]: ‘SCCS/p.*string*’ nonexistent (ut4)

Cause

An attempt was made to **sccs**(1) `edit` or `sccs get` a file that is not yet under SCCS control.

Action

Run **sccs**(1) `create` on that file to place it under SCCS control.

ERROR [SCCS/s.*string*]: writable ‘*string*’ exists (ge4)

Cause

An attempt was made to **sccs**(1) `edit` a file that is writable, probably because it is already checked out.

Action

Run **sccs**(1) `info` to see who has the file checked out. If it is you, go ahead and edit it. If it is somebody else, ask that person to check in the file.

Error: you don’t have a license to run this program

Cause

Customer tries to mount the `/export` file system with Volume Manager 2.1.1, getting the message.

Action

Run `vxserial -p` to print the available volume manager licenses in the system.

Also, check the `/etc/vfstab` file to make sure that the filesystem is not a `vxfs` filesystem.

`esp0: data transfer overrun`

Cause

When a user tries to mount a CD-ROM on a third-party CD drive, **`mount`**(1M) fails with the above error, followed by the `sr0: SCSI transport failed` message. The CD drive probably comes from a vendor unknown to the system.

Action

Third-party CD drives generally have an 8192 block size, as opposed to the 512 block size on supported Sun drives. Check with the vendor to see if any special configuration is possible to allow the drive to operate on a Sun workstation.

`Event not found`

Cause

This C shell message indicates that a user tried to repeat a command from the history list, but that command or number does not exist in the list.

Action

Run the C shell **`history`**(1) command to display recent events in the history list. If a user often tries to run commands that have disappeared from the history list, make the list longer by setting **`history`**(1) to a higher value.

See Also

For more information about the C shell, see **`csh`**(1).

EXCESSIVE BAD BLKS I=*int* CONTINUE?

Cause

During phase 1, **fsck**(1M) found more than 10 bad (out-of-range) blocks associated with the specified inode number.

Action

With this many bad blocks, it might be preferable to restore the filesystem from backup tapes.

See Also

For more information on bad blocks, see the section on checking filesystem integrity in the *System Administration Guide, Volume I*. If you are using the AnswerBook, "bad blocks" is a good search string.

EXCESSIVE DUP BLKS I=*int* CONTINUE?

Cause

During phase 1, **fsck**(1M) found more than 10 duplicate (previously claimed) blocks associated with the specified inode number.

Action

With this many duplicate blocks, it might be preferable to restore the filesystem from backup tapes.

See Also

For more information on blocks, see the section on checking filesystem integrity in the *System Administration Guide, Volume I*. If you are using the AnswerBook, "bad blocks" is a good search string.

Exec format error

Cause

This often happens when trying to run software compiled for different systems or architectures, such as when executing Solaris 2 programs on a SunOS 4.1 system, or when trying to execute SPARC-specific programs on an x86 machine. On a Solaris 2 system, it can also occur if the Binary Compatibility Package was not installed.

Action

Make sure that the software matches the architecture and system you're using. The **`file`**(1) command can help you determine the target architecture. If you're using SunOS 4.1 software on a Solaris 2 system, make sure that the Binary Compatibility Package is installed. You can check for it using this command:

```
$ pkginfo | grep SUNWbcp
```

Technical Notes

A request was made to execute a file that, although it has the appropriate permissions, does not start with a valid format.

The symbolic name for this error is `ENOEXEC`, `errno=8`.

See Also

See the **`a.out`**(4) man page for a description of executable files.

"F"

failed to initialize adapter

Cause

Using an Adaptec AHA-154x Cx SCSI HBA during installation of Solaris 2.x x86, you may see the message during the mdb device probe that says

`failed to initialize adapter` after the probe has correctly identified the card. There are a variety of reasons for this error, but in all cases the error is because of misconfiguring the card.

Action

To correct the problem, press `Ctrl-a` during boot of the computer to enter the 154x BIOS configuration utility. Choose the `Configure/View Host Adapter Settings` option, then press the F6 key to return the adapter to its factory default settings.

After doing this, reconfigure the adapter per the instructions contained in the x86 Device Configuration Guide or Driver Update Guide if applicable. It is especially important that the adapter be configured to use DMA 6. Note that it defaults to DMA 5 and must be changed.

`fbconsole: ioctl SRIOCSREDIR: Device Busy.`

Cause

When starting Openwindows from the command line, the following error message is echoed on the Solaris "Welcome" screen:
`fbconsole: ioctl SRIOCSREDIR: Device Busy`

Once inside Openwindows, The following message is displayed in the background windows and when starting `cmdtool -C`:

```
SYSTEM WARNING: Object 0x340f8, Device busy, ioctl SRIOCSREDIR
returned -1, attempt to make tty the console failed (Tty package)
```

Action

Openwindows was probably started in the background (using the "&"). Exit Openwindows, and run the command in foreground:
`/usr/openwin/bin/openwin`

If this doesn't help, then perhaps some daemon or process is "holding" the console. Type the command: `fuser /dev/console`.

A list of process id's is returned. Examine these processes to determine if an application has hold of the console (using the **ps**(1) command, will help).

fd0: unformatted diskette or no diskette in the drive

Cause

This message appears on the system console to indicate that the floppy driver **fd**(4) could not read the label on a diskette. Usually this is either because a new diskette has not yet been formatted, or a formatted diskette has become corrupted. This message often appears along with "read failed" and "bad format" messages after **volcheck**(1) is run.

Action

If you are certain that the diskette contains no data, run `fdformat -d` to format the diskette in DOS format. (You can also format a diskette in UFS format if you like, although then it cannot be transported to most other systems.) When the diskette is formatted, you can write on it, if it was not corrupted beyond repair.

File descriptor in bad state

Cause

Either a file descriptor refers to no open file or a read request was made to a file that is open only for writing.

Technical Notes

The symbolic name for this error is `EBADFD`, `errno=81`.

File exists

Cause

The name of an existing file was mentioned in an inappropriate context. For example, establishing a link to an existing file, or overwriting an existing file are not allowed when the **csh**(1) `noclobber` option is set.

Action

Look at the names of files in the directory, then try again with a different name or after renaming or removing the existing file.

Technical Notes

The symbolic name for this error is `EEXIST`, `errno=17`.

File locking deadlock

Cause

This is a programming problem, in some cases unavoidable.

Action

All a user can do is restart the program and hope deadlock does not reoccur.

Technical Notes

In the file locking subsystem, two processes tried to modify some lock at the same time. In the multithreading subsystem, two threads became deadlocked and could not continue. When a program using the threads library encounters this error, it should restart the deadlocked threads.

The symbolic name for this error is `EDEADLOCK`, `errno=56`.

filemgr: mknod: Permission denied

Cause

File Manager issues this message and fails to come up whenever the `/tmp/.removable` directory is owned by another user and is not 1777 mode. This can happen, for example, when multiple users share a workstation.

Action

Have the original owner change the mode ((**chmod**(1)) of this file back to 1777, its default creation mode. Rebooting the workstation also resolves this problem.

Technical Notes

This is a known problem that was fixed in Solaris 2.4.

File name too long

Cause

The specified file name has too many characters.

Action

If a file name or path name component is too long, devise a shorter name. If the total path name is longer than PATH_MAX characters, first change to an intermediate directory, then specify a shorter path name. Newly-created data will be lost unless written to another file with a shorter name.

Technical Notes

In a UFS or NFS-mounted UFS filesystem, the length of a path name component exceeds MAXNAMLEN (255) characters, or the total length of the path name exceeds PATH_MAX (1024) characters. In a System V filesystem, the length of a path name component exceeds NAME_MAX (14) characters while no-truncation mode is in effect. These values are defined in the /usr/include/limits.h file.

The symbolic name for this error is ENAMETOOLONG, errno=78.

file system full

Cause

During login file system full errors are seen and login fails with the message No utmpx entry.

See Also

See `No utmpx entry`, below.

FILE SYSTEM STATE IN SUPERBLOCK IS WRONG; FIX?

Cause

The **`fsck`**(1M) command has just checked a filesystem, and has determined that the filesystem is clean. The filesystem's superblock, however, still thinks the filesystem is "dirty" in some way.

Action

If you believe that the filesystem is adequately repaired, answer yes to mark the filesystem as clean.

Technical Notes

Different "dirty" filesystem types are listed in `/usr/include/sys/fs/ufs_fs.h`, and include `FSACTIVE`, `FSBAD`, `FSFIX`, `FSLOG`, and `FSSUSPEND`.

See Also

For more information on superblocks, see the section on checking filesystem integrity in the *System Administration Guide, Volume I*. If you are using the AnswerBook, "bad superblock" is a good search string.

File table overflow

Cause

The kernel file table is full because too many files are open on the system. Temporarily, no more files can be opened. New data created under this condition will probably be lost.

Action

Simply waiting often gives the system time to close files. However, if this message occurs often, reconfigure the kernel to allow more open files. To increase the size of the file table in Solaris 2, increase the value of `maxusers` in the `/etc/system` file. The default `maxusers` value is the amount of main memory in MB, minus 2.

Technical Notes

The symbolic name for this error is `ENFILE`, `errno=23`.

File too large

Cause

The file size exceeded the limit specified by **`ulimit`**(1), or the file size exceeds the maximum supported by the file system. New data created under this condition will probably be lost.

Action

In the C shell, use the **`limit`**(1) command to see or set the default file size. In the Bourne or Korn shells, use the `ulimit -a` command. Even when the shells claim that the file size is unlimited, in fact the system limit is `FCHR_MAX` (usually 1 gigabyte).

Technical Notes

The symbolic name for this error is `EFBIG`, `errno=27`.

FREE BLK COUNT(S) WRONG IN SUPERBLK SALVAGE?

Cause

During phase 5, **`fsck`**(1M) detected that the actual number of free blocks in the filesystem did not match the superblock's free block count. The **`df`**(1M) command accesses this free block count when measuring filesystem capacity.

Action

Generally you can answer yes to this question without harming the filesystem.

See Also

For more information on superblocks, see the section on checking filesystem integrity in the *System Administration Guide, Volume I*. If you are using the AnswerBook, "bad superblock" is a good search string.

fsck: Can't open /dev/dsk/*string*

Cause

The **fsck**(1M) command cannot open the disk device, because although a similar filesystem exists, the partition specified does not.

Action

Run the **mount**(1M) or the *format*(1M) command to see what filesystems are configured on the machine. Then run **fsck**(1M) again on an existing partition.

fsck: Can't stat /dev/dsk/*string*

Cause

The **fsck**(1M) command cannot open the disk device, because the specified filesystem does not exist.

Action

Run the **mount**(1M) or the **format**(1M) command to see what filesystems are configured on the machine. Then run **fsck**(1M) again on an existing filesystem.

ftp: ftp/tcp: unknown service

Cause

The user was getting the error. User was using no naming service and the services file looked fine. User could FTP as `root` but not as a normal user.

Action

Permissions on the `/etc/services` file were wrong. User changed them to read access for everyone (644) to correct the problem.

fw_ipinput: q fc5fddc0:illegal interface

Cause

The FW-1 kernel module displays the error message when a new network interface has been added to the FW-1 system while `fwd` is running.

Action

To resolve this problem, run the following to reinstall the FW kernel and reinstall the security policy:

```
# fw ctl uninstall
# fw ctl install
# fw fetch localhost
```

fwm: no license

Cause

Firewall-1, version 2.1 and produces the message when the `fwstart` command is issued or `fwm` is started from the command line.

There are two possible reasons for this.

The first is when a firewall module is installed without a control station on the same machine, the messages are displayed on the console (under Unix) or in the event log (under WinNT)

The second is that the messages may be legitimate. You may find that `fwm` has not started and you cannot do some crucial tasks. One problem may be that the license is issued for the wrong hostid.

Action

Check that the license daemon is running on the server. Then...

Case one: Workaround: Ignore the messages. Solution: Upgrade to 2.1c or above.

Case two: To check for a misassigned license, run the command **`hostid`**(1). Your `hostid` is displayed.

Now run the command `fw printlic`. You will see output like this...

```
This is FireWall-1 Version 2.1
Type            Expiration Features
id-649f152b  never     stdlight
```

The first field should list the correct `hostid`. Also check the expiration date and the features. A list of what is included with the features is provided in INFODOC 13215. If you find any inconsistencies, call the Sun License and Password Center and get a license reissued . Have you hostid and serial number ready.

"G"

giving up

Cause

This message appears in the SCSI log to indicate that a read or write operation has been retried until it timed out. With SCSI disk the timeout period is usually 30 seconds; with tape the period is usually 20 attempts. Timeout periods are generally coded into the drivers.

Action

Check that all SCSI devices are connected and powered on. Make sure that SCSI target numbers are correct and not in conflict. Verify that all cables are no longer than six meters, total, and that all SCSI connections are properly terminated.

Technical Notes

The **scsi_log**(9F) routine usually displays messages on the system console and in the /var/adm/messages file. Run the **dmesg**(1M) command to see the most recent message buffer.

Graphics Adapter device /dev/fb is of unknown type

Cause

The /dev/fb driver is either missing or corrupted.

Action

See "InitOutput: Error loading module for /dev/fb" for details.

group.org_dir: NIS+ servers unreachable

Cause

This is the second of three messages that an NIS+ client prints when it cannot locate an NIS+ server on the network.

Action

See the message "hosts.org_dir: NIS+ servers unreachable" for details.

"H"

hang console

Cause

Console hangs - but all other operations are working, including **rlogin**(1) and **telnet**(1). Rebooting the system (via a remote shell) clears the problem.

This problem occurs if another window is opened with the `-C` option, causing the console to hang. The other window could be another cmdtool window, shelltool window, or even an xterm window. Only one console window can be active at a time.

Action

The window / process that is causing the problem can be located by using the **ps**(1) command (`aux`w options may be necessary). The process can then be killed. Eliminate the console window running with -C, and control returns to the 'real' console.

Machine hung in reboot process: when the user is booting the machine, it hangs at checking filesystems.

A possible workaround is: 1. Boot miniroot from tape or CD-ROM, 2. `mkdir mnt`, 3. Mount the root partition to some mountpoint, i.e. /mnt, 4. Change directory to `/mnt/dev`, 5. Check to see if the console is located in the, 6. `mnt/dev` directory, 7. If not, make the device std.: `MAKEDEV std`, 8. Halt the system and reboot.

/home/*string*: No such file or directory

Cause

An attempt was made to change to a user's home directory, but either that user does not exist or the user's fileserver has not shared (exported) that filesystem.

Action

To check on the existence of a particular user, run the **ypmatch**(1) or **nismatch**(1) command, specifying the user name and then the **passwd**(4) map.

To export filesystems from the remote fileserver, become superuser on that system and run the **share**(1M) command with the appropriate options. If that system is sharing (exporting) filesystems for the first time, also invoke `/etc/init.d/nfs.server start` to begin NFS service.

See Also

For more information on sharing filesystems, see the **share_nfs**(1M) man page.

Host is down

Cause

A transport connection failed because the destination host was down. For example, mail delivery was attempted over several days, but the destination machine was not available during any of these attempts.

Action

Report this error to the system administrator for the host. If you are the person responsible for this system, check to see if the machine needs repair or rebooting.

Technical Notes

This error results from status information delivered by the underlying communication interface. If there is no known connection to the host, a different message usually results. See "No route to host" for details.

The symbolic name for this error is `EHOSTDOWN`, `errno=147`.

host name configuration error

Cause

This is an old **`sendmail`**(1M) message, which replaced "I refuse to talk to myself" and is now replaced by the "Local configuration error" message.

Action

See the message "554 *string*... Local configuration error" for details.

hosts.org_dir: NIS+ servers unreachable

Cause

This is the third of three messages that an NIS+ client prints when it cannot locate an NIS+ server on the network.

Action

If other NIS+ clients are behaving normally, check the Ethernet cabling on the workstation showing this message. On SPARC machines, disconnected network cabling also produces a series of "no carrier" messages. On x86 machines, the NIS+ messages might be your only indication that network cabling is disconnected.

If many NIS+ clients on the network are giving this message, go to the NIS+ server in question and reboot or repair it, as necessary. When the server machine is back in operation, NIS+ clients will give an "NIS server for domain OK" message.

"I"

I can’t read your attachments. What mailer are you using?

Cause

The SunView *mailtool(1)* and pre-3.3 OpenWindows *mailtool(1)* produce this message when they cannot cope with an attachment. The attachment is probably in MIME (Multipurpose Internet Mail Extensions) format, using `base64` encoding.

Action

To read a mail message containing MIME attachments, use *mailtool(1)* from Solaris 2.3 or later. If you are running an earlier version of Solaris, **`rlogin`**(1) to a later version of Solaris, set the `DISPLAY` environment variable back to the first system, and run *mailtool* remotely. If those options prove impossible, ask the originator to send the message again using *mailtool(1)*, or using the CDE `dtmail` compose File->SendAs->SunMailTool option.

Technical Notes

Standard MIME attachments with base64 encoding, for example, produce this message and fail to display in older *mailtool(1)*s.

See Also

Look into using `metamail`, available on the Internet, which allows you to send and receive MIME attachments.

Identifier removed

Cause

This message indicates an error in a System V IPC facility. Most likely a file associated with messaging, semaphores, or shared memory was deleted from the filesystem where it had been created.

Technical Notes

This error is returned to processes that resume execution after the removal of an identifier from the file system's name space. See **msgctl**(2), **semctl**(2), and **shmctl**(2) for details.

The symbolic name for this error is EIDRM, errno=36.

ie0: Ethernet jammed

Cause

This message can appear on SPARCservers or x86 machines with an Intel 82586 Ethernet chip. It indicates that 16 successive transmission attempts failed, causing the driver to give up on the current packet.

Action

If this error occurs sporadically or at busy times, it probably means that the network is saturated. Wait for network traffic to clear. If bottlenecks arise frequently, think about reconfiguring the network or adding subnets.

Another possible cause of this message is a noise source somewhere in the network, such as a loose transceiver connection. Use **snoop**(1M) or a similar program to isolate the problem area, then check and tighten network connectors as necessary.

ie0: no carrier

Cause

This message can appear on SPARCservers or x86 machines with an Intel 82586 Ethernet chip. It indicates that the chip has lost input to its carrier detect pin while trying to transmit a packet, causing the packet to be dropped.

Action

Check that the Ethernet connector is not loose or disconnected. Other possible causes include an open circuit somewhere in the network and noise on the carrier detect line from the transceiver. Use **snoop**(1M) or a similar program to isolate the problem area, then check the network connectors and transceivers, as needed.

ifconfig: bad address

Cause

System fails to boot with error message: `ifconfig: bad address`. Upon coming up to multiuser `ifconfig -a` indicate:

```
le0: flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST> mtu 1500
 inet 0.0.0.0 netmask 0
```

Once up, command

```
# ifconfig le0 inet hostname
```

succeeds, and all is well.

Action

Check `/etc/hostname.*` for a possible bad entry.

`/etc/hosts` was linked to `/var/named/hosts` and `/var` was a separate file system. Until system comes up in multiuser to mount `/var`, hostname could not be resolved to proper IP address.

ifconfig bad address le0

Cause

Customer installed the recommended 2.5.1 patches. When he booted, `rootuser.sh` presented the following errors:

```
ifconfig bad address le0
le0 arp - revarp failed no rarp replies
bad address hme0
hme0 auto-revarp failed: no rarp replies received.
```

Ip address of interface is set to 0.0.0.0

System fails to: resolve host ip address from `/etc/host` and no other rarp servers responded to the systems request for it's IP address.

Action

The workaround is to put `files` before `dns [NOT FOUND=return]` in `/etc/nsswitch.conf`

This matches bug number 4040423. Its summary is: if `dns [NOTFOUND=return]` appears before `files` in `/etc/nsswitch.conf`, at boot-time `ifconfig` complains about `bad address`. In some cases this can cause the boot to fail.

If pipe/FIFO, don’t sleep in stream head

Cause

Streams pipe error (not externally visible).

Technical Notes

The symbolic name for this error is `ESTRPIPE`, `errno=92`.

Illegal Instruction

Cause

A process has received a signal indicating that it attempted to execute an instruction that is not allowed by the kernel. This usually results from running programs compiled for a slightly different machine architecture. This message is usually accompanied by a core dump, except on read-only filesystems.

Action

If you are booting from CD-ROM or from the net, check README files to make sure you are using an image appropriate for your machine architecture. Run **`df`**(1M) to make sure there is enough swap space on the system; too little swap space can cause this error. If you recently upgraded your CPU to a new architecture, replace your operating system with one that supports the new architecture (an operating system upgrade might be required).

Technical Notes

Sometimes this condition results from a programming error, such as when a program attempts to execute data as instructions. This condition can also indicate device file corruption on your system.

Illegal instruction "0x*hex*" was encountered at PC 0x*hex*

Cause

The machine is trying to boot from a non-boot device, or from a boot device for a different hardware architecture.

Action

If you are booting from the net, check README files to make sure you are using a boot image for that architecture. If you are booting from disk, make sure the system is looking at the right disk, which is usually SCSI target 3. Failing these solutions, connect a CD drive to the system and boot from CD-ROM.

Illegal seek

Cause

Using a pipe ("|") on the command line doesn't work here.

Action

Rather than using a pipe on the command line, redirect the output of the first program into a file and run the second program on that file.

Technical Notes

A call to **lseek**(2) was issued to a pipe. This error condition can also be fixed by altering the program to avoid using **lseek**(2).

The symbolic name for this error is ESPIPE, errno=29.

Image Tool: Unable to open XIL Library.

Cause

This message follows multiple multi-line "XilDefaultErrorFunc" errors, indicating that ImageTool could not locate the X Imaging Library. Many OpenWindows and CDE deskset programs require XIL.

Action

Run **pkginfo**(1) to determine what packages are installed on the system. If the following packages are not present, install them from CD-ROM or over the net: `SUNWxildg`, `SUNWxiler`, `SUNWxilow`, and `SUNWxilrt`.

Inappropriate ioctl for device

Cause

This is a programming error.

Action

Ask the program's author to fix this condition. The program needs to be changed so it employs a device driver that can accept special character device controls.

Technical Notes

The **ioctl**(2) system call was given as an argument for a file that is not a special character device. This message replaces the traditional but puzzling "Not a typewriter" message.

The symbolic name for this error is `ENOTTY`, `errno=25`.

INCORRECT BLOCK COUNT I=*int* (should be *int*) CORRECT?

Cause

During phase 1, **fsck**(1M) determined that the specified inode pointed to a number of bad or duplicate blocks, so the block count should be corrected to the actual number shown.

Action

Generally you can answer yes to this question without harming the filesystem.

See Also

For more information on bad blocks, see the section on checking filesystem integrity in the *System Administration Guide, Volume I.*

index failed:full:index preceded by saveset name

Cause

This is a server which has several clients. It seems when the backup kicks off many the savesets are failing with the message listed below.

```
godzilla                              index failed:full:index
* godzilla:index 2 retries attempted
* godzilla:index sh: save: not found
```

Action

Edit the `/etc/init.d/networker` file and change the `nsrexecd` startup line to include a `-p` option to specify the command search path :

```
(/usr/sbin/nsr/nsrexecd -s masters -p /usr/sbin/nsr )  > /dev/console
```

inetd[*int*]: execv /usr/sbin/in.uucpd: No such file or directory

Cause

This message indicates that the Internet services daemon **inetd**(1M) tried to start up the UUCP service without the UUCP daemon existing on the system.

Action

The SUNWbnuu package must be installed before the machine can run UUCP. Run **pkgadd**(1M) to install this package from the distribution CD-ROM or over the network.

inetd[*int*]: *string*/tcp: unknown service

Cause

This message indicates that the Internet services daemon **inetd**(1M) could not locate the TCP service specified after the first colon.

Action

Check the current machine's /etc/services file, and the NIS services map, to see if the service is described. To start this service, add an appropriate entry into the /etc/services file and possibly the services map as well. Note that NIS+ does not consult the local /etc/services file unless you put "files" right after "nisplus" on the services line of the system's /etc/nsswitch.conf file.

If you do not want to start this service, edit the system's /etc/inetd.conf file and delete the entry that tries to start it up.

See Also

For more information about NIS+, see the *NIS+ and FNS Administration Guide.*

inetd[*int*]: *string*/udp: unknown service

Cause

This message indicates that the Internet services daemon **inetd**(1M) could not locate the UDP service specified after the first colon.

Action

See the message "inetd[*int*]: *string*/tcp: unknown service" for a solution.

inetd: Too many open files

Cause

This message can appear when someone runs a command from the shell or uses a third-party application. The **sar**(1) command does not indicate that the system-wide open file limit has been exceeded.

Action

The probable cause of this message is that the shell limit has been exceeded. The default open file limit is 64, but can be raised to 256.

See the message "Too many open files" for a solution.

INIT: Cannot create /var/adm/utmp or /var/adm/utmpx

Cause

This console message indicates that **init**(1M) cannot write in the /var directory, which is usually part of the / (root) filesystem. Some other messages follow, and the system usually comes up single-user. The problem is often that / or /var is mounted read-only. Sometimes a brief power outage leaves the system believing that many filesystems are still mounted.

Action

If `/var` is a separate filesystem on the machine, and is not yet mounted, mount it now. If the filesystem containing `/var` is mounted read-only, remount it read-write with a command similar to this:

```
# mount -o rw,remount /
```

Then type Control-d and try to bring up the system multi-user. If that fails, the root filesystem is probably corrupted. Run **`fsck`**(1M) on the root filesystem, halt the machine, power cycle the CPU, and wait for the system to reboot. Should this problem still occur, restore the root filesystem from backup tapes, or re-install the system from net or CD-ROM to replace the root filesystem.

`InitOutput: Error loading module for /dev/fb`

Cause

This fatal X server error message indicates that `/dev/fb`, the "dumb frame buffer," is either missing or corrupted. It is usually followed by a "giving up" message and a few *xinit(1)* errors.

Action

If other devices on the system are working correctly, the most likely reason for this error is that the `SUNWdfb` package was removed or never installed. Insert the installation CD-ROM, change to the Solaris_2.x directory, and run the following command to install the packages `SUNWdfbh` and `SUNWdfb` (for your machine architecture):

```
pkgadd -d .
```

If other devices on the system are not working correctly, the system might have a corrupt `/devices` directory. Halt the system and boot using the `-r` (reconfigure) option. The system will run **`fsck`**(1M) if the `/devices` filesystem is corrupted, most likely fixing the problem.

Interrupted system call

Cause

The user issued an interrupt signal (usually Control-c) while the system was in the middle of executing a system call. When network service is slow, interrupting **cd**(1) to a remote-mounted directory can produce this message.

Action

Proceed with your work, this message is purely informational.

Technical Notes

An asynchronous signal (such as interrupt or quit), which a program was set up to catch, occurred during an internal system call. If execution is resumed after processing the signal, it will appear as if the interrupted programming function returned this error condition, so the program might exit with an incorrect error message.

The symbolic name for this error is `EINTR`, `errno=4`.

Invalid argument

Cause

An invalid parameter was specified that the system cannot interpret. For example, trying to mount an uncreated filesystem, printing without sufficient system support, or providing an undefined signal to a **signal**(3C) library function, can all produce this message.

Action

If you see this message when you are trying to mount a filesystem, make sure that you have run **newfs**(1M) to create the filesystem. If you see this message when you are trying to read a diskette, make sure that the diskette was properly formatted with **fdformat**(1), either in DOS format (**pcfs**(7FS)) or as a UFS filesystem. If you see this message while you are trying to print, make sure that the print service is configured correctly.

Technical Notes

The symbolic name for this error is `EINVAL`, `errno=22`.

`Invalid null command`

Cause

This C shell message results from a command line with two pipes (|) in a row or from a pipe without a command afterwards.

Action

Change the command line so that each pipe is followed by a command.

`Invalid_SS_JWS_HOME:no C:\\lib\basicframe.properties`

Cause

Customer is running WinNT 4.0 and goes to lauch Java Workshop - then gets the error message.

Action

Removed software loaded on her system from `marimba` company. The product is `castanet`. Removed the preduct from thesystem and JWS works fine. Apparently, product `Tuner` comes loaded with JDK, and this conflicts with JWS.

Check out www.marimba.com for more details on marimba products.

Another possible solution:

Double-click `jws.exe` within the: `C:\Java-WorkShop\jws\intel-win32\bin\` folder.

I/O error

Cause

Some physical Input/Output error has occurred. If the process was writing a file at the time, data corruption is possible.

Action

First find out which device is experiencing the I/O error. If the device is a tape drive, make sure a tape is inserted into the drive. When this error occurs with a tape in the drive, it is likely that the tape contains an unrecoverable bad spot.

If the device is a floppy drive, an unformatted or defective diskette could be at fault. Format the diskette, or obtain a replacement.

If the device is a hard disk drive, you might need to run **fsck**(1M) and possibly even reformat the disk.

Technical Notes

In some cases this error might occur on a call following the one to which it actually applies.

The symbolic name for this error is `EIO`, `errno=5`.

Is a directory

Cause

An attempt was made to read or write a directory as if it were a file.

Action

Look at a listing of all the files in the current directory and try again, specifying a file instead of a directory.

Technical Notes

The symbolic name for this error is `EISDIR`, `errno=21`.

"J"

java.lang.UnsatisfiedLinkError:

Cause

When trying to start Java Workshop 2.0 (or some other Java applications) on Solaris 2, the following error is displayed:

```
java.lang.UnsatisfiedLinkError: setCursor
at sun.awt.motif.MComponentPeer.initialize(Compiled Code)
at sun.awt.motif.MTextAreaPeer.initialize(Compiled Code)
at sun.awt.motif.MComponentPeer.<init>(Compiled Code)
at sun.awt.motif.MTextAreaPeer.<init>(Compiled Code)
at sun.awt.motif.MToolkit.createTextArea(Compiled Code)
```

Action

The `LD_LIBRARY_PATH` is probably set up to include a Java lib directory that doesn't quite match the java bin command used. For example, on Solaris 2.6: `LD_LIBRARY_PATH = /usr/openwin/lib` results in Java Workshop runing properly. But setting: `LD_LIBRARY_PATH = /usr/java/lib:/usr/openwin/lib` results in the error being displayed, since Java Workshop uses its own version of JDK and the startup process picks up a mixture of versions.

The answer is to not include `/usr/java/lib` in your `LD_LIBRARY_PATH` since it is needed only in rare circumstances, such as if you are using the Java Invocation API.

"K"

kernel read error

Cause

This message appears when **savecore**(1M), if activated, tries to copy a debugging image of kernel memory to disk but cannot read various kernel data structures correctly. Generally this occurs after a system panic has corrupted main memory. Data corruption on the system is possible.

Action

Look at the kernel error messages that preceded this one to try to determine the cause of the problem. Error messages such as BAD TRAP usually indicate faulty hardware. Until the problem that caused the kernel panic is resolved, a kernel core image cannot be saved for debugging.

Killed

Cause

This message is purely informational. If the killed process was writing a file, some data might be lost.

Action

Continue with your work.

Technical Notes

This message from the signal handler or various shells indicates that a process has been terminated with a SIGKILL. However, if you don't see this message and cannot terminate a process with a SIGKILL, you might have to reboot the machine to get rid of that process.

kmem_free block already free

Cause

This is a programming error, probably from a device driver.

Action

Determine which driver is giving this message and contact the vendor for a software update, as this message indicates a bug in the driver.

Technical Notes

This message is from the DDI programming function **kmem_free**(9F), which releases a block of memory at address `addr` of size `siz` that was previously allocated by the DDI function **kmem_alloc**(9F). Both `addr` and `siz` must correspond to the original allocation. If you have source code for the driver, follow **kmem_alloc**(9F) and *kmem_free(p]9F)* in the code to make sure they allocate and free the same chunk of memory.

"L"

last message repeated *int* times

Cause

This message comes from **syslogd**(1M), the facility that prints messages on the console and records them in `/var/adm/messages`. To reduce the log size and minimize buffer usage, `syslog` collapses any identical messages it sees during a 20 second period, then prints this message with the number of repetitions.

Action

Look above this message to see which message was repeated so often. Then consider the repeated message and take action accordingly. If repeated log entries such as `su ... failed` appear, consider the possibility of a security breach.

ld.so.1 fatal: can’t set protection on segment

Cause

Applications have recently begun to fail with this error: `ld.so.1 fatal: can’t set protection on segment`. The failures are random.

Action

This was happening because of the recent introduction of a rogue application that consumed most of the swap space on the system. The other applications, which failed randomly, were doing so because of insufficient swap space to run. The error from `ld.so.1` happened because there was no segment on which to set the protections.

ld.so.1: *string*: fatal: *string*: can’t open file: errno=2

Cause

This message is produced in Solaris 2.5.1 and earlier releases. It is not produced in Solaris 2.6, or later releases.

See the next message, which has the same cause.

Action

See the next message, which can be resolved by the same action.

See Also

For more information about the Linker, see the *Linker and Libraries Guide*.

ld.so.1: *string*: fatal: *string*: open failed: No such file or directory

Cause

This message is produced in Solaris 2.6 and later releases. It is not produced in Solaris 2.5.1, or earlier releases.

This message indicates that the run time linker, **ld.so.1**(1), while running the program specified after the first colon, could not find the shared object specified after the third colon. (A shared object is sometimes called a dynamically linked library.)

Action

As a workaround, set the environment variable LD_LIBRARY_PATH to include the location of the shared object in question, for example:

```
/usr/dt/lib:/usr/openwin/lib
```

Better yet, if you have access to source code, recompile the program using the -R*path* loader option. Using LD_LIBRARY_PATH slows down performance.

See Also

For more information about the Linker, see the *Linker and Libraries Guide.*

ld.so.1: *string*: fatal: relocation error: symbol not found: *string*

Cause

This message is produced in Solaris 2.5.1 and earlier releases. It is not produced in Solaris 2.6, or later releases.

See the next message, which has the same cause.

Action

See the next message, which can be resolved by the same action.

Technical Notes

This error does not necessarily occur when you first bring up an application. It could take months to develop, if ordinary use of the application seldom references the undefined symbol.

See Also

For more information about the Linker, see the *Linker and Libraries Guide*.

`ld.so.1: `*`string`*`: fatal: relocation error: `*`string`*`: `*`string`*`: referenced symbol not found`

Cause

This message is produced in Solaris 2.6 and later releases. It is not produced in Solaris 2.5.1, or earlier releases.

The message from the run time linker **`ld.so.1`**(1) indicates that in trying to execute the application given after the first colon, the specified symbol could not be found for relocation. The message goes on to say in what file the symbol was referenced. Since this is a fatal error, the application terminates with this message.

Action

Run the `ldd -d` command on the application to show its shared object dependencies and symbols that aren't found. Probably your system contains an old version of the shared object that should contain this symbol. Contact the library vendor or author for an update.

Technical Notes

This error does not necessarily occur when you first bring up an application. It could take months to develop, if ordinary use of the application seldom references the undefined symbol.

See Also

For more information about the Linker, see the *Linker and Libraries Guide*.

le0: Memory error!

Cause

This message indicates that the network interface encountered an access time-out from the CPU's main memory. There is probably nothing wrong except system overload.

Action

If the system is busy with other processes, this error can occur frequently. If possible, try to reduce the system load by quitting applications or killing some processes.

Technical Notes

The Lance Ethernet chip timed out while trying to acquire the bus for a DVMA transfer. Most network applications wait for a transfer to occur, so generally no data gets lost. However, data transfer might fail after too many time-outs.

See Also

For more information about the Lance Ethernet chip, see the **le**(7D) man page.

le0: No carrier-- cable disconnected or hub link test disabled?

Cause

Standalone machines with no Ethernet port connection get this error when the system tries to access the network. If the Ethernet cable is disconnected, SPARC machines with the sun4m architecture usually display this message, whereas machines with the sun4c architecture usually display the "le0: No carrier– transceiver cable problem" message instead. If the Ethernet cable is connected, this message could result from a mismatch between the machine's NVRAM settings and the Ethernet hub settings.

Action

If this message is continuous, try to save any work to local disk.

When a machine is configured as a networked system, it must be plugged into the Ethernet with a twisted pair J45 connector.

If the Ethernet cable is plugged in, find out whether or not the Ethernet hub does a Link Integrity Test. Then become superuser to check and possibly set the machine's NVRAM. If the hub's Link Integrity Test is disabled, set this variable to `false`.

```
# eeprom | grep tpe
tpe-link-test?=true
# eeprom 'tpe-link-test?=false'
```

The default setting is `true`. If for some reason `tpe-link-test?` was set to `false`, and the hub's Link Integrity Test is enabled, reset this variable to `true`.

le0: No carrier-- transceiver cable problem?

Cause

Standalone machines with no Ethernet port connection get this error when the system tries to access the network.

Action

If this message is continuous, try to save any work to local disk.

When a machine is configured as a networked system, it must be plugged into the Ethernet with either a twisted pair J45 connector or thicknet 10Base-T connector (depending on the building's Ethernet cable type).

Technical Notes

Older workstations have a thicknet connection on the back instead of a twisted pair Ethernet connection, so they require a thicknet to twisted pair transceiver to translate between cabling types.

level 15 interrupt

Cause

on an SS20

.lib section in a.out corrupted

Cause

Trying to **exec**(2) an **a.out**(4) that requires a static shared library (to be linked in) and there was erroneous data in the `.lib` section of the **a.out**(4). The `.lib` section tells **exec**(2) which static shared libraries are needed. The **a.out**(4) is probably corrupted.

Technical Notes

The symbolic name for this error is `ELIBSCN`, `errno=85`.

LINK COUNT FILE I=i OWNER=o MODE=m SIZE=s MTIME=t COUNT... ADJUST?

Cause

During phase 4, **fsck**(1M) determined that the inode's link count for the specified file is wrong, and asks if you want to adjust it to the value given.

Action

Generally you can answer yes to this question without harming the filesystem.

See Also

For more information on **fsck**(1M), see the section on checking filesystem integrity in the *System Administration Guide, Volume I.*

Link has been severed

Cause

This error occurs when the connection to a remote machine is gone, for example after a remote procedure call is interrupted.

Technical Notes

The symbolic name for this error is `ENOLINK`, `errno=67`.

LL105W: Protocol error detected.

Cause

This error message comes from Lifeline Mail, an unbundled PC compatibility application.

Action

The likeliest cause for this problem is that someone set up a user account without a password. Assign the user a password to solve this problem.

ln: cannot create /dev/fb: Read-only file system

Cause

During device reconfiguration at boot time, the system cannot link to the frame buffer because `/dev` is on a read-only filesystem.

Action

Check that `/dev/fb` is a symbolic link to the hardware frame buffer, such as **`cgsix`**(7D) or **`tcx`**(7D). Ensure that the filesystem containing `/dev` is mounted read-write.

lockd[*int*]: create_client: no name for inet address 0x*hex*

Cause

This lock daemon message usually indicates that the NIS `hosts.byname` and `hosts.byaddr` maps are not coordinated.

Action

Wait a short time for the maps to synchronize. If they don't, take steps to coordinate them.

See Also

For information on updating NIS data, see the section on NIS maps in the *NIS+ and FNS Administration Guide*. If you are using the AnswerBook, "hosts.byaddr" is a good search string.

Login incorrect

Cause

This message from the **`login`**(1) program indicates an incorrect combination of login name and password. There is no way to tell whether what's wrong is the login name, the password, or both. Other programs such as **`ftp`**(1), **`rexecd`**(1M), **`sulogin`**(1M), and **`uucp`**(1C) also give this error under similar conditions.

Action

Check the `/etc/passwd` file and the NIS or NIS+ `passwd` map on the local system to see if an entry exists for this user. If a user has simply forgotten the password, **`su`**(1M) and set a new one with the **`passwd`**(1) *username* command. This command automatically updates the NIS+ `passwd` map, but with NIS you'll need to coordinate the update with the `passwd` map.

The "Login incorrect" problem can also occur with older versions of NIS when the user name has more than eight characters. If this is the case, edit the NIS password file, change the user name to have eight or fewer characters, and then remake the NIS `passwd` map.

If you cannot log in to the system as root, despite knowing the proper password, it is possible that the `/etc/passwd` file is corrupted. Try to log in as a regular user and **su**(1M) to root.

If that doesn't work, see the message "su: No shell" and follow most of the instructions given there. Instead of changing the default shell, make the password field blank in `/etc/shadow`.

lp hang

Cause

On a print server, the queue continues to grow but nothing comes out of the printer. The printer daemon is hung.

Action

Here is a simple procedure for flushing a hung printing queue: 1. Login or switch user to `root`; 2. Issue the **reject**(1M) *printername* command to make sure no one sends any job to the printer; 3. Turn off power to the printer; 4. If the active job appears to be causing the hang, remove it from the print queue with the **cancel**(1) *jobnumber* command, and ask the owner to requeue that print job; 5. Shut down the print queue with the `/usr/lib/lpshut` command; 6. Remove the lock file `/var/spool/lp/SCHEDLOCK` and the temporary files `/var/spool/lp/tmp/*/*`; 7. Turn the printer back on; 8. Restart the print queue with the `/usr/lib/lpsched` command.

See Also

For more information on print queuing, see the *System Administration Guide, Volume II*. If you are using the AnswerBook, "print server" is a good search string.

"M"

Machine is not on the network

Cause

This error is Remote File Sharing (RFS) specific. It occurs when users try to advertise, unadvertise, mount, or unmount remote resources while the machine has not properly started a network connect.

Technical Notes

The symbolic name for this error is `ENONET`, `errno=64`.

mailtool: Can’t create dead letter: Permission denied

Cause

An attempt was made to send a message with *mailtool(1)* from a directory where the user does not have write permission, and the user’s home directory is currently unavailable.

Action

Change to another directory and start *mailtool(1)* again, or use **chmod**(1) to change permissions for the directory (if possible).

mailtool: Could not initialize the Classing Engine

Cause

When a user runs *mailtool(1)* on a remote machine, setting the DISPLAY environment back to the local machine, this message might appear inside a dialog box window. The dialog box goes on to say that the Classing Engine must be installed to use Attachments. This problem occurs because **rlogin**(1) does not propagate the user's environment.

Action

Exit *mailtool(1)* and set your `OPENWINHOME` environment variable to `/usr/openwin`. Then run *mailtool(1)* again. The error message will not appear, and you will be able to use Attachments.

Technical Notes

Classing Engine is a new name for Tool Talk. Earlier versions of *mailtool(1)* said `Tool Talk: TT_ERR_NOMP` instead of Classing Engine.

Mail Tool is confused about the state of your Mail File.

Cause

This message appears in a pop-up dialog box whenever you ask *mailtool(1)* to access messages after another mail reader has modified your inbox. A request follows: "Please Quit this Mail Tool."

Action

Click "Continue" to close the dialog box, then exit *mailtool(1)*. If you continue trying to read mail, messages deleted by the other mail reader will never appear, and *mailtool(1)* will fail to see any new messages.

mail: Your mailfile was found to be corrupted (Content-length mismatch).

Cause

This message comes from **mail**(1) or **mailx**(1)(1) whenever it detects messages with a different content length than advertised. The **mail**(1) program tells you which message might be truncated or might have another message concatenated to it.

Two common causes of content length mismatches are the simultaneous use of different mail readers (such as **mail**(1) and *mailtool(1)*), or using a mail reading program (or an editor) that does not update the Content-Length field after altering a message.

Action

The **mailx**(1) program can usually recover from this error and delineate mail message boundaries correctly. Pay close attention to the message that might be truncated or combined with another message, and to all messages after that one. If a mail file becomes hopelessly corrupted, run it through a text editor to eliminate all Content-Length lines, and ensure that each message has a `From` (no colon) line for each message, preceded by a blank line.

To avoid mailfile corruption, exit from *mailtool(1)* without saving changes when you are currently running **mail**(1) or **mailx**(1).

Machine is not on the network

Cause

This error is Remote File Sharing (RFS) specific. It occurs when users try to advertise, unadvertise, mount, or unmount remote resources while the machine has not properly started a network connect.

Technical Notes

The symbolic name for this error is ENONET, errno=64.

mailtool: Can’t create dead letter: Permission denied

Cause

An attempt was made to send a message with *mailtool(1)* from a directory where the user does not have write permission, and the user’s home directory is currently unavailable.

Action

Change to another directory and start *mailtool(1)* again, or use **chmod**(1) to change permissions for the directory (if possible).

mailtool: Could not initialize the Classing Engine

Cause

When a user runs *mailtool(1)* on a remote machine, setting the DISPLAY environment back to the local machine, this message might appear inside a dialog box window. The dialog box goes on to say that the Classing Engine must be installed to use Attachments. This problem occurs because **rlogin**(1) does not propagate the user’s environment.

Action

Exit *mailtool(1)* and set your `OPENWINHOME` environment variable to `/usr/openwin`. Then run *mailtool(1)* again. The error message does not appear, and you can use Attachments.

Technical Notes

Classing Engine is a new name for Tool Talk. Earlier versions of *mailtool(1)* said `Tool Talk: TT_ERR_NOMP` instead of Classing Engine.

Mail Tool is confused about the state of your Mail File.

Cause

This message appears in a pop-up dialog box whenever you ask *mailtool(1)*(1) to access messages after another mail reader has modified your inbox. A request follows: "Please Quit this Mail Tool."

Action

Click "Continue" to close the dialog box, then exit *mailtool(1)*. If you continue trying to read mail, messages deleted by the other mail reader will never appear, and *mailtool(1)* will fail to see any new messages.

mail: Your mailfile was found to be corrupted (Content-length mismatch).

Cause

This message comes from **mail**(1) or **mailx**(1) whenever it detects messages with a different content length than advertised. The **mail**(1) program tells you which message might be truncated or might have another message concatenated to it.

Two common causes of content length mismatches are the simultaneous use of different mail readers (such as **mail**(1) and *mailtool(1)*), or using a mail reading program (or an editor) that does not update the Content-Length field after altering a message.

Action

The **mailx**(1) program can usually recover from this error and delineate mail message boundaries correctly. Pay close attention to the message that might be truncated or combined with another message, and to all messages after that one. If a mail file becomes hopelessly corrupted, run it through a text editor to eliminate all Content-Length lines, and ensure that each message has a `From` (no colon) line for each message, preceded by a blank line.

To avoid mailfile corruption, exit from *mailtool(1)* without saving changes when you are currently running **mail**(1) or **mailx**(1).

file name may contain holes - can't swap on it.

Cause

A swapfile was created with the command:

```
# mkfile -nv 50m /ab/swap_50mb
```

When the user tried to add the file:

```
# swap -a /ab/swap_50mb
```

It failed with the message:

```
/ab/swap_50mb may contain holes - can't swap on it.
/ab/swap_50mb: Error 0
```

Action

The `-n` option was supported on SunOS 4, but on SunOS 5 (Solaris 2) `-n` works only when the file is to be used by NFS. Local swap files cannot be created with the `-n` option.

mbuf map full

Cause

mbuf allocation

Memory address alignment

Cause

This message can occur when printing large files on a SPARCprinter attached to a SPARCstation 2.

Action

Replace the SPARCstation 2 CPU with one that is at the most recent dash level.

memory leaks

Cause

An application uses up more and more memory, until all swap space is exhausted.

Action

Many developers have found that third party software (such as Purify) can help identify memory leaks in their applications. If you suspect that you have a memory leak, you can use **sar**(1) to check on the Kernel Memory Allocation (KMA). Any driver or module that uses KMA resources, but does not specifically return the resources before it exits, can create a memory leak.

See Also

For more information on memory leaks, see the section on monitoring system activity in the *System Administration Guide, Volume II*. If you are using the AnswerBook, "displaying disk usage" is a good search string. Also, see the section on system resource problems in the *NIS+ and FNS Administration Guide*.

Message too long

Cause

A message sent on a transport provider was larger than the internal message buffer or some other network limit.

Technical Notes

The symbolic name for this error is `EMSGSIZE`, `errno=97`.

mount: /dev/dsk/*string* is already mounted, */string* is busy, or...

Cause

While trying to mount a filesystem, the **mount**(1M) command received a "Device busy" (EBUSY) error code. There are several possible reasons: this /dev/dsk filesystem is already mounted on a different directory, the busy path name is the working directory of an active process, or the system has exceeded its maximum number of mount points (unlikely).

Action

Run /etc/mount to see if the filesystem is already mounted. If not, check to see if any shells are active in the busy directory (did the user **cd**(1) into the directory?), or if any processes in the **ps**(1) listing are active in that directory. If the reason for the error message isn't obvious, try using a different directory for the mount point.

mount: giving up on: */string*

Cause

An existing server did not respond to an NFS mount request, so after retrying a number of times (default 1000), the **mount**(1M) command has given up. Nonexistent servers or bad mount points produce different messages.

Action

If the RPC: Program not registered message precedes this one, the requested mount server probably did not share (export) any filesystems, so it has no NFS daemons running. Have the superuser on the mount server **share**(1M) the filesystem, then run /etc/init.d/nfs.server start to begin NFS service.

If the requested mount server is down or slow to respond, check to see whether the machine needs repair or rebooting.

mount: mount-point */string* does not exist.

Cause

Someone tried to mount a filesystem onto the specified directory, but there is no such directory.

Action

If this is the directory name you want, run **mkdir**(1) to create this directory as a mount point.

mount: the state of /dev/dsk/*string* is not okay

Cause

The system was unable to mount the filesystem that was specified because the super-block indicates that the filesystem might be corrupted. This is not an impediment for read-only mounts.

Action

If you don't need to write on this filesystem, **mount**(1M) it using the `-o ro` option. Otherwise, do as one of the message continuation lines suggests and run **fsck**(1M) to correct the filesystem state and update the super-block.

See Also

For more information on using **fsck**(1M), see the section on checking filesystem integrity in the *System Administration Guide, Volume I.*

Multihop attempted

Cause

This error occurs when users try to access remote resources that are not directly accessible.

Technical Notes

The symbolic name for this error is EMULTIHOP, errno=74.

mbuf map full

Cause

mbuf allocation

Memory address alignment

Cause

This message can occur when printing large files on a SPARCprinter attached to a SPARCstation 2.

Action

Replace the SPARCstation 2 CPU with one that is at the most recent dash level.

memory leaks

Cause

An application uses up more and more memory, until all swap space is exhausted.

Action

Many developers have found that third party software (such as Purify) can help identify memory leaks in their applications. If you suspect that you have a memory leak, you can use **sar**(1) to check on the Kernel Memory Allocation (KMA). Any driver or module that uses KMA resources, but does not specifically return the resources before it exits, can create a memory leak.

See Also

For more information on memory leaks, see the section on monitoring system activity in the *System Administration Guide, Volume II*. If you are using the AnswerBook, "displaying disk usage" is a good search string. Also, see the section on system resource problems in the *NIS+ and FNS Administration Guide*.

Message too long

Cause

A message sent on a transport provider was larger than the internal message buffer or some other network limit.

Technical Notes

The symbolic name for this error is `EMSGSIZE`, `errno=97`.

mount: /dev/dsk/*string* is already mounted, */string* is busy, or...

Cause

While trying to mount a filesystem, the **mount**(1M) command received a "Device busy" (`EBUSY`) error code. There are several possible reasons: this `/dev/dsk` filesystem is already mounted on a different directory, the busy path name is the working directory of an active process, or the system has exceeded its maximum number of mount points (unlikely).

Action

Run `/etc/mount` to see if the filesystem is already mounted. If not, check to see if any shells are active in the busy directory (did the user **cd**(1) into the directory?), or if any processes in the **ps**(1) listing are active in that directory. If the reason for the error message isn't obvious, try using a different directory for the mount point.

mount: giving up on: */string*

Cause

An existing server did not respond to an NFS mount request, so after retrying a number of times (default 1000), the **mount**(1M) command has given up. Nonexistent servers or bad mount points produce different messages.

Action

If the "RPC: Program not registered" message precedes this one, the requested mount server probably did not share (export) any filesystems, so it has no NFS daemons running. Have the superuser on the mount server **share**(1M) the filesystem, then run `/etc/init.d/nfs.server start` to begin NFS service.

If the requested mount server is down or slow to respond, check to see whether the machine needs repair or rebooting.

mount: mount-point */string* does not exist.

Cause

Someone tried to mount a filesystem onto the specified directory, but there is no such directory.

Action

If this is the directory name you want, run **mkdir**(1) to create this directory as a mount point.

mount: the state of /dev/dsk/*string* is not okay

Cause

The system was unable to mount the filesystem that was specified because the super-block indicates that the filesystem might be corrupted. This is not an impediment for read-only mounts.

Action

If you don't need to write on this filesystem, **mount**(1M) it using the `-o ro` option. Otherwise, do as one of the message continuation lines suggests and run **fsck**(1M) to correct the filesystem state and update the super-block.

See Also

For more information on using **fsck**(1M), see the section on checking filesystem integrity in the *System Administration Guide, Volume I*.

Multihop attempted

Cause

This error occurs when users try to access remote resources that are not directly accessible.

Technical Notes

The symbolic name for this error is EMULTIHOP, errno=74.

"N"

Name not unique on network

Cause

Given log name not unique.

Technical Notes

The symbolic name for this error is ENOTUNIQ, errno=80.

named [*pid*]: *hostname*.*domainname* has CNAME and other data (illegal)

Cause

On the DNS server, the error message is displayed.

Action

This error indicates that an alias (CNAME) is associated with another type of DNS record.

The DNS system allow you to set up an alias to a system using the CNAME record. An example of this is:

```
alias1  IN CNAME host1.domain1.
```

The alias `alias1` cannot appear in any other type of record. Only the actual name of the host may be used. So, if you wanted to use this host as a mail exhanger, the record:

```
alias1  IN MX  10  host2.domain1.
```

would be illegal and would produce the error.

Instead, you should use

```
host1  IN MX  10  host2.domain1.
```

This goes for all types of records, including HINFO and A records.

Also, it is possible to get this error without explicitly setting the left hand side of a record. The DNS system defaults the left hand side to the last given left hand side. So you might have the following in a named database file:

```
host1 IN A  123.124.125.126
        IN HINFO Sun Solaris
alias1  IN CNAME host1.domain1.
        IN MX 10 host2.domain1.
```

In this fragment, there is an implied alias1 in the left hand side of the MX record. If the alias was added after the database was in use for a while, the error would suddenly start showing up. Since the MX record was legal until the CNAME was added in front of it. This example could be fixed either by reversing the order of the MX and CNAME records, or explicitly giving the host1 in the lefthand side of the MX record.

/net/*string*: No such file or directory

Cause

A user tried to change directory (for example with **cd**(1)) to a network partition on the system specified after /net/, but this host either does not exist or has not shared (exported) any filesystem.

Action

To gain access to files on this system, try **rlogin**(1).

To export filesystems from the remote system, become superuser on that system and run the **share**(1M) command with the appropriate options. If that system is sharing filesystems for the first time, also run /etc/init.d/nfs.server start to begin NFS service.

Network dropped connection because of reset

Cause

The host you were connected to crashed and rebooted.

Technical Notes

The symbolic name for this error is `ENETRESET`, `errno=129`.

Network is down

Cause

A transport connection failed because it encountered a dead network.

Action

Report this error to the system administrator for the network. If you are the person responsible for this network, check to see why the network is dead and what repairs are necessary.

Technical Notes

This error results from status information delivered by the underlying communication interface.

The symbolic name for this error is `ENETDOWN`, `errno=127`.

Network is unreachable

Cause

An operational error occurred either because there was no route to the network or because negative status information was returned by intermediate gateways or switching nodes.

The returned status is not always sufficient to distinguish between a network that is down and a host that is down. See the "No route to host" message.

Action

Check the network routers and switches to see if they are disallowing these packet transfers. If they are allowing all packet transfers, check network cabling and connections.

Technical Notes

The symbolic name for this error is `ENETUNREACH`, `errno=128`.

`NFS getattr failed for server` *string*`: RPC: Timed out`

Cause

This message appears on an NFS client that requested a service from an NFS server whose hardware is failing. Often the message "NFS read failed" appears along with this message. If the server were merely down or slow to respond, the "NFS server not responding" message would appear instead. Data corruption on the server system is possible.

Action

Because this message usually indicates server hardware failure, initiate repair procedures as soon as possible. Check the memory modules, disk controllers, and CPU board.

See Also

For more information on NFS tuning, see chapter on monitoring network performance in the *System Administration Guide, Volume II*.

nfs mount: Couldn’t bind to reserved port

Cause

This message appears when a client attempts to NFS mount a filesystem from a server that has more than one Ethernet interface configured on the same physical subnet.

Action

Always connect multiple Ethernet interfaces on one router system to different physical subnetworks.

NFS mounted callog file Unsupported.

Cause

After installing Solaris 2.6 on a system, when users try to bring up their calendars either with CDE’s calendar manager (`/usr/dt/bin/dtcm`) or OpenWindow’s calendar (`/usr/openwin/bin/cm`), they see the dialog box:

```
Calendar :Informational - NFS mounted callog file Unsupported.
Your default startup Calendar file appears to be NFS mounted or
a symlink to the same.  This is Not Supported.
   Continue
```

The following error is displayed in the console window when the Continue button is clicked:

```
date time host rpc.cmsd[pid]: rpc.cmsd :
 NFS mounted callog file Not Supported - user@host
date time host rpc.cmsd[pid]: rpc.cmsd :
 NFS mounted callog file Not Supported - user@host
```

The calendars would’ve worked under 2.5.1 or before however.

Action

It has long been known that NFS mounted calendars are not supported in Solaris. Of the calendar can be corrupted when more than one person uses the calendar at the same time. If two `rpc.cmsd` daemons write to the `callog` file at the same time, the file becomes corrupt. However, two `rpc.cmsd` daemons could be run simultaneously through Solaris 2.5.1 even though this isn't a supported configuration.

With Solaris 2.6, this is no longer an option. `rpc.cmsd` does not allow the user to bring up a calendar that is NFS mounted and produces the error message above.

`nfs mount: mount: `*`string`*`: Device busy`

Cause

This message appears when the superuser attempts to NFS mount on top of an active directory. The busy device is actually the working directory of a process.

Action

Determine which shell on the workstation is currently located below the mount point, and change out of that directory. Be wary of subshells (such as **su**(1M) shells) that could be in different working directories while the parents remain below the mount point.

`NFS mount: /`*`string`*` mounted OK`

Cause

While booting, the system failed to mount the directory specified after the first colon, probably because the NFS server involved was down or slow to respond. The mount ran in the background and successfully contacted the NFS server.

Action

This is a purely informative message to let you know that the mount process has completed.

NFS read failed for server *string*

Cause

This is generally a permissions problem. Perhaps a directory or file permission was changed while the client held the file open. Perhaps the filesystem's share or netgroup permissions changed. If the server were down or the network saturated, the "NFS server not responding" message would appear instead.

Action

Log in to the NFS server and check the permissions of directories leading to the file. Make certain that the filesystem is shared with (exported to) the client experiencing an NFS read failure.

See Also

For more information, see the chapter on NFS troubleshooting in the *NFS Administration Guide*.

nfs_server: bad getargs for *int/int*

Cause

This message comes from the NFS server when it recieves a request with unrecognized or incorrect arguments. Typically, it means the request could not be XDR decoded properly. This can result from corruption of the packet over the network, or from an implementation bug causing the NFS client to improperly encode its arguments.

Action

If this message originates from a single client, investigate that machine for NFS client software bugs. If this message appears throughout a network, especially accompanied by other networking errors, investigate the network cabling and connectors.

NFS server *string* not responding still trying

Cause

In most cases this very common message indicates that the system has requested a service from an NFS server that is either down or extremely slow to respond. In some cases this message indicates that the network link to this NFS server is broken, although usually that condition generates other error messages as well. In a few cases this message indicates NFS client set-up problems.

Action

Check the non-responding NFS server to see whether the machine needs repair or rebooting. Encourage your user community to report such problems quickly but only once.

Should this message appear when booting a diskless client, make sure that the client's `/etc/hosts` file and the network naming service (NIS, NIS+, or other `/etc/hosts` files on the network) have been updated.

See Also

For more information, see the chapter on NFS troubleshooting in the *NFS Administration Guide.*

NFS server *string* ok

Cause

This message is the follow-up to the "NFS server not responding" error. It indicates that the NFS server is back in operation.

Action

When an NFS server first comes up, it is busy fulfilling client requests for a while. Be patient and wait for your client system to respond. Making many extraneous requests only further slows the NFS server response time.

NFS *string* failed for server *string*: error *int* (*string*)

Cause

The failed NFS operation could be any one of the following: getattr, setattr, lookup, access, readlink, read, write, create, mkdir, symlink, mknod, remove, rmdir, rename, link, readdir, readdir+, fsstat, fsinfo, pathconf, or commit.

See Also

For more information on NFS, see the *NFS Administration Guide*.

nfs umount: *string*: is busy

Cause

This message appears when the superuser attempts to unmount an active NFS filesystem. The busy point is the working directory of a process.

Action

Determine which shell (or process) on the workstation is currently located in the remotely mounted filesystem, and change (**cd**(1)) out of that directory. Be wary of subshells (such as **su**(1M) shells) that could be in different directories while the parent shells remain in the NFS filesystem.

NFS write error on host *string*: No space left on device.

Cause

This console message indicates that an NFS-mounted partition has filled up and cannot accept writing of new data. Unfortunately, software that attempts to overwrite existing files will usually zero out all data in these files. This is particularly destructive on NFS-mounted `/home` partitions.

Action

Find the user or process that is filling up the filesystem, and stop the out-of-control process as soon as you can. Then delete files as necessary to create more space on the filesystem (large **core**(4) files are good candidates for deletion). Have users write any modified files to local disk if possible. If this error occurs often, redistribute directories to ease demand on this partition.

See Also

For more information on disk usage, see the *System Administration Guide, Volume II*. If you are using the AnswerBook, "managing disk use" is a good search string.

NFS write failed for server *string*: RPC: Timed out

Cause

This error can occur when a file system is soft-mounted, and server or network response time lags. Any data written to the server during this period could be corrupted.

Action

If you intend to write on a filesystem, never specify the soft mount option. Use the default hard mount for all the filesystems that are mounted read-write.

See Also

For more information, see the chapter on NFS troubleshooting in the *NFS Administration Guide.*

NIS+ authentication failure

Cause

This is a Federated Naming Service message. The operation could not be completed because the principal making the request could not be authenticated with the name service involved.

Action

Run the **nisdefaults**(1) command to verify that you are identified as the correct NIS+ principal. Also check that the system has specified the correct public key source.

See Also

For more information, see the authentication and authorization overview in the *NIS+ and FNS Administration Guide.*

nis_cachemgr: Error in reading NIS cold start file : '/var/nis/NIS_COLD_START'

Cause

After installing patches 104331-04 and 103612-33, **nis_cachemgr**(1M) failed to come up. The symptoms are as follows during the reboot:

```
Sep 11 16:34:00 nis_cachemgr: Error in reading NIS cold start file :
          '/var/nis/NIS_COLD_START'
```

and **nis_cachemgr**(1M) isn't there after logging in. Trussing **nis_cachemgr**(1M) showed that it is reading `/var/nis/NIS_COLD_START` and immediately reporting an error. Neither reinitializing the client nor copying `NIS_COLD_START` helps.

Action

This is a timing problem. Put a **sleep**(1) before the NIS+ initialization in `/etc/init.d/rpc`, after `rpc.bind` has been started. `rpc.bind` is slow about

initializing and needs a few extra seconds to get going before **nis_cachemgr**(1M) starts bugging it.

No buffer space available

Cause

An operation on a transport endpoint or pipe was not performed because the system lacked sufficient buffer space or because a queue was full. The target system probably ran out of memory or swap space. Any data written during this condition will probably be lost.

Action

To add more swap area, use the `swap -a` command on the target system. Alternatively, reconfigure the target system to have more swap space. As a general rule, swap space should be two to three times as large as physical memory.

Technical Notes

The symbolic name for this error is `ENOBUFS`, `errno=132`.

No child processes

Cause

This message can appear when an application tries to communicate with cooperating process that do not exist.

Action

Restart the parent process so it can create the child processes again. If that doesn't help, this could be the result of a programming error; contact the vendor or author of the program for an update.

Technical Notes

A **wait**(2) system call was executed by a process that had no existing or unwaited-for child processes. The child processes could have exited prematurely, or might never have been created.

The symbolic name for this error is `ECHILD`, `errno=10`.

No default media available

Cause

The volume manager issues this message if a user makes an **eject**(1) request when the drives contain no diskette or CD-ROM to eject.

Action

Insert a diskette or CD-ROM. If the volume manager is confused and there actually is a diskette or CD-ROM in a drive, run **volcheck**(1) to update the volume manager. If the system remains confused, try booting with the `-r` option to reconfigure devices.

No directory! Logging in with home=/

Cause

The **login**(1) program could not find the home directory listed in the password file or NIS **passwd**(4) map, so it deposited the user in the root directory.

Action

Check that the user's home directory is mounted and is owned by and accessible to that user. Perhaps the automounter tried to mount the home directory, but the NFS server did not respond quickly enough. Try listing the files in `/home/`*username*. If the NFS server responds to this request, have the user log out and log in again.

It is possible that the automounter daemon is not running. Run the **ps**(1) command to see if **automountd**(1M) is present. If not, run the second command; if it appears to be wedged, run both these commands:

```
# /etc/init.d/autofs stop
# /etc/init.d/autofs start
```

When the automounter daemon is running, verify that the `/etc/auto_master` file has a line like this:

```
/home  auto_home
```

Verify that the `/etc/auto_home` file has a line like this:

```
+auto_home
```

These entries depend on the NIS `auto_home` map.

It is also possible that the NFS server has not shared (exported) this `/home` directory, or that the NFS daemons on the server have disappeared.

See Also

For more information on NFS, see the *NFS Administration Guide.*

No message of desired type

Cause

An attempt was made to receive a message of a type that does not exist on the specified message queue. See the **`msgsnd`**(2) and **`msgrcv`**(2) man pages for details.

Action

This indicates an error in the System V IPC message facility. Generally the message queue is empty or devoid of the desired message type, while `IPC_NOWAIT` is set.

Technical Notes

The symbolic name for this error is `ENOMSG`, `errno=35`.

No recipients specified

Cause

This message comes from the **mailx**(1) command whenever a user doesn't provide an address in the To: field.

Action

See the message "Recipient names must be specified" for details.

No record locks available

Cause

No more record locks are available. The system lock table is full.

Technical Notes

The symbolic name for this error is ENOLCK, errno=46.

Perhaps a process called **fcntl**(2) with the F_SETLK or F_SETLKW option, and the system maximum was exceeded. The system contains several different locking subsystems, including **fcntl**(2), the NFS lock daemon, and mail locking, all of which can produce this error.

Action

Try again later, when more locks might be available.

No route to host

Cause

An operational error occurred because there was no route to the destination host, or because of status information returned by intermediate gateways or switching nodes.

The returned status is not always sufficient to distinguish between a host that is down and a network that is down. See the "Network is unreachable" message.

Action

Check the network routers and switches to see if they are disallowing these packet transfers. If they are allowing all packet transfers, check network cabling and connections.

Technical Notes

The symbolic name for this error is `EHOSTUNREACH`, `errno=148`.

No shell Connection closed

Cause

A user has attempted to a remote login to the system, and has a valid account name and password, but the shell specified for their account is not available on that system. For example, the seventh field could request the GNU Bourne-again shell `/bin/bash`, which does not exist on standard Solaris distributions.

Action

If you have a copy of the requested shell, become superuser and install the missing shell on that system. Otherwise, change the user's password file entry (perhaps only in the NIS+ or NIS **`passwd`**(4) map) to specify an available shell such as `/bin/csh` or `/bin/ksh`.

No space left on device

Cause

While writing an ordinary file or creating a directory entry, there was no free space left on the device. The disk, tape, or diskette is full of data. Any data written to that device during this condition will be lost.

Action

Remove unneeded files from the hard disk or diskette until there is space for all the data you are writing. It might be advisable to move some directories onto another

filesystem and create symbolic links accordingly. When a tape is full, continue on another one, use a higher density setting, or obtain a higher-capacity tape.

To create multi-volume tapes or diskettes, use the **pax**(1) or **cpio**(1) command; **tar**(1) is still limited to a single volume.

Technical Notes

The symbolic name for this error is `ENOSPC`, `errno=28`.

No such device

Cause

An attempt was made to apply an operation to an inappropriate device, such as writing to a nonexistent device.

Action

Look in the `/devices` directory to see why this device does not exist, or why the program expects it to exist. The similar "No such device or address" message tends to indicate I/O problems with an existing device, whereas this message tends to indicate a device that does not exist at all.

Technical Notes

The symbolic name for this error is `ENODEV`, `errno=19`.

No such device or address

Cause

This error can occur when a tape drive is off-line or when a device has been powered off or removed from the system.

Action

For tape drives, make sure the device is connected, powered on, and toggled online (if applicable). For disk and CD-ROM drives, check that the device is connected and powered on.

With all SCSI devices, ensure that the target switch or dial is set to the number where the system originally mounted it. To inform the system of a change to the target device number, reboot using the `-r` (reconfigure) option.

Technical Notes

This message results from I/O to a special file's subdevice that either does not exist or that exists beyond the limit of the device.

The symbolic name for this error is `ENXIO`, `errno=6`.

No such file or directory

Cause

The specified file or directory does not exist. Either the file name or path name was entered incorrectly.

Action

Check the file name and path name for correctness and try again. If the specified file or directory is a symbolic link, it probably points to a nonexistent file or directory.

Technical Notes

The symbolic name for this error is `ENOENT`, `errno=2`.

no such map in server's domain

Cause

A user or an application tried to look up something using Network Information Services (NIS), but NIS has no corresponding database for this request.

Action

Make sure the NIS map name is spelled correctly. To see a list of nicknames for the various NIS maps, run the `ypcat -x` command. To see a full list of the various NIS maps (databases), run the `ypwhich -m` command. If the NIS service were not running on the current machine, these commands would result in a "can't communicate with ypbind" message.

No such process

Cause

This process cannot be found. The process could have finished execution and disappeared, or it might still be in the system under a different numeric ID.

Action

Use the **ps**(1) command to check that the process ID you're supplying is correct.

Technical Notes

No process corresponds to the specified process ID (PID), light-weight process ID, or `thread_t`.

The symbolic name for this error is `ESRCH`, `errno=3`.

No such user as *string*-- cron entries not created

Cause

A file exists in `/var/spool/cron/crontabs` for the specified user, but this user is not in `/etc/passwd` or the NIS **passwd**(4) map. The system cannot create **cron**(1M) entries for nonexistent users.

Action

To eliminate this message at boot time, remove the `cron` file for the nonexistent user, or rename it if the user's login name has changed. If this is a valid user, create an appropriate password entry for this name.

Not a data message

Cause

During a **`read`**(2), **`getmsg`**(2), or **`ioctl`**(2) `I_RECVFD` call to a STREAMS device, something has come to the head of the queue that can't be processed. That something depends on the call: 1. **`read`**(2): control information or passed file descriptor; 2. **`getmsg`**(2): passed file descriptor; 3. **`ioctl`**(2): control or data information.

Technical Notes

The symbolic name for this error is `EBADMSG`, `errno=77`.

Not a directory

Cause

A non-directory was specified where a directory is required, such as in a path prefix or as an argument to the **`chdir`**(2) call.

Action

Look at a listing of all the files in the current directory and try again, specifying a directory instead of a file.

Technical Notes

The symbolic name for this error is `ENOTDIR`, `errno=20`.

Not a stream device

Cause

A **putmsg**(2) or **getmsg**(2) system call was attempted on a file descriptor that is not a STREAMS device.

Technical Notes

The symbolic name for this error is `ENOSTR`, `errno=60`.

Not enough space

Cause

This message indicates that the system is running many large applications simultaneously, and has run out of swap space (virtual memory). It could also indicate that applications failed without freeing pages from the swap area. Swap space is an area of disk set aside to store portions of applications and data not immediately required in memory. Any data written during this condition will probably be lost.

Action

Reinstall or reconfigure the system to have more swap space. A general rule of thumb is that swap space should be two to three times as large as physical memory. Alternatively, use **mkfile**(1M) and **swap**(1M) to add more swap area. This example shows how to add 16 MB of virtual memory in the `/usr/swap` file (any filesystem with enough free space would work):

```
# mkfile 16m /usr/swap
# swap -a /usr/swap
```

To make this automatic at boot time, add the following line to the `/etc/vfstab` file:

```
/usr/swap   -   -   swap   -   no   -
```

Technical Notes

In calling the **fork**(2), **exec**(2), **sbrk**(2), or **malloc**(3C) routine, a program asked for more memory than the system could supply. This is not a temporary condition; swap space is a system parameter.

The symbolic name for this error is ENOMEM, errno=12.

not found

Cause

This message indicates that the Bourne shell could not find the program name given as a command.

Action

Check the form and spelling of the command line. If that looks correct, echo $PATH to see if the user's search path is correct. When communications are garbled, it is possible to unset a search path to such an extent that only built-in shell commands are available. Here is a command to reset a basic search path:

```
$ PATH=/usr/bin:/usr/ccs/bin:/usr/openwin/bin:.
```

If the search path looks correct, check the directory contents along the search path to see if programs are missing or if directories are not mounted.

NOTICE: vxvm: unexpected status on close

Cause

Everytime system boots (or is shut down), the message is displayed on the console. Sometimes, the following message is also displayed on the console and in the /var/adm/messages file:

```
 WARNING:
/iommu@0,10000000/sbus@0,10001000/SUNW,soc@2,0/SUNW,pln@a0000000,74127a/ssd@4,2
```

(continued)

(Continuation)

```
(ssd22):
 Error for Command: <undecoded cmd 0x35>     Error Level: Fatal
 Requested Block: 0    Error Block: 0
 Vendor: CONNER            Serial Number: 93081LPT
 Sense Key: Aborted Command
 ASC: 0xb3 (<vendor unique code 0xb3>), ASCQ: 0x0, FRU: 0x0
 WARNING:
/iommu@0,10000000/sbus@0,10001000/SUNW,soc@2,0/SUNW,pln@a0000000,74127a/ssd@4,2
(ssd22): ssd_synchronize_cache failed (5)
```

Action

In a High Availability system with NVRAM, this would be caused by unprocessed data in a NVRAM cache of the active logical host that has been down and come up later. Because of this, NVRAM should not be used in an HA system. The problem can be solved in this case by getting rid of the NVRAM on the HA system.

In a non-HA system, this can also be caused by stale data in the NVRAM cache. (The example commands below assume the controller for the array is `c1`.) To fix for a non-HA system:

1. Turn off all fast writes on this array and sync any remaining pending writes.

```
# ssaadm fast_write -d c1
# ssaadm sync_cache c1
```

2. When you sync the fast writes to the array, all pending writes are physically made to the disks. Anything that is left in the cache is stale, and thus, it is safe to purge it. Run the command:

```
# ssaadm purge c1
```

3. Turn the fast writes for the disks back on. This command MAY be different on your system, depending on the disks on which you want fast writes enabled and the types of fast writes you want:

```
# ssaadm fast_write -s -e c1
```

NOTICE: */string*: out of inodes

Cause

The filesystem specified after the first colon probably contains many small files, exceeding the per-filesystem limit for inodes (file information nodes).

Action

If many small files were created unintentionally, removing them resolves the problem.

Otherwise, follow these steps to increase filesystem capacity for small files. Make several backup copies of the filesystem on different tapes (for safety), then bring the machine down to single-user mode. Use the **newfs**(1M) command with the `-i` option to increase inode density for this filesystem. Here is an example:

```
# newfs -i 1024 /dev/rdsk/partition
```

Finally, restore the filesystem from a backup tape. Note that increasing the inode density slightly reduces total filesystem capacity.

Not login shell

Cause

This message results when a user tries to **logout**(1) from a shell other than the one started at login time.

Action

To quit a non-login shell, use the **exit**(1) command. Continue doing so until you have logged out.

See Also

For more general information on the login shell, see the section on customizing your work environment in the *Solaris Advanced User's Guide*.

Not on system console

Cause

A user tried to **login**(1) to a system as the superuser (uid=0, which is not necessarily root) from a terminal other than the console.

Action

Login to that system as a normal user, then run **su**(1M) to become superuser. To allow superuser logins from any terminal, comment out the CONSOLE line in `/etc/default/login` (this is not recommended for security reasons).

Not owner

Cause

Either an ordinary user tried to do something reserved for the superuser, or the user tried to modify a file in a way restricted to the file's owner or to the superuser.

Action

Switch user to root and try again.

Technical Notes

The symbolic name for this error is `EPERM`, `errno=1`.

Not supported

Cause

This version of the system does not support the feature requested, although future versions of the system might provide support.

Action

This is generally not a system message from the kernel, but an error returned by an application. Contact the vendor or author of the application for an update.

Technical Notes

The symbolic name for this error is `ENOTSUP`, `errno=48`.

No utmpx entry

Cause

During login `file system full` errors are seen and login fails with the message `No utmpx entry`.

This is caused by a full file system so that the system has no space to write its `utmpx` (login info) entry.

Action

To get around this condition the system must be booted into single user mode. Then clear (do not delete) the files: `/var/adm/utmp` and `/var/adm/utmpx`. This can be done by typing:

```
#cat /dev/null > /var/adm/utmp
#cat /dev/null > /var/adm/utmpx
```

These commands zero out the files but keep it with the correct permissions.

In some cases after clearing these files the `/var` filesystem may still be full. In this case type:

```
du -askd /var |sort -nr |more
```

This will give you a listing of the files from largest to smallest in the `/var` filesystem. To create space you can zero the files: `/var/cron/log`, `/var/spool/lp/logs`, and `/var/adm/messages`. You can also check `/.wastebasket` for large files to delete.

6/04/98 7:27:54 nsrck: SYSTEM error, more space needed to compress [client] index, 8.1 MB required

Cause

In `networker`, cannot use the Remove Oldest Cycle feature because the `/nsr` filesystem is too full to perform a remove. An error message appears in the console window indicating that the file system is full.

Action

1. Stop the `networker` daemons so that some of the indices can be moved. In SunOS 5, use `/etc/init.d/networker stop`. In SunOS 4, use `ps -ef | grep nsr` and **`kill`**(1) the processes.

2. Find a filesystem with enough space to move one of the client's indices. Only one of the client's indices should be moved, not the `networker` server's index. To find the size of a client's index, go to `/nsr/index/`*client name*`/db` and list the contents using `ls -l`. The data base file can be very large (possibly over 500 MB).

3. Move the contents of a client's index to the other filesystem and check that `/nsr` has freed the space to use. It may be necessary to unmount and remount `/nsr`, or even to reboot to designate the space freed by the move as available.

4. Once the space is available, restart the daemons.

5. Go into `nwadmin`. Under `Clients--Indexes`, select a client and use `Remove Oldest Cycle` to free more space.

Use `Reclaim Space` to reclaim the space from the removed cycles. After a few of the old cycles have been removed, there should be enough space in the filesystem to move the removed client's index back.

6. Stop the daemons, and move the client's index back to `/nsr/index/`*clientname.*

7. Restart the daemons. Remove oldest cycles for the client that was just moved.

Tweaking of the browse policy and retention policy may be necessary to prevent this situation from happening in the future.

Other, long term solutions are to add more hard disk and run `growfs` or move `/nsr` to a drive with more space on it.

"O"

Object is remote

Cause

This error occurs when users try to share a resource that is not on the local machine, or try to mount/unmount a device or path name that is on a remote machine.

Technical Notes

The symbolic name for this error is `EREMOTE`, `errno=66`.

ok

Cause

This is the OpenBoot PROM monitor prompt. From this prompt, you can `boot` the system (from disk, CD-ROM, or net), or you can use the `go` command to continue where you left off.

Action

If you suddenly see this prompt, look at the messages above it to see if the system crashed. If no other messages appear, and you just typed Stop-A or plugged in a new keyboard, type `go` to continue. You might need to Refresh the window system from its Workspace Menu.

Technical Notes

Never invoke *sync* from the *ok* prompt without first running the *fsck*(1M) command, especially if the filesystem has changed.

Operation already in progress

Cause

An operation was attempted on a non-blocking object that already had an operation in progress.

Technical Notes

The symbolic name for this error is `EALREADY`, `errno=149`.

Operation canceled

Cause

The associated asynchronous operation was canceled before completion.

Technical Notes

The symbolic name for this error is `ECANCELED`, `errno=47`.

operation failed [error 185], unknown group error 0, *string*

Cause

When you use *admintool* to add a user to a newly-created group, *admintool* issues this error.

Action

Apply patch 101384-05 to fix bug ID 1151837 and to provide a workaround for bug ID 1153087.

Operation not applicable

Cause

This error indicates that no system support exists for some function that the application requested.

Action

Ask the system vendor for an upgrade, or contact the vendor or author of the application for an update.

Technical Notes

This message indicates that no system support exists for an operation. Many modules set this error when a programming function is not yet implemented. If you are writing a program that produces this message while calling a system library, try to find and use an alternative library function. Future versions of the system might support this operation; check system release notes for further information.

The symbolic name for this error is ENOSYS, errno=89.

Operation not supported on transport endpoint

Cause

For example, trying to accept a connection on a datagram transport endpoint.

Technical Notes

The symbolic name for this error is `EOPNOTSUPP`, `errno=122`.

Operation now in progress

Cause

An operation that takes a long time to complete (such as a *connect*) was attempted on a non-blocking object.

Technical Notes

The symbolic name for this error is `EINPROGRESS`, `errno=150`.

/opt/bin/jws: /solaris/bin/locate_dirs: not found

Cause

This error message occurred when the customer used the link from `/opt/bin/jws` to `/opt/SUNWjws/JWS/sparc-S2/bin/jws`, to start Java Workshop. Typing in the full pathname works fine, typing `jws` gives the error.

Action

This happens because `/opt/bin/jws` is not `/opt/SUNWjws/JWS/sparc-S2/bin/jws`, which a script that runs another script: `$_SS_JWS_HOME/solaris/bin/locate_dirs`.

So whatever `/opt/bin/jws` is, it is not setting `$_SS_JWS_HOME` correctly. Take that out of your path and put `/opt/SUNWjws/JWS/sparc-S2/bin/jws` in your path so `which jws` returns: `/opt/SUNWjws/JWS/sparc-S2/bin/jws`.

Option not supported by protocol

Cause

A bad option or level was specified when getting or setting options for a protocol.

Technical Notes

The symbolic name for this error is `ENOPROTOOPT`, `errno=99`.

`out of memory`

Cause

Hundreds of different programs can produce this message when the system is running many large applications simultaneously. This message usually means that the system has run out of swap space (virtual memory).

Action

See the message "Not enough space" for details. Any data written during this condition will probably be lost.

`Out of stream resources`

Cause

During a STREAMS open, either no STREAMS queues or no STREAMS head data structures were available. This is a temporary condition; one may recover from it if other processes release resources.

Technical Notes

The symbolic name for this error is ENOSR, errno=63.

`overlapping swap volume`

Cause

After creating volumes in `rootdg` to be used as additional swap and adding these to the `/etc/vfstab` file, an error message is displayed at boot time complaining about overlapping swap volumes.

Action

Change the names of these volumes to read `swap1`, `swap2`, etc...

If you still get this message after making the above change, edit the `/sbin/swapadd` script. Find the line:

```
c='$SWAP -l | grep -c '\\<'${special}'\>''
```

and change it to

```
='$SWAP -l | grep -c ''${special}'''
```

Also see bug number 1215062 for more information on this behavior.

"P"

Package not installed

Cause

This error occurs when users attempt to use a system call from a package which has not been installed.

Technical Notes

The symbolic name for this error is `ENOPKG`, `errno=65`.

panic -boot: Could not mount filesystem

Cause

The primary problem is that `jumpstart` gives the following error:

```
2ec00 RPC: Can't decode result.
whoami RPC call failed with rpc status: 2
```

(continued)

(Continuation)

```
panic - boot: Could not mount filesystem.
program terminated
ok
```

Normally this is a result of the `bootparams` not being able to get to the install image.

The second problem is that other users have had the same error message, with the additional message:

```
'Timeout waiting for ARP/RARP packet...'
```

Action

To solve the first problem:

1. Check how the **`dfstab`**(4) (`/etc/dfs/dfstab` on the install image NFS server) looks:

```
share -F nfs -o ro,anon=o /jumpstart-dir
```

2. Run **`share`**(1M) command on the installed image NFS server, to make sure it is shared properly.

3. Check `/etc/bootparams` file on the net install server. Look for entries with incorrect boot path.

4. Make sure that `/usr/sbin/rpc.bootparamd` is running on the boot server. If necessary, kill and restart it.

5. Check `/etc/ethers` on the boot server for duplicate or conflicting entries

6. At `OK` prompt, run test net /test-net and/or watch net /watch-net to test the network connectivity

A workaround for the second problem is to check the **`nsswitch.conf`**(4) file. If some of the entries point to NIS such as:

```
rpc  nis files
hosts  nis files
ethers  nis files
bootparams files   nis
```

change all of these entries to files first:

```
rpc  files  nis
hosts  files  nis
ethers  files nis
bootparams files nis
```

Note - You may have to manually update these files if they do not contain info on the client machine you are trying to jumpstart.

Then remove the client with **`rm_install_client`**(1M), remove the contents of `tftpboot`, and re-add the client:

```
add_install_client -c /jumpstart-dir/profiles  'client name'  'arch'
```

panic: mutex_adaptive_exit

Cause

CD-ROM boot gets error:panic: mutex_adaptive_exit Documented above under message "panic_mutex". Same SRDB ID.

Panic

Cause

A system panics and crashes when a program exercises an operating system bug. Although the crash might seem unfriendly to a user, the sudden stop actually safeguards the system and its data from further corruption.

Along with bringing the operating system to a stop, the panic routine copies the memory contents in use to a dump device, recording critical information about the current state of the CPU from which the panic routine was called.

Because the primary swap device is usually the default dump device, the primary swap device should be large enough to hold a complete image of memory. The system tries to reboot after the memory image is saved.

If the system does not reboot successfully, consider these possibilities:

1. Catastrophic hardware failure, such as faulty memory or a crashed disk;

2. Major kernel configuration faults, such as a buggy device driver;

3. Major kernel tuning errors, such as a too-large value for maxusers;

4. Data corruption, including corruption of the operating system files;

5. Manual intervention is needed, as when **fsck**(1M) expects answers to its queries.

Action

To find out why a system crashed, you can

1. Look in the `/var/adm/message*` log files;

Action

Of these methods, using **savecore**(1M) is the most informative. The **savecore**(1M) command transfers the system crash dump image generated by the panic routine from the dump device to a file system. The image can then be analyzed with a debugger such as **adb**(1).

See Also

Correctly setting up **savecore**(1M) and interpreting its results can be difficult. For more information about debugging system panics, refer to *Panic! UNIX System Crash Dump Analysis* by Chris Drake and Kimberley Brown (ISBN 0-13-149386-8).

PARTIALLY ALLOCATED INODE I=*int* CLEAR?

Cause

During phase 1, **fsck**(1M) found that the specified inode was neither allocated nor unallocated. The reason is probably that the system crashed in the middle of a **sync**(2) or **write**(2) operation.

Action

Should you answer yes to this question, "UNALLOCATED" messages might result during phase 2, if any directory entries point to this inode. If you are being careful, exit **fsck**(1M) and run **ncheck**(1M) (specifying the inode number after the `-i` option) to determine which file or directory is involved here. You might be able restore this file or directory from another system. It is also possible that **fsck**(1M) will copy this file to the `lost+found` directory in a later phase.

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

passwd: Changing password for *string*

Cause

If you put the following lines into /etc/nsswitch.conf

```
 passwd:    compat
passwd_compat:    nis
```

Then when you run passwd, it fails as follows:

```
server1% passwd
passwd:  Changing password for khh
server1%
```

NOTE: passwd exits before you get the opportunity to enter a password.

Action

If you read the man page for passwd very carefully, you will see the following:

If all requirements are met, by default, the passwd command will consult /etc/nsswitch.conf to determine in which repositories to perform password update. It searches the **passwd**(4) and passwd_compat entries. The sources (repositories) associated with these entries will be updated. However, the password update configurations supported are limited to the following 5 cases. Failure to comply with the configurations will prevent users from logging onto the system.

- passwd: files
- passwd: files nis
- passwd: files nisplus
- passwd: compat (==> files nis)
- passwd: compat (==> files nisplus)

passwd_compat: nisplus

NOTE: It does *not* say that you can use the line: `passwd_compat: nis`. If you conform exactly to what's written in the man page, then **passwd**(1) works.

passwd.org_dir: NIS+ servers unreachable

Cause

This is the first of three messages that an NIS+ client prints when it cannot locate an NIS+ server on the network.

Action

See the message "hosts.org_dir: NIS+ servers unreachable" for details.

Password does not decrypt secret key for unix.uid@*string*

Cause

This message appears at login time when a user's password is not identical to the user's **keylogin**(1) network password. When a system is running NIS+, the login program first performs UNIX authentication, and then attempts a **keylogin**(1) for secure RPC authentication.

Action

To gain credentials for secure RPC, users can run **keylogin**(1) (after login) and type in their secret key. To stop this message from appearing at login time, users can run the `chkey -p` command and set their network password to be the same as their NIS+ password. If a user doesn't remember the network password, the system administrator should delete and re-create the user's credentials table entry so the user can establish a new network password with **chkey**(1).

Permission denied

Cause

An attempt was made to access a file in a way forbidden by the protection system.

Action

Check the ownership and protection mode of the file (with a long listing from the `ls -l` command) to see who is allowed to access the file. Then change the file or directory permissions as needed.

Technical Notes

The symbolic name for this error is `EACCES`, `errno=13`.

Please specify a recipient.

Cause

With *mailtool(1)*, this message comes up in a dialog box whenever a user tries to deliver a message with no address in the To: field.

Action

See the message "Recipient names must be specified" for details.

Protocol error

Cause

Some protocol error occurred. This error is device specific, but is generally not related to a hardware failure.

Technical Notes

The symbolic name for this error is `EPROTO`, `errno=71`.

protocol error, *string* closed connection

Cause

rlogin(1) fails on SunOS machine.

Action

1. Check the permissions on in.rlogind on the machine you are trying to connect to. The permissions should look like this:

```
-rwxr-xr-x  1 root     staff       16384 Jan 20  1994 /usr/etc/in.rlogind
```

2. Check the login line in the /etc/inetd.conf file. It should look like the following:

```
login stream tcp nowait root /usr/etc/in.rlogind in.rlogind
```

3. Check `/etc/passwd` to see if an invalid login shell has been substituted in the entry for the login id.

Protocol family not supported

Cause

The protocol family has not been configured into the system or no implementation for it exists. Used for the Internet protocols.

Technical Notes

The symbolic name for this error is `EPFNOSUPPORT`, `errno=123`.

Protocol not supported

Cause

The requested networking protocol has not been configured into the system, or no implementation for it exists. (A protocol is a formal description of the messages to be exchanged and the rules to be followed when systems exchange information.)

Action

Verify that the protocol is in the `/etc/inet/protocols` file and in the NIS protocols map, if applicable. If the protocol is not listed, and you want to permit its use, configure the protocol as documented or as required.

Technical Notes

The symbolic name for this error is `EPROTONOSUPPORT`, `errno=120`.

Protocol wrong type for socket

Cause

This message indicates either an application programming error, or badly configured protocols.

Action

Make sure that the `/etc/protocols` file corresponds number-for-number with the NIS **`protocols`**(4) map. It it does, ask the vendor or author of the application for an update.

Technical Notes

A protocol was specified that does not support the semantics of the socket type requested. This amounts to a request for an unsupported type of socket. Look at the source code that made this socket request and check that it requested one of the types specified in `/usr/include/sys/socket.h`.

The symbolic name for this error is `EPROTOTYPE`, `errno=98`.

"Q"

quotactl: open Is a directory

Cause

Using `edquota` to set users limits the command displays the error.

`edquota` updates all quota files that are on a mounted filesystem. So, a directory named `quotas` causes it to fail.

Action

In one of the mounted filesystems, there is a directory named `quotas`. To fix the problem, move the directory off the mounted filesystem, rename it, or delete it.

For example: If you have `/usr/quotas/old_info` The directory `/usr/quotas` is going to cause `edquota` to fail. Either move `/usr/quotas` to `/usr/old_quotas` or delete the directory.

"R"

Read error from network: Connection reset by peer

Cause

This message appears when a user logs remotely into a machine that crashes or s rebooted during the **`rlogin`**(1) or **`rsh`**(1) session. Any data changes that were not saved are probably lost. Sometimes this message appears only when the user types something, even though the system went down hours before.

Action

Try to **`rlogin`**(1) again, perhaps after waiting a few minutes for the system to reboot.

Read-only file system

Cause

Files and directories on filesystems that are mounted read-only cannot be changed.

Action

If you only modify these files and directories occasionally, **rlogin**(1) to the servers from which the filesystems are mounted and change the files or directories there. If you change these files and directories frequently, **mount**(1M) the filesystems read/write.

Technical Notes

The symbolic name for this error is `EROFS`, `errno=30`.

rebooting...

Cause

This message appears on the console to indicate that the machine is booting, either after the superuser issued a **reboot**(1M) command, or after a system panic if the EEPROM's `watchdog-reboot?` variable is set to true.

Action

Allow the machine to boot itself. In case of a system panic, look above this message for other indications of what went wrong.

Recipient names must be specified

Cause

Somebody sent mail without a valid recipient in the To: field, so **sendmail**(1M) could not deliver the mail message. Using **mail**(1), the recipient's address might have been specified using spaces or non-alphanumeric characters. The *mailtool(1)* and

mailx(1) commands try to prevent this by issuing "Please specify a recipient" or "No recipients specified" messages instead. If there is at least one valid recipient, each invalid recipient address will generate a "User unknown" message.

Action

Look in the sender's `dead.letter` file for the automatically saved message, and have the originator send it again, this time specifying a recipient.

See Also

For more information about **sendmail**(1M), see the *Mail Administration Guide*.

Reset tty pgrp from *int* to *int*

Cause

The C shell sometimes issues this message when it clears away the window process group after the user exits the window system. This can happen when the window system doesn't clean up after itself.

Action

Proceed with your work. This message is only informational.

Resource temporarily unavailable

Cause

This indicates that the **fork**(2) system call failed because the system's process table is full, or that a system call failed because of insufficient memory or swap space. It is also possible that a user is not allowed to create any more processes.

Action

Simply waiting often gives the system time to free resources. However if this message occurs often on a system, reconfigure the kernel and allow more processes.

To increase the size of the process table in Solaris 2, increase the value of `maxusers` in the `/etc/system` file. The default `maxusers` value is the amount of main memory in MB, minus 2.

If one user is not allowed to create any more processes, that user has probably exceeded the memory size limit; see the **`limit`**(1) man page for details.

Technical Notes

The symbolic name for this error is `EAGAIN`, `errno=11`.

Restartable system call

Cause

Interrupted system call should be restarted.

Technical Notes

The symbolic name for this error is ESTART, errno=91.

Result too large

Cause

This is a programming error or a data input error.

Action

Ask the program's author to fix this condition.

Technical Notes

This indicates an attempt to evaluate a mathematical programming function at a point where its value would overflow or underflow. The value of a programming function in the math package (3M) is not representable within machine precision. This could occur after floating point overflow or underflow (either single or double precision), or after total loss of numeric significance in Bessel functions.

This message can indicate "Result too small" in the case of floating point underflow.

To help pinpoint a program's math errors, use the **matherr**(3M) facility.

The symbolic name for this error is ERANGE, errno=34.

rlogin: no directory! connection closed

Cause

When user tries to remotely login to a machine, he gets the error.

The machine that the customer was trying to **rlogin**(1) to had permissions of 700 on its root directory. The permissions on root should be 755.

Once the user changed the rootpermissions to 755, he was able to get farther when attempting a rlogin, but it still failed:

```
Last login: Fri Aug 29 10:24:43 from machinename
no shell
connection closed
```

Action

The machine that the user was trying to rlogin into had the permissions set to 700 on both the root and /usr/bin directories. For both directories, the permissions should be 775. Once the user changed the permissions to 775, **rlogin**(1) was successful.

Another possibility is to check the user's >*passwd(1)* entry in the NIS/NIS+ map. A login shell such as /usr/dist/exe/tcsh or /net/lab/.../csh could cause the failure because of NFS mount permission.

rmdir: *string*: Directory not empty

Cause

The **rmdir**(1) command can remove empty directories only. The directory whose name appears after the first colon in the message still contains some files or directories.

Action

Use **rm**(1) instead of **rmdir**(1). To remove this directory and everything underneath it, use the `rm -ir` command to recursively descend the directory, being asked if you want to delete each element. To remove the directory and all its contents without being asked for approval, use the `rm -r` command.

ROOT LOGIN /dev/console

Cause

This `syslog` message indicates that someone has logged in as `root` on the system console.

Action

If you have just logged in as root, don't worry. If this is not you, consider the possibility of a security breach. The best site-wide policy is for all system administrators to **su**(1M) instead of logging in as root.

ROOT LOGIN /dev/pts/*int* FROM *string*

Cause

This `syslog` message indicates that someone has logged in remotely as `root` on a pseudo-terminal from the system specified after the FROM keyword.

Action

For security reasons, it is a bad idea to allow `root` logins from anywhere other than the console. To restrict superuser logins to the console, remove the comment from the CONSOLE line in `/etc/default/login`.

`RPC: Program not registered`

Cause

Check the rpc.bynumber NIS map.

`rx framing error`

Cause

Usually this error indicates a hardware problem.

Action

Check the Ethernet cabling and connectors to locate a problem.

Technical Notes

A framing error occurs when the Ethernet I/O driver receives a non-integral unit of octets, such as 63 bytes and then 3 bits. (Ethernet specifies the use of octets.) Framing errors are caused by corruption of the starting or ending frame delimiters. These can be corrupted by some violation of the encoding scheme.

Framing errors are a subset of CRC errors, which are usually caused by anomalies on the physical media. An "alignment/framing error" is a type of CRC error where octet boundaries do not line up.

"S"

save: SYSTEM error, Arg list too long

Cause

save fails with the error. The cause of this error is that the data base (index) file for the client is greater than 2 Gbytes. With Solaris 2.6 and SBU 5.0.1 this is no longer a problem.

Action

However, with earlier versions of Solaris you need to bring up nwadmin -> indexes -> select appropriate client -> select appropriate fs -> remove oldes cycle -> reclaim space.

This may have to be repeated a few times to reclaim enough space. The indexes can be recreated later if necessary by using scanner.

SCSI bus DATA IN phase parity error

Cause

The most common cause of this problem is unapproved hardware. Some SCSI devices for the PC market do not meet the high I/O speed requirements for the UNIX market. Other possible causes of this problem are improper cabling or termination, and power fluctuations. Data corruption is possible but unlikely to occur, because this parity error prevents data transfer.

Action

Check that all SCSI devices on the bus are Sun-approved hardware. Then verify that all cables measure no longer than six meters, total, and that all SCSI connections are properly terminated. If power fluctuations are occurring, invest in an uninterruptible power supply.

SCSI transport failed: reason 'reset'

Cause

This message indicates that the system sent data over the SCSI bus, but the data never reached its destination because of a SCSI bus reset. The most common cause of this condition is conflicting SCSI targets.¤ Data corruption is possible but unlikely to occur, because this failure prevents data transfer.

Action

Verify that all cables measure no longer than six meters, total, and that all SCSI connections are properly terminated. If power surges are a problem, acquire a surge suppressor or uninterruptible power supply.

A machine's internal disk drive is usually SCSI target 3. Make sure that external and secondary disk drives are targeted to 1, 2, or 0, and do not conflict with each other. Also make sure that tape drives are targeted to 4 or 5, and CD drives to 6, avoiding any conflict with each other or with disk drives. If the targeting of the internal disk drive is in question, power off the machine, remove all external drives, turn the power on, and from the PROM monitor run the `probe-scsi-all` or `probe-scsi` command.

If SCSI device targeting is acceptable, memory configuration could be the problem, especially for machines with the sun4c architecture. Ensure that high-capacity memory chips (such as 4MB SIMMs) are in lower banks, while lower-capacity memory chips (such as 1MB SIMMs) are in the upper banks.

SPARC systems do not always support third party CD-ROM drives, and may generate a similar "unknown vendor" error message. Check with the CD-ROM vendor for specific configuration requirements.

Some third-party disk drives have a read-ahead cache that interferes with Solaris device drivers. Make sure that any existing read-ahead cache facility is turned off.

See Also

¤ For more information on SCSI targets, see the section on device naming conventions in the *Solaris 1.x to Solaris 2.x Transition Guide*. If you are using the AnswerBook, "scsi targets" is a good search string.

Security exception on host *string*. USER ACCESS DENIED.

Cause

When trying to create a user via `Adminsuite`, placing the home directory on a system remote from the nisplus server, customer gets error message:

```
Security exception on host hostname. USER ACCESS DENIED.
The user identity (555)username was received, but that user
is not authorized to execute the requested functionality
on this system. Is this user a member of an appropriate
security group on this system ?
   (Function: class directory method create_dir)
```

User can **`rsh`**(1) to the remote machine and create a home directory on the system.

Action

The user was not in the sysadmin group NIS+ tables.

```
 # niscat group.org_dir | grep sysadmin
sysadmin::14:
```

Add the username to the sysadmin group.

Segmentation Fault

Cause

Segmentation faults usually result from programming error. This message is usually accompanied by a core dump, except on read-only filesystems.

Action

To see which program produced a **`core`**(4) file, run either the **`file`**(1) command or the **`adb`**(1) command. The following examples show the output of the **`file`**(1) and **`adb`**(1) commands on a core file from the `dtmail` program.

```
$ file core
core: ELF 32-bit MSB core file SPARC Version 1, from ‘dtmail’
```

```
$ adb core
core file = core -- program ‘dtmail’
SIGSEGV  11: segmentation violation
^D      (use Control-d to quit the adb rogram)
```

Ask the vendor or author of this program for a debugged version.

Technical Notes

A process has received a signal indicating that it attempted to access an area of memory that is protected or that does not exist. The two most common causes of segmentation faults are attempting to dereference a null pointer or indexing past the bounds of an array.

sendmail[]: can’t lookup data via name server "dns" or sendmail[]: can’t lookup data via name server "nis"

Cause

The following entry in the `/etc/nsswitch.conf` file:
`sendmailvars: dns nis files` causes the messages to appear in the console window.

Action

The `sendmailvars` database can only be used with local files and/or NIS+. So, if you do not have this database setup, the default `sendmailvars` entry should look as follows in the `/etc/nsswitch.conf file`:

```
sendmailvars: files
```

sendmail[*int*]: NOQUEUE: SYSERR: net hang reading from *string*

Cause

This is a **sendmail**(1M) message that appears on the console and in the log file /var/adm/messages. If this message occurs once for a particular user, it is possible that a mail message from this user ends with a partial line (having no terminating newline character). If this message appears frequently or at busy times, especially along with other networking errors, it could indicate network problems.

Action

Check the user's mail spool file to see if a message ends without a newline character. If so, talk with the user and determine how to prevent the problem from occurring again. If these messages are the result of network problems, you could try moving the mail spool directory to another machine with a faster network interface.

Technical Notes

During the SMTP receipt of DATA phase, a message-terminating period on a line of its own never arrived, so **sendmail**(1M) timed out and produced this error.

Service wouldn't let us acquire selection

Cause

This message indicates that the OpenWindows selection service failed to seize the requested selection from /tmp/winselection. Some diagnostics follow: the requested selection could be 0 for unknown, 1 for caret, 2 for primary, 3 for secondary, or 4 for clipboard. The result could be 0 for failure, 2 for nonexistent, 3 for didn't have, 4 for wrong rank, 5 for continued, 6 for cancelled, or 7 for unrecognized.

setmnt: Cannot open /etc/mnttab for writing

Cause

The system is having problems writing to `/etc/mnttab`. The filesystem containing `/etc` may be mounted read-only, or is not mounted at all.

Action

Check that this file exists and is writable by root. If so, ensure that the `/etc` filesystem has been mounted, and is mounted read-write rather than read-only.

share_nfs: /home: Operation not applicable

Cause

This message usually indicates that the system has a local filesystem mounted on `/home`, which is where the automounter usually mounts users' home directories.

Action

When a system is running the automounter, do not mount local filesystems on the `/home` directory. Mount them on another directory, such as `/disk2`, which on most systems you will have to create. You could also change the automounter `auto_home` entry, but that is a more difficult solution.

Slice c0t1d0s0 is too small to contain 1 replicas

Cause

When trying to add a state replica using metatool to cylinder 0 of a disk, the following error message appears:

```
 Your attempt to attach metastate database
replicas on slice "c?t?d?s?" failed for the
following reason: Slice c?t?d?s? is too small
to contain 1 replicas.
```

This is because metatool masks out the very first cylinder to protect the disk label. On `disksuite` v4.1, `metatool` does allow adding the databases to cylinder 0 on 2.1gb disks or larger.

Action

The workaround is not to start at cylinder 0 but at cylinder 1, or use the command line (`metadb -a`).

Socket type not supported

Cause

The support for the socket type has not been configured into the system or no implementation for it exists.

Technical Notes

The symbolic name for this error is `ESOCKTNOSUPPORT`, `errno=121`.

Soft error rate (*int*%) during writing was too high

Cause

This message from the SCSI tape drive appears when Exabyte or DAT tapes generate too many soft (recoverable) errors. It is followed by the advisory "Please, replace tape cartridge" message. Soft errors are an indication that hard errors could soon occur, causing data corruption.

Action

First clean the tape head with a cleaning tape as recommended by the manufacturer. If that doesn't work, replace the tape cartridge. You might need to replace the tape drive if the problem still occurs with new tape cartridges.

Soft error rate (retries = *int*) during writing was too high

Cause

This message from the SCSI tape drive appears when Archive tapes generate too many soft (recoverable) errors. It is followed by the advisory "Periodic head cleaning required and/or replace tape cartridge" message. Soft errors are an indication that hard errors could soon occur, causing data corruption.

Action

First clean the tape head with a cleaning tape as recommended by the manufacturer. If that doesn't work, replace the tape cartridge. You might need to replace the tape drive if the problem still occurs with new tape cartridges.

Software caused connection abort

Cause

A connection abort was caused internal to your host machine.

Technical Notes

The symbolic name for this error is `ECONNABORTED`, `errno=130`.

Srmount error

Cause

This error is RFS specific. It occurs when an attempt is made to stop RFS while resources are still mounted by remote machines, or when a resource is readvertised with a client list that does not include a remote machine with the resource currently mounted.

Technical Notes

The symbolic name for this error is `ESRMNT`, `errno=69`.

Stale NFS file handle

Cause

A file or directory that was opened by an NFS client was either removed or replaced on the server.

Action

If you were editing this file, write it to a local filesystem instead. Try remounting the filesystem on top of itself or shutting down any client processes that refer to stale file handles. If neither of these solutions works, reboot the system.

Technical Notes

The original `vnode` is no longer valid. The only way to get rid of this error is to force the NFS server and client to renegotiate file handles.

The symbolic name for this error is `ESTALE`, `errno=151`.

statd: cannot talk to statd at *string*

Cause

This message comes from the NFS status monitor daemon **statd**(1M), which provides crash recovery services for the NFS lock daemon **lockd**(1M). The message indicates that **statd**(1M) has left old references in the `/var/statmon/sm` and `/var/statmon/sm.bak` directories. After a user has removed or modified a host in the *hosts* database, **statd**(1M) might not properly purge files in these directories, which results in its trying to communicate with a nonexistent host.

Action

Remove the file named *variable* (where *variable* is the hostname) from both the `/var/statmon/sm` and `/var/statmon/sm.bak` directories. Then kill the *statd* daemon and restart it. If that doesn't get rid of the message, kill and restart **lockd**(1M) as well. If that doesn't work, reboot the machine at your convenience.

stty: TCGETS: Operation not supported on socket

Cause

This message results when a user tries to remote copy with **rcp**(1) or remote shell with **rsh**(1) from one machine to another, but has an **stty**(1) command in the remote `.cshrc` file. This error results in failure of the **rcp**(1) or **rsh**(1) command.

Action

The solution is to move the invokation of the **stty**(1) command to the user's `.login` (or equivalent) file. Alternatively, execute the **stty**(1) command in `.cshrc` only when the shell is interactive. Here is a test to do that:

```
if ($?prompt) stty ...
```

Technical Notes

The **rcp**(1) and **rsh**(1) commands make a connection using sockets, which do not support **stty**(1)'s TCGETS *ioctl*.

su: No shell

Cause

This message indicates that someone changed the default login shell for `root` to a program that is missing from the system. For example, the final colon-separated field in `/etc/passwd` could have been changed from `/sbin/sh` to `/usr/bin/bash`, which does not exist in that location. Possibly an extra space was appended at the end of the line. The outcome is that you cannot login as `root` or switch user to `root`, and so cannot directly fix this problem.

Action

The only solution is to reboot the system from another source, then edit the password file to correct this problem. Invoke **sync**(1M) several times, then halt the machine by typing `Stop-A` or by pressing the reset button. Reboot single-user from CD-ROM, the net, or diskette, such as by typing `boot cdrom -s` at the `ok` prompt.

After the system comes up and gives you a # prompt, mount the device corresponding to the original / partition somewhere, such as with a **mount**(1M) command similar to the one below. Then run an editor on the newly-mounted system password file (use **ed**(1) if terminal support is lacking):

```
# mount /dev/dsk/c0t3d0s0 /mnt
# ed /mnt/etc/passwd
```

Use the editor to change the password file's `root` entry to call an existing shell, such as `/usr/bin/csh` or `/usr/bin/ksh`.

Technical Notes

To keep the "No shell" problem from happening, habitually use *admintool* or `/usr/ucb/vipw` to edit the password file. These tools make it difficult to change password entries in ways that make the system unusable.

SunPC may NOT run correctly as root

Cause

With SunPC 4.1 and the 102924 jumbo patch installed: when a user attempts to run SunPC, the following error message is displayed:

```
SunPC may NOT run correctly as root.
Please run in user mode.
SunPC script is exiting
```

Yet, the user is not root.

The user's primary group id is probably root. For example:

```
$ /usr/bin/id
uid=33650(gruff) gid=0(root)
```

Action

Change the user's primary group to another group, such as 10, and, the user still needs to be in teh root group, add the root group to the user's secondary group list.

su: 'su root' failed for *string* on /dev/pts/*int*

Cause

The user specified after "for" tried to become superuser, but typed the wrong password.

Action

If the user is supposed to know the `root` password, wait to see if the correct password is supplied. If the user is not supposed to know the `root` password, ask why he or she is attempting to become superuser.

su: 'su root' succeeded for *string* on /dev/pts/*int*

Cause

The user specified after "for" just became superuser by typing the `root` password.

Action

If the user is supposed to know the `root` password, this message is only informational. If the user is not supposed to know the `root` password, change this password immediately and ask how the user learned it.

syncing file systems...

Cause

This indicates that the kernel is updating the super-blocks before taking the system down, to ensure filesystem integrity. This message appears after a **`halt`**(1M) or **`reboot`**(1M) command. It can also appear after a system panic, in which case the system might contain corrupted data.

Action

If you just halted or rebooted the machine, don't worry– this message is normal. In case of a system panic, look up the panic messages that appear above this one. Your system vendor might be able to help diagnose the problem. So that you can describe the panic to the vendor, either leave your system in its panicked state or be sure that you can reproduce the problem.

Technical Notes

Numbers that sometimes display after the three dots in the message show the count of dirty pages that are being written out. Numbers in brackets show an estimate of the number of busy buffers in the system.

SYSLOGD CAUSES SYSTEM HANGS

Cause

(Over and Over again = installpatch problems)

syslog service starting.

Cause

During system reboot, this message might appear and the boot seems to hang. After starting **syslogd**(1M) service, the system runs `/etc/rc2.d/S75cron`, which in turn calls **ps**(1). Sometimes after an abrupt system crash `/dev/bd.off` becomes a link to nowhere, causing the **ps**(1) command to hang indefinitely.

Action

Reboot single user (for example with `boot -s`) and run `ls -l /dev/bd*` to see if this is the problem. If so, remove `/dev/bd.off`, then run `bdconfig off` or reboot with the `-r` (reconfigure) option.

This is the most commonly reported situation that causes **ps**(1) to hang.

System booting after fatal error FATAL

Cause

The system reboots automatically. Afterward, the messages file contains `System booting after fatal error FATAL`.

The message is issued during a reboot after the system detects a hardware error. Things which can cause this are: UPA address parity error, Master queue overflows, DTAG parity errors, E-Cache tag parity errors, and Coherence errors.

Action

Use **prtdiag**(1M) to help identify failed hardware components. The errors indicate either have a bad CPU module or a bad system board.

system hang

Cause

4.1.3C SBUS cards suffer system freeze

SYSTEM HANGS DURING BOOT

Cause

When the user boots a system, it hangs after the boot up messages "root on," "swap on," and "dump on." After the system displays these messages, the LEDs will flash and the system hangs.

This is the result of an earlier fsck that deleted devices under the /dev directory. Check for the /dev/console device and if it is missing, make one.

"T"

tar: /dev/rmt/0: No such file or directory

Cause

The default tape device `/dev/rmt/0`, or possibly the device specified by the TAPE environment variable, is not currently connected to the system, is not configured, or its hardware symbolic link is broken.

Action

List the files in the `/dev/rmt` directory to see which tape devices are currently configured. If none are configured, ensure that a tape device is correctly attached to the system, and reboot with the `-r` option to reconfigure devices.

If tape devices other than `/dev/rmt/0` are configured, you could specify one of them after the `-f` option of **`tar`**(1).

tar: directory checksum error

Cause

This error message from **tar**(1) indicates that the checksum of the directory and the files it has read from tape does not match the checksum advertised in the header block. Usually this indicates the wrong blocking factor, although it could indicate corrupt data on tape.

Action

To resolve this problem, make certain that the blocking factor you specify on the command line (after `-b`) matches the blocking factor originally specified. If in doubt, leave out the block size and let **tar**(1) determine it automatically. If that doesn't help, tape data could be corrupted.

tar: tape write error

Cause

A physical write error has occurred on the **tar**(1) output file, which is usually a tape, although it could be a diskette or disk file. Look on the system console, where the device driver should provide the actual error condition. This might be a write-protected tape, a physical I/O error, an end-of-tape condition, or a file too large limitation.

Action

In the case of write-protected tapes, enable the write switch. For physical I/O errors, the best course of action is to replace the tape with a new one. For end-of-tape conditions, try using a higher density if the device supports one, or use **cpio**(1) or **pax**(1) for their multi-volume support. When encountering file too large limitations, use the parent shell's **limit**(1) or **ulimit**(1) facility to increase the maximum file size.

See Also

For more information on tar tapes, see the section on copying UFS files in the *System Administration Guide, Volume I.*

Text file busy

Cause

This can occur when an attempt was made to execute a pure-procedure program that is currently open for writing. It also occurs because of attempts to open for writing or to remove a pure-procedure program that is being executed. (This message is obsolete.)

Technical Notes

The symbolic name for this error is `ETXTBSY`, `errno=26`.

Text is lost because the maximum edit log size has been exceeded.

Cause

This message appears at the beginning of a *cmdtool(1)* session after 100,000 characters have gone by in the scrolling window. Clicking on the top rectangle of the scrollbar might display this message. No data were lost, but the user cannot scroll back before this wraparound point.

Action

To increase the maximum size of the Command Tool log file, use `cmdtool -M`, specifying more than 100,000 bytes.

THE FOLLOWING FILE SYSTEM(S) HAD AN UNEXPECTED INCONSISTENCY:

Cause

At boot time the `/etc/rcS` script runs the **`fsck`**(1M) command to check the integrity of filesystems marked "fsck" in `/etc/vfstab`. If **`fsck`**(1M) cannot repair a filesystem automatically, it interrupts the boot procedure and produces this message. When **`fsck`**(1M) gets into this state, it cannot repair filesystems without losing one

or more files, so it wants to defer this responsibility to you, the administrator. Data corruption has probably already occurred.

Action

First run `fsck -n` on the filesystem, to see how many and what type of problems exist. Then run **`fsck`**(1M) again to repair the filesystem. If you have a backup of the filesystem, you can generally answer "y" to all the **`fsck`**(1M) questions. It's a good idea to keep a record of all problematic files and inode numbers for later reference. To run **`fsck`**(1M) yourself, specify options as recommended by the boot script. For example:

```
# fsck /dev/rdsk/c0t4d0s0
```

Usually, files lost during **`fsck`**(1M) repair were created just before a crash or power outage, and cannot be recovered. If important files are lost, you can recover them from backup tapes.

If you don't have a backup, ask an expert to run **`fsck`**(1M) for you.

See Also

For more information, see the section on checking filesystem integrity in the *System Administration Guide, Volume I.*

The SCSI bus is hung. Perhaps an external device is turned off.

Cause

This message appears near the beginning of rebooting, immediately after a "Boot device: ..." message, then the system hangs. The problem is conflicting SCSI targets for a non-boot device. Having an external device turned off is unlikely to cause this problem.

Action

See the message "Boot device: /iommu/sbus/*string*/*string*/sd@3,0" for a solution.

See Also

For more information, see the section on halting and booting in the *System Administration Guide, Volume I.*

THE SYSTEM IS BEING SHUT DOWN NOW !!!

Cause

This message means the system is going down immediately and it's too late to save any changes.

Action

This message is often preceded by messages telling you that the system is going down in 15 minutes, 10 minutes, and so on. When you see these initial broadcast shutdown messages, save all your work, send any email you're working on, and close your files. Fortunately **vi**(1) sessions are automatically saved for later recovery, but many other applications have no crash protection mechanism. Data loss is likely.

See Also

For more information on shutting down the system, see the *System Administration Guide, Volume I.* If you are using the AnswerBook, "halting the system" is a good search string.

The system will be shut down in *int* minutes

Cause

This message from the system **shutdown**(1M) script informs you that the superuser is taking down the system.

Action

Save all changes now or your work will be lost. Write out any files you were changing, send any email messages you were composing, and close your files.

See Also

For more information on shutting down the system, see the *System Administration Guide, Volume I*. If you are using the AnswerBook, "halting the system" is a good search string.

This gateway does not support Unix Password.

Cause

While using Firewall v2.0, the following sequence happpens:

```
# telnet firewall-machine
Trying 192.29.174.60 ...
Connected to firewall-machine
Escape character is '^]'.
CheckPoint FireWall-1 authenticated Telnet server running on
firewall-machine
Login: testuser
This gateway does not support Unix Password.
```

Action

Under Network Objects, edit your Gateway object, Host Properties Auth Schemes and select Unix Password. UNIX Password is not checked by default as it is considered an unsecure method of authentication.

This mail file has been changed by another mail reader.

Cause

This message appears in a pop-up dialog box whenever you start *mailtool(1)* while another mail reader has the inbox locked. A question follows: "Do you wish to ask that mail reader to save the changes?" You are given three choices.

Action

If you choose "Save Changes," *mailtool(1)* requests the other mail reader to relinquish its lock and write out any changes it has made to your inbox. If you choose "Ignore," *mailtool(1)* reads your inbox without locking it. If you choose "Cancel" *mailtool(1)* exits.

Timeout waiting for ARP/RARP packet

Cause

This problem can occur while booting from the net, and indicates a network connection problem.

Action

Make sure the Ethernet cable is connected to the network. Check that this system has an entry in the NIS **ethers**(4) map or locally on the boot server. Then check the IP address of the server and the client to make sure they are on the same subnet. Local `/etc/hosts` files must agree with one another and with the NIS **hosts**(4) map.

If those conditions are not causing the problem, go to the system's PROM monitor `ok` prompt and run `test net` to test the network connection. (On older PROM monitors, use `test-net` instead.) If the network test fails, check the Ethernet port, card, fuse, and cable, replacing them if necessary. Also check the twisted pair port to make sure it is patched to the correct subnet.

See Also

For more information on packets, see *SPARC: Installing Solaris Software*. If you are using the AnswerBook, "ARP/RARP" is a good search string.

Timer expired

Cause

The timer set for a STREAMS `ioctl` call has expired. The cause of this error is device specific and could indicate either a hardware or software failure, or perhaps a timeout value that is too short for the specific operation. The status of the **ioctl**(2) operation is indeterminate. This is also returned in the case of **_lwp_cond_timedwait**(2) or **cond_timedwait**(3T).

Technical Notes

The symbolic name for this error is ETIME, errno=62.

token ring hangs

Cause

4.1.3C SBUS cards suffer system freeze

Too many links

Cause

An attempt was made to create more than the maximum number of hard links (LINK_MAX, by default 32767) to a file. Because each subdirectory is a link to its parent directory, the same error results from trying to create too many subdirectories.

Action

Check to see why the file has so many links to it. To get more than the maximum number of hard links, use symbolic links instead.

Technical Notes

The symbolic name for this error is `EMLINK`, `errno=31`.

Too many open files

Cause

A process has too many files open at once. The system imposes a per-process soft limit on open files, OPEN_MAX (usually 64), which can be increased, and a per-process hard limit (usually 1024), which cannot be increased.

Action

You can control the soft limit from the shell. In the C shell, use the **limit**(1) command to increase the number of `descriptors`. In the Bourne or Korn shells, use the `ulimit -n` command to increase the number of file descriptors.

If the window system refuses to start new applications because of this error, increase the open file limit in your login shell before starting the window system.

Technical Notes

The symbolic name for this error is `EMFILE`, `errno=24`.

Transport endpoint is already connected

Cause

A connect request was made on an already connected transport endpoint; or, a **sendto**(3XN) or **sendmsg**(3XN) transport endpoint specified a destination when already connected.

Technical Notes

The symbolic name for this error is `EISCONN`, `errno=133`.

Transport endpoint is not connected

Cause

A request to send or receive data was disallowed because the transport endpoint is not connected and (when sending a datagram) no address was supplied.

Technical Notes

The symbolic name for this error is `ENOTCONN`, `errno=134`.

TRAP 3E

Cause

Ultra system fails to boot with TRAP 3E. The system sometimes also displays bad magic number errors.

This is caused by a bad superblock on the boot disk. Which, in turn, could have beee caused by a SCSI configuration problem.

Action

To fix:

1. Check SCSI bus for illegal configuration, bad cables, and duplicate SCSI addresses;

2. Boot from cdrom in single user.

```
OK boot cdrom -sw
```

3. Attempt to **fsck**(1M) boot disk. This will probably fail with a superblock error.

```
# fsck /dev/rdsk/device
```

4. Find out locations of alternate superblocks. BE SURE TO USE AN UPPERCASE -N. For example:

```
# newfs -N /dev/rdsk/c0t0d0s0
/dev/rdsk/c0t0d0s0:     2048960 sectors in 1348 cylinders of 19 tracks,
80 sectors 1000.5MB in 85 cyl groups (16 c/g, 11.88MB/g, 5696 i/g)
super-block backups (for fsck -F ufs -o b=#) at:
32, 24432, 48832, 73232, 97632, 122032, 146432, 170832, 195232, 219632,
244032, 268432, 292832, 317232, 341632, 366032, 390432, 414832, 439232,
463632, 488032, 512432, 536832, 561232, 585632, 610032, 634432, 658832,
683232, 707632, 732032, 756432, 778272, 802672, 827072, 851472, 875872,
900272, 924672, 949072, 973472, 997872, 1022272, 1290672, ...
```

5. Using an alternate superblock, **fsck**(1M) the disk. You may have to try more than one alternate superblock to get this to work. Pick a couple from the beginning, the middle, and the end.

```
# fsck -o b=<altblk> /dev/rdsk/c0t0d0s0
```

6. The boot block is probably bad too. Restore it while we are booted from the cdrom.

```
# /usr/sbin/installboot /usr/platform/architecture/lib/fs/ufs/bootblk /dev/rdsk/c0t0d0s0
```

7. Reboot the O.S. Should come up now.

```
# reboot
```

"U"

ufsdump 4mm commands

Cause

Dump syntax used with autoloader

umount: warning: */string* not in mnttab

Cause

This message results from the superuser attempting to unmount a filesystem that is not mounted. Subdirectories of filesystems, such as `/var`, cannot be unmounted.

Action

Run the **`mount`**(1M) or **`df`**(1M) command to see what filesystems are mounted. If you really want to unmount one of them, specify the existing mount point.

Unable to connect to license server. Inconsistent encryption code.

Cause

User receives the following error message. The only thing that had changed was the IP address of the machine.

Action

The IP address defined with **ifconfig**(1M) must match that in /etc/hosts. That is, if you change the machine's IP address with **ifconfig**(1M) you must also change the machine's entry in the /etc/hosts file.

For machines with multiple interfaces, you must check and possibly update /etc/hostname.*.

unable to get pty!

Cause

When trying to bring up a Terminal window (dtterm) in CDE, a popup appears stating: Unable to get pty!.

Action

This error is because dtterm is not able to open /dev/pts/*int* (where *int* is an integer). The reason they cannot open this file is **grantpt**(3C) failed to change the permissions on the file. **grantpt**(3C) failed because the binary /usr/lib/pt_chmod is not setuid root. The permissions on /usr/lib/pt_chmod must be 4111.

To restore the correct permissions to pt_chmod, use the following command: (as root)

```
# chmod 4111 /usr/lib/pt_chmod
```

Unable to install/attach driver '*string*'

Cause

These messages appear in `/var/adm/messages` at boot time, when the system tries to load drivers for devices the machine does not have.

Action

Despite the alarmist tone, this message is intended as only informational. You probably don't want all these device drivers, because they make your system kernel larger, requiring more memory.

Unable to open nwrecover, Error: nwrecover: NSR: please start a server on *client_name*

Cause

While trying to open the graphical recovery interface by running `nwrecover` from the client, the error was displayed.

Action

In this case, multiple networker servers existed and `nwrecover` could not determine which network server to use for the client.

The server can be specified to the `nwrecover` command with the `-s` option.

```
nwrecover -c client_name -s server_name
```

Where `-s` *server_name* sets the NetWorker server and `-c` *client_name* sets the NetWorker client index.

uname: error writing name when booting

Cause

Error is as follows: `uname: error writing name when booting` System cannot bootstrap.

Action

Boot off CD-ROM and check `/etc/nodename`. The file must contain exactly one line with the name of the system. No blank, or other, lines are allowed.

undefined control

Cause

This message, prefaced by the file name and line number involved, is from the C preprocessor `/usr/ccs/lib/cpp`, and indicates a line starting with a sharp (#) but not followed by a valid keyword such as `define` or `include`.

Action

A piece of software might be running the C preprocessor on an initialization file that you thought was interpreted by a shell. In most shells, the sharp (#) indicates a comment. The C preprocessor considers comments to be anything between /* and */ delimiters.

Unmatched ‘

Cause

This message from the C shell **csh**(1) indicates that a user typed a command containing a backquote symbol (‘) without a closing backquote. Similar messages result from an unmatched single quote (’) or an unmatched double quote ("). Other shells generally give a continuation prompt when a command line contains an unmatched quote symbol.

Action

Correct the command line and try again. To continue typing on another line, give the C shell a backslash right before the newline.

UNREF FILE I=i OWNER=o MODE=m SIZE=s MTIME=t CLEAR?

Cause

During phase 4, **fsck**(1M) discovered that the specified file was orphaned because the inode had no record of its pathname. In other words, the file was not connected with any directory.

Action

Answer yes to reconnect the file into the `lost+found` directory. Then contact the file's owner to ask if you should send it back, and where to place it.

See Also

For more information, see the chapter on checking filesystem integrity in the *System Administration Guide, Volume I.*

Use "logout" to logout.

Cause

This C shell message might come as a surprise to Bourne or Korn shell users accustomed to logging out with a Control-d.

Action

When `ignoreeof` is set, the C shell requires users to logout by typing **logout**(1) or **exit**(1). Write any modified files to disk before exiting.

user unknown

Cause

When trying to mail to a user, the error `Username... User unknown` is displayed. The user is on the same system.

Action

Check for typo the entered e-mail address. Or, the user could be aliased to a non-existant e-mail address in `/etc/mail/aliases` or the user's `.mailrc` file.

You cannot mail to a user that has capital letters in its name. **`sendmail`**(1M) converts all the capital letters to lowercase before attempting to find the user. Since UNIX is case sensitive, it finds no username on the system with all lowercase letters, so it displays the `User unknown` message.

Workaround: Make sure all usernames are composed of *only* lowercase letters.

/usr/dt/bin/rpc.ttdbserverd:Child Status' changed

Cause

While running CDE, the error in the console or `/var/adm/messages` file:

```
Oct 19 04:41:00 darkcastle last message repeated 393 times
Oct 19 04:41:01 darkcastle inetd[120]: /usr/dt/bin/rpc.ttdbserverd:Child Status Changed
```

Action

The fix is to create the following soft links:

```
ln -s /usr/openwin/bin/rpc.ttdbserver /usr/dt/bin/rpc.ttdbserver
ln -s /usr/openwin/bin/rpc.ttdbserverd /usr/dt/bin/rpc.ttdbserverd
```

/usr/openwin/bin/xinit: connection to X server lost

Cause

This means that the *xinit(1)* program, which sets up X11 resources and starts a window manager, failed to locate the X server process. Perhaps the user interrupted window system startup, or exited abnormally from OpenWindows (for example, by killing processes or by rebooting). It is possible that the X server crashed. Data loss is possible in some cases. Depending on process timing, this message might be normal when OpenWindows exits during a system reboot.

Action

The only solution is to exit and restart OpenWindows. You do not need to reboot the system unless it hangs and fails to give you a console prompt. To exit OpenWindows, select Workspace->Exit. To restart OpenWindows, type *openwin(1)* at the system prompt.

/usr/ucb/cc: language optional software package not installed

Cause

When compiling some code for BSD compatibility the error happened after invoking `usr/ucb/cc`. The unbundled compiler (SPARCworks Professional C product) was installed in `/opt`.

`/usr/ucb/cc` is a script which checks for the file `/usr/ccs/bin/ucbcc` and, if found, invokes it with appropriate library flags for BSD-compatibility compilation.

`/usr/ucb/cc` is part of the package `SUNWscpu`. `/usr/ccs/bin/ucbcc` is supposed to be a symbolic link to `/opt/SUNWspro/bin/acc`, which is created during installation of the unbundled C compiler, `SPROcc`.

Action

Verify that you have the essential OS-bundled Developer packages, `SUNWscpu`, `SUNWbtool`, and the unbundled C compiler:- `SPROcc`. However, /usr/ccs/bin/

ucbcc was missing on customer's system. Evidently somewhere along the line this link was removed.

Solve the problem by creating a new symbolic link:

```
# ln -s /opt/SUNWspro/bin/acc /usr/ccs/bin/ucbcc
```

Invoke usr/ucb/cc to verify this worked.

Commands used to identify which packages contain particular components involved:

```
craterlake% grep ucb/cc /var/sadm/install/contents
/usr/ucb/cc f none 0555 bin bin 3084 50323 814621113 *SUNWscpu
craterlake% ls -l /usr/ucb/cc
-r-xr-xr-x   1 bin      bin         3084 Oct 25  1995 /usr/ucb/cc
craterlake% file !$
file /usr/ucb/cc
/usr/ucb/cc:    executable /usr/bin/sh script
craterlake% grep ucbcc /var/sadm/install/contents
/usr/ccs/bin/ucbcc=/opt1/40/SUNWspro/SC4.0/bin/acc s none SPROcc SPROcc.2 SPROcc.5
craterlake% file /usr/ccs/bin/ucbcc
/usr/ccs/bin/
ucbcc:     ELF 32-bit MSB executable SPARC Version 1, dynamically linked, stripped
craterlake% ls -l /usr/ccs/bin/ucbcc
lrwxrwxrwx 1 root other 31 Aug 23 1996 /usr/ccs/bin/ucbcc -> /opt1/40/SUNWspro/SC4.0/bin/
acc
```

UX: userdel: error: Cannot update system files login cannot be deleted

Cause

When using userdel to delete a user:

```
userdel -r userid
```

If the root (/) filesystem is full, the error is displayed.

Action

Free up space on root (/) filesystem.

"V"

Value too large for defined data type

Cause

The user ID or group ID of an IPC object or file system object was too large to be stored in an appropriate member of the caller-provided structure.

Action

Run the application on a newer system, or ask the program's author to fix this condition.

Technical Notes

This error occurs only on systems that support a larger range of user or group ID values than a declared member structure can support. This condition usually occurs because the IPC or file system object resides on a remote machine with a larger value of type `uid_t`, `off_t`, or `gid_t` than that of the local system.

The symbolic name for this error is `EOVERFLOW`, `errno=79`.

Volume Manager reports error:

Cause

After upgrading from VxVM 2.0 or 2.1 to 2.3, when attempting to run `vxva`, the volume manager GUI, you get the message:

```
      Volume Manager reports error:
  Configuration daemon can't speak protocol version
```

This message indicates that there is a version mismatch between the version of the volume manager daemon (`vxconfigd`) and the GUI (`vxva`) you are trying to run.

For example, you are running the 2.3 version of vxconfigd, and trying to run an old (2.1) version of vxva.

The most likely reason for this to happen is because the you are using the wrong path for vxva. For vxva versions 2.1 and below, the binary was found in /opt/vxva/bin, but starting with 2.1.1, the location was changed to /opt/SUNWvxva/bin.

If you did not remove the old SUNWvxva package before installing the new 2.3 version (which is a normal thing; you don't NEED to remove the old package), you probably still have the old /opt/vxva/bin in your $PATH, and thus, you're attempting to run the older version of vxva.

Action

Run the newer vxva program: /opt/SUNWvxva/bin/vxva. If that does work and you do not get the error message, simply remove /opt/vxva/bin/vxva from your path statement or remove the old version of vxva and create a symbolic link to the new version with the following two commands:

```
# rm /opt/vxva/bin/vxva
# ln -s /opt/SUNWvxva/bin/vxva /opt/vxva/bin/vxva
```

vxconfigd error: segmentation fault

Cause

When the system boots, the vxconfid fails to start. It fails with a segmentation fault (core dump).

```
 vxconfigd error: segmentation fault
[ vxvm warning: _illegal vminor encountered ]
```

Action

Check the date on the system using **date**(1) (`/bin/date` or `/usr/bin/date`). If the date on the system is very old (like 1970) or very far out in the future (like 2010), `vxconfigd` core dumps.

Change the date on the system using `/bin/date` or `/usr/bin/date` and the `vxconfigd` will start like a champ.

vxvm:vxslicer:ERROR unsupported disk layout

Cause

When trying to encapsulate a disk you get this error.

Action

You must meet the minimum requirements to encapsulate a disk:

1. You must have two free, zero length, slices on the disk (no cylinders should be assigned to these slices.)

2. You must have two free cylinders on the disk. These 2 cylinders must not be in use by any slice other than slice two.

3. The two free cylinders must be located at the beginning or end of the drive.

"W"

WARNING: add_spec: No major number for sf

Cause

The system prints the following warning message while booting:

```
        SunOS Release 5.5.1 Version Generic_103640-03 [UNIX(R)
System V Release 4.0]
```

(Continuation)

```
Copyright (c) 1983-1996, Sun Microsystems, Inc.
WARNING: add_spec: No major number for sf
```

The **sf**(7D) driver is specific for a Sun Enterprise Network Array (SENA), also known as a "photon".

Action

If there is no SENA attached to the system, the message can be safely ignored. To stop seeing the message comment out the last line in `/kernel/drv/ssd.conf` that references **sf**(7D).

If you do this, and then later attach a SENA to your system, please remember to uncomment this line again.

WARNING: Clock gained *int* days-- CHECK AND RESET THE DATE!

Cause

Each workstation contains an internal clock powered by a rechargeable battery. After the system is halted and turned off, the internal clock continues to keep time. When the system is powered on and reboots, the system notices that the internal clock has gained time since the workstation was halted.

Action

In most cases, especially if the power has been off for less than a month, the internal clock keeps the correct time, and you do not have to reset the date. Use the **date**(1) command to check the date and time on your system. If the date or time is wrong, become superuser and use the *date*(1) command to reset them.

WARNING: No network locking on *string*: contact admin to install server change

Cause

The Solaris 2 `mount`(1M) command issues this message whenever it mounts a filesystem that doesn't have NFS locking, such as a standard SunOS 4.1 exported filesytem. Data loss is possible in applications that depend on locking.

Action

On the remote SunOS 4.1 system, install the appropriate `rpc.lockd` jumbo patch to implement NFS locking. For SunOS 4.1.4, install patch #102264; for SunOS 4.1.3, install patch #100075; for earlier 4.1 releases, install patch #101817.

WARNING: processor level 4 interrupt not serviced

Cause

This message is basically a diagnostic from the SCSI driver. Especially on machines with the sun4c architecture, it can appear on the console every 10 minutes or so.

Action

To reduce the frequency of this message, add this line near the bottom of the `/etc/system` file and reboot:

```
set esp:esp_use_poll_loop=0
```

Technical Notes

You might also see this message repeatedly after manually removing a CD when it was busy. Don't do this! To get the system back to normal, reboot the system with the `-r` (reconfigure) option.

WARNING: /tmp: File system full, swap space limit exceeded

Cause

The system swap area (virtual memory) has filled up. You need to reduce swap space consumption by killing some processes or possibly by rebooting the system.

Action

See the message "Not enough space" for information about increasing swap space.

WARNING: TOD clock not initialized--CHECK AND RESET THE DATE!

Cause

This message indicates that the Time Of Day (TOD) clock reads zero, so its time is the beginning of the UNIX epoch: midnight 31 December 1969. On a brand-new system, the manufacturer might have neglected to initialize the system clock. On older systems it is more likely that the rechargeable battery has run out and requires replacement.

Action

First replace the battery according to the manufacturer's instructions. Then become superuser and use the **date**(1) command to set the time and date. On SPARC systems the clock is powered by the same battery as the NVRAM, so a dead battery also causes loss of the machine's Ethernet address and host ID, which are more serious problems for networked systems.

WARNING: Unable to repair the / filesystem. Run fsck

Cause

This message comes at boot time from the `/etc/rcS` script whenever it gets a bad return code from **`fsck`**(1M) after checking a filesystem. The message recommends an **`fsck`**(1M) command line, and instructs you to exit the shell when done to continue booting. Then the script places the system in single-user mode so **`fsck`**(1M) can be run effectively.

Action

See "/dev/rdsk/*variable*: UNEXPECTED INCONSISTENCY" for information about repairing UFS filesystems.

See "THE FOLLOWING FILE SYSTEM(S) HAD AN UNEXPECTED INCONSISTENCY" for information about repairing non-UFS filesystems.

Watchdog Reset

Cause

This fatal error usually indicates some kind of hardware problem. Data corruption on the system is possible.

Action

Look for some other message that might help diagnose the problem. By itself, a watchdog reset doesn't provide enough information; because traps are disabled, all information has been lost. If all that appears on the console is an `ok` prompt, issue the PROM command below to view the final messages that occurred just before system failure:

```
ok f8002010 wector p
```

Yes, that word is `wector`, not `vector`.

The result is a display of messages similar to those produced by the **`dmesg`**(1M) command. These messages can be useful in finding the cause of system failure.

Technical Notes

This message doesn't come from the kernel, but from the OpenBoot PROM monitor, a piece of Forth software that gives you the `ok` prompt before you boot UNIX. If the CPU detects a trap when traps are disabled (an unrecoverable error), it signals a watchdog. The OpenBoot PROM monitor detects the watchdog, issues this message, and brings down the system.

Who are you?

Cause

Many networking programs can print this message, including **`from`**(1B), **`lpr`**(1B), **`lprm`**(1B), **`mailx`**(1), **`rdist`**(1), **`sendmail`**(1M), **`talk`**(1), and **`rsh`**(1). The command prints this message when it cannot locate a password file entry for the current user. This might occur if a user logged in just before the superuser deleted that user's password entry, or if the network naming service fails for a user who has no entry in the local password file.

Action

If a user's password file entry was accidentally deleted, restore it from backups or from another password file. If a user's login name or user ID was changed, ask that user to logout and login again. If the network naming service failed, check the NIS server(s) and repair or reboot as necessary.

Technical Notes

There is a known problem (bug 1138025) with starting hundreds of **`rsh`**(1) processes on another machine. This message appears because **`rsh`**(1) hangs while binding to a reserved port, and responds too slowly to interact with the network naming service.

Window Underflow

Cause

This message often occurs at boot time, sometimes along with a "Watchdog Reset" error. It comes from the OpenBoot PROM monitor, which was passed a processor trap from the hardware. This error indicates that some program tried to access a SPARC register window that wasn't accessible from the processor.

Action

On some system architectures, specifically sun4c, the problem could be that different capacity memory chips are mixed together. Someone might have placed 1MB SIMMs in the same bank with 4MB SIMMs. If this is so, rearrange the memory chips. Make sure to put higher-capacity SIMMs in the first bank(s), and lower-capacity SIMMs in the remaining bank(s); never mix different capacity SIMMs in the same bank.

The problem could also be that cache memory on the motherboard has gone bad and needs replacement. If main memory is installed correctly, try swapping the motherboard.

Technical Notes

The best way to isolate the problem is to look at the `%pc` register to see where it got its arguments, and why the arguments were bad. If you can reproduce the condition causing this message, your system vendor might be able to help diagnose the problem.

"X"

`X connection to` *string*`:0.0 broken (explicit kill or server shutdown).`

Cause

This means that the client has lost its connection to the X server. The "0.0" represents the display device, which is usually the console. This message can appear when a user is running an X application on a remote system with the DISPLAY set back to the original system and the remote system's X server disappears, perhaps because someone exited X windows or rebooted the machine. It sometimes appears locally when a user exits the window system. Data loss is possible if applications were killed before saving files.

Action

Try to run the application again in a few minutes after the system has rebooted and the window system is running.

xinit: not found

Cause

OpenWindows was probably not installed properly, and the *openwin(1)* program could not find *xinit(1)* to start the X windows system. If the user is running another version of X windows, such as the MIT X11 distribution, the `startx` program serves the same function as *xinit(1)*.

Action

Check the PATH environment variable to make sure it contains the appropriate X windows install directory. Verify that *xinit(1)* is in this directory as an executable program.

XIO: fatal IO error 32 (Broken pipe) on X server "*string*:0.0"

Cause

This means that I/O with the X server has been broken. The "0.0" represents the display device, which is usually the console. This message can appear when a user is running Display PostScript applications and the X server disappears or the client is shut down. Data loss is possible if applications disappeared before saving files.

Action

Try to run the application again in a few minutes after the system has rebooted and the window system is running.

Xlib: connection to "*string*:0.0" refused by server

Cause

This message is immediately followed by the "Xlib: Client is not authorized to connect to Server" message. These messages indicate that an X windows application

tried to run on the X server specified inside double quotes, which did not allow the request. The "0.0" represents the display device, which is usually the console. If no server name appears, the superuser probably tried to run an X application on the current machine in an X session that was owned by somebody else.

Action

To allow this client to connect to the X server, run *xhost(1) +clientname* on the X server system. Only the owner of the current X session (who is not necessarily the superuser) is allowed to run the *xhost(1)* command. If somebody else is running X windows on the server, ask them to log out and then start your own X session on that server; remote X connections are usually allowed for the same user ID.

Xlib: extension "GLX" missing on display "0.0"

Cause

Install OpenGL 1.0 and test the configuration by running `/usr/openwin/demo/GL/ogl_install_check` which results in following:

```
# ./ogl_install_check
Xlib:  extension "GLX" missing on display "0.0".
Xlib:  extension "GLX" missing on display "0.0".
Xlib:  extension "GLX" missing on display "0.0".
can't find visual
```

Action

First check that the installation has worked correctly by running the package check utility on the runtime package: `# pkgchk SUNWglrt`. This should result in an error message such as:

```
ERROR: /usr/openwin/server/etc/OWconfig
 file size <187> expected <5423> actual
 file cksum <14394> expected <27045> actual
```

(The numbers might be different but there should be only 1 file.) If other errors result, re-install OpenGL, especially the `SUNWglrt` package.

Assuming that is fine, look at the process owner for the Xsun process using:

```
# ps -aef | grep Xsun | grep -v grep
nobody 20022   225  0 11:36:22 ?  0:34 /usr/openwin/bin/Xsun :0 -nobanner
```

If the owner is not `root`, that is most likely the problem since there will be a permission issue loading the graphic pipelines.

If you are are using CDE, ensure that the Xservers file has the form

```
:0 Local local_uid@console root /usr/openwin/bin/Xsun :0 -nobanner
```

The Xservers file will be found in `/usr/dt/config` if you haven't done any customization but more likely `/etc/dt/config/`. Additional arguments after the `-nobanner` option are acceptable.

Another way of proving this is to run OpenWindows from the command line as root. It will ensure that the Xsun process is owned by root.

Another possibility is that the system is NOT a Creator 3D. You can only run openGL 1.0 on an Ultra with a Creator 3D graphics card. If you install this application on an Ultra with a Creator framebuffer and NOT a Creator 3D you'll see these same error messages.

xterm: fatal IO error 32 (Broken Pipe) or KillClient on X server "*string*:0.0"

Cause

This means that *xterm(1)* has lost its connection to the X server. The "0.0" represents the display device, which is usually the console. This message can appear when a user is running `xterm` and the X server disappears or the client gets shut down. Data loss is possible if applications were killed before saving files.

Action

Try to run the terminal emulator again in a few minutes after the system has rebooted and the window system is running.

XView warning: Cannot load font set *'string'* (Font Package)

Cause

This message from the XView library warns that a requested font is not installed on the X server. Often multiple warnings are displayed for the same font. The set of available fonts can vary from release to release.

Action

To see which fonts are available on the X server, run the *xlsfonts(1)* program. Then specify another font name that you see in the output of *xlsfonts(1)*. Sometimes it is possible to locate a similar font from a different vendor.

Technical Notes

There are two packages of X windows fonts: the common but not required fonts (`SUNWxwcft`), and the optional fonts (`SUNWxwoft`). Run **`pkginfo`**(1) to see if both packages are installed, and add them to the system as you want.

"Y"

yp_all RPC clnt_call (transport level) failure

Cause

At random times, a slave NIS server has a problem that causes **`ypbind`**(1M) to report: `ypserver not responding` and the machine must be rebooted. The `syslog` contains:

```
Dec 14 07:11:03 rahab syslog: yp_all -
 RPC clnt_call (transport level) failure:
RPC: Unable to receive; An event requires attention
```

Action

To workaround, increase the file descriptor limit in the yp startup script, `/etc/rc2.d/S71rpc`. Add this to the script before ypserv is started:

```
ulimit -n 256
```

ypbind[*int*]: NIS server for domain "*string*" OK

Cause

This message appears after an "NIS server not responding" message to indicate that **ypbind**(1M) is able to communicate with an NIS server again.

Action

Proceed with your work. This message is purely informational.

ypbind[*int*]: NIS server not responding for domain "*string*"; still trying

Cause

This means that the NIS client daemon **ypbind**(1M) cannot communicate with an NIS server for the specified domain. This message appears when a workstation running the NIS naming service has become disconnected from the network, or when NIS servers are down or extremely slow to respond.

Action

If other NIS clients are behaving normally, check the Ethernet cabling on the workstation that is getting this message. On SPARC machines, disconnected network cabling also produces a series of "no carrier" messages. On x86 machines, the above message might be your only indication that network cabling is disconnected.

If many NIS clients on the network are giving this message, go to the NIS server in question and reboot or repair as necessary. To locate the NIS server for a domain, run

the **ypwhich**(1) command. When the server machine comes back in operation, NIS clients give an "NIS server for domain OK" message.

See Also

For more information about **ypbind**(1M), see the section on administering secure NFS in the *NFS Administration Guide*.

ypwhich: can't communicate with ypbind

Cause

This message from the **ypwhich**(1) command indicates that the NIS binder process **ypbind**(1M) is not running on the local machine.

Action

If the system is not configured to use NIS, this message is normal and expected. Configure the system to use NIS if necessary.

If the system is configured to use NIS, but the **ypbind**(1M) process is not running, invoke the following command to start it up:

```
# /usr/lib/netsvc/yp/ypbind -broadcast
```

"Z"

zs*int*: silo overflow

Cause

This message means that the Zilog 8530 character input silo (or serial port FIFO) overflowed before it could be serviced. The **zs**(7D) driver, which talks to a Zilog Z8530 chip, is reporting that the FIFO (holding about two characters) has been overrun. The number after **zs**(7D) shows which serial port experienced an overflow:

```
zs0 - tty serial port 0 (/dev/ttya)
zs1 - tty serial port 1 (/dev/ttyb)
zs2 - keyboard port (/dev/kbd)
zs3 - mouse port (/dev/mouse)
```

Action

Silo overflows indicate that data in the respective serial port FIFO has been lost. However, consequences of silo overflows might be negligible if the overflows occur infrequently, if data loss is not catastrophic, or if data can be recovered or reproduced. For example, although a silo overflow on the mouse driver (`zs3`) indicates that the system could not process mouse events quickly enough, the user can perform mouse motions again. Similarly, lost data from a silo overflow on a serial port with a modem connection transferring data using **uucp**(1C) is recovered when **uucp**(1C) discovers the loss of data and requests retransmission of the corrupted packet.

Frequent silo overflow messages can indicate a **zs**(7D) hardware FIFO problem, a serial driver software problem, or abnormal data or system activity. For example, the system ignores interrupts during system panics, so mouse and keyboard activity result in silo overflows.

If the serial ports experiencing silo overflows are not being used, a silo overflow could indicate the onset of a hardware problem.

Technical Notes

Another type of silo overflow is one that occurs during reboot when an HDLC line is connected to any of the terminal ports. For example, an X.25 network could be sending frames before the kernel has been told to expect them. Such overflow messages can be ignored.