



3.3 NFS Release Notes

Document Version 1.0

Document Number 007-3358-010

9/90

Technical Publications:

Seth Katz
Lorrie Williams

Engineering:

Dana Treadwell

© Copyright 1990, Silicon Graphics, Inc.—All rights reserved.

This document contains proprietary information of Silicon Graphics, Inc. The contents of this document may not be disclosed to third parties, copied or duplicated in any form, in whole or in part, without the prior written permission of Silicon Graphics, Inc.

Restricted Rights Legend

Use, duplication or disclosure of the technical data contained in this document by the Government is subject to restrictions as set forth in subdivision (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 52.227-7013, and/or in similar or successor clauses in the FAR, or the DOD or NASA FAR Supplement. Unpublished rights reserved under the Copyright Laws of the United States. Contractor/manufacturer is Silicon Graphics, Inc., 2011 N. Shoreline Blvd., Mountain View, CA 94039-7311.

3.3 NFS Release Notes

Document Version 1.0

Document Number 007-3358-010

**Silicon Graphics, Inc.
Mountain View, California**

IRIS® is a registered trademark and Silicon Graphics™, IRIS-4D™, and IRIX™ are trademarks of Silicon Graphics, Inc. Sun™, NFS™, and SunOS™ are trademarks of Sun Microsystems, Inc.

Contents

1. Introduction	1-1
1.1 Release Identification Information	1-2
1.2 NFS Option Subsystems and Disk Usage	1-2
1.3 Software Installation	1-3
1.4 On-Line Release Notes	1-4
1.5 Product Support	1-4
2. Additions	2-1
3. Changes	3-1
4. Bug Fixes	4-1
5. Documentation Errors	5-1
5.1 Errata: 2.3.3 Creating the Share Tree	5-1
5.1.1 Automatic Installation	5-2
5.1.2 Manual Installation	5-2
5.2 Errata: 2.3.5 Installing the Client Tree	5-3

1. Introduction

This document describes the features of software release 3.3 of the Network File System (NFS™) option. Silicon Graphics NFS 3.3 is based on NFSSRC 4.0 and NFSSRC 4.0.3 bug fixes. DES authentication is not implemented.

Note: Packaged with these release notes is a separate sheet that contains the Software License Agreement. This software is provided to you solely under the terms and conditions of the Software License Agreement. Please take a few moments to review the Agreement. Note in particular paragraphs 1 and 2 under the heading “Terms and Conditions of Software License.” This software may be used only by you on *one* workstation, computer, or server at one time, and may be copied only as necessary for backup or archival purposes.

This document contains the following chapters:

1. Introduction
2. Additions
3. Changes
4. Bug Fixes
5. Documentation Errors
(in *Administrator's Guide to Diskless Workstations*)

1.1 Release Identification Information

Following is the release identification information for NFS:

Software Option Product	NFS
Version	3.3
Product Code	S4-NFS-33
System Software Requirements	4D1-3.3

1.2 NFS Option Subsystems and Disk Usage

This section lists the subsystems (and their sizes) on your NFS option tape.

Those marked "default" are the default subsystems. If you are installing this option for the first time, the default subsystems are installed when you choose the "default" or "automatic" menu items during the installation procedure.

If you are updating from an older version of software, and you select "default" or "automatic", the system installs only the default subsystems that already are installed.

Subsystem	IRIS-4D™ Series, IRIS® POWER Series (512 byte blocks)	Personal IRIS (512 byte blocks)
<i>nfs.sw.nfs</i> (default)	3356	3356
<i>nfs.sw.dskless</i> (default)	205	205
<i>nfs.sw.yp</i> (default)	4686	4686
<i>nfs.man.nfs</i>	323	323
<i>nfs.man.relnotes</i> (default)	20	20

1.3 Software Installation

As of system software release 4D1-3.2, optional software product tapes no longer contain the software installation tools. Therefore, these release notes do not document the installation procedure. The installation software, as well as the installation instructions, can be found with the standard products you received from Silicon Graphics, Inc.

The following table shows you where to look for the installation software and documentation.

	Software	Document
Personal IRIS	Execution-only Environment (1)	<i>3.3 Standard System Release and Installation Notes</i>
Personal IRIS	Development Environment	<i>4D1-3.3 Development Release and Installation Notes or IRIS-4D System Administrator's Guide</i>
All other IRIS-4D Series workstations and servers	Execution-only Environment (1)	<i>4D1-3.3 Development Release and Installation Notes or IRIS-4D System Administrator's Guide</i>

1.4 On-Line Release Notes

When you install the on-line documentation for a product, you can view the release notes on your screen as you would an on-line manual page.

The command:

relnotes

displays a list of products that have on-line release notes. The *relnotes* command accepts the following arguments:

- h** describes how to use *relnotes*
- <product>** displays the table of contents for a product's on-line release notes
- <product> <chapter>** displays a specific chapter of a product's on-line release notes
- t <product> <chapter>** prints a specific chapter of a product's on-line release notes

To page through the chapter, press **<space>** and to quit, press **** or **<ctrl-c>**. See *relnotes(1)* for more information.

1.5 Product Support

Silicon Graphics, Inc., provides a comprehensive product support maintenance program for IRIS-4D Series products. For further information, please contact your service organization.

2. Additions

This chapter lists the new features provided with this release of NFS.

- The *automount* daemon automatically mounts filesystems on an as-needed basis. File hierarchies can be mounted automatically when they are used, and unmounted silently following a predetermined idle period. The *automount* utility can be used for a variety of purposes, including automatically mounting a user's home directory from any workstation connected by NFS. See *automount(1M)*.
- The Network Lock Manager allows the locking of records and files between NFS clients. The Network Lock Manager consists of two daemons, *lockd* and *statd*, which run on both the client and the server. See *lockd(1M)*, *statd(1M)* and *statmon(4)*.
- The *ypchpass(1)* utility is a program for updating Yellow Pages user information. *ypchpass* allows users to set their full names, office and home phone numbers, home directories, and login shells. See also *finger(1)*.

3. Changes

This chapter lists the changes to existing NFS features since the last release (3.2).

The IRIX™ version of *mountd*(1M), which supports export options not offered by *mountd* from other vendors, has been given its own *RPC*(4) program number. This number assignment is contained in the */etc/rpc* database. Users of previous YP releases must upgrade their YP master to support the new version of the */etc/rpc* database in order to run the IRIX *mountd*. Your YP master should have this line in */etc/rpc*:

```
sgi_mountd      391004  mount showmount
```

Other changes to existing NFS features in the current release include:

- NFS read/write performance improvements.
- The *mount* options, **-b list**, **-n**, and **-private** have been added. See *mount*(1M) and *fstab*(4).
- The *umount* option, **-b list** has been added. See *umount*(1M).
- The *export* option **-wsync** has been added. See *exports*(4).
- The *rpcinfo*(1M) options, **-b program-number [version-number]** and **-d program-number [version-number]** have been added.
- The ability to log various *ypserv*(1M) activities has been added. See *ypserv*(1M).
- *ypxfer*(1M) now logs errors to *syslogd*(1M).
- *ypbind*(1M) now logs errors to *syslogd*(1M) in addition to the console.
- There is a new command, *ypmake*(1M), which executes */usr/etc/yp/Makefile* and logs its results. See *ypmake*(1M).

- The ability to interrupt NFS system calls on hard-mounted filesystems has been enhanced and extended. Interrupt response is now faster and non-fatal interrupts are no longer ignored.

4. Bug Fixes

This chapter lists the bug fixes in NFS since the last release (3.2).

- A bug in SunOS™ 4.1 mountd that prevents Sun™ clients from NFS mounting IRIX file systems has been fixed from the (SGI) server side. The IRIX version of *mountd*, which supports additional export options, has been given its own RPC program number.
- A bug that caused confusion between NFS-mounted filesystems has been fixed. When asked for information on the current working directory, programs such as *pwd(1)* and *ls(1)*, sometimes reported information for other filesystems. The hash function that caused the confusion has been corrected.
- A bug that could cause *nfs_writes* to fail if they occurred at certain offset/size values and spanned extents in the filesystem has been fixed. When the writes failed this message appeared on the console:

```
xdr_opaque: decode FAILED
```


5. Documentation Errors

This section contains corrections to important procedures found in sections 2.3.3 *Creating the Share Tree* and 2.3.5 *Installing the Client Tree* of the *Administrator's Guide to Diskless Workstations*. Read this material before you read these chapters in the *Administrator's Guide to Diskless Workstations* and before you install a diskless IRIS-4D Series workstation.

5.1 Errata: 2.3.3 Creating the Share Tree

To create the share tree, use this section instead of section 2.3.3 *Creating the Share Tree*.

To create the share tree, follow these steps:

1. Become the superuser.

```
su
```

2. Move to the directory */usr/etc/boot*.

```
# cd /usr/etc/boot
```

3. Install the share tree using a *clinst* command of the form:

```
./clinst -c class share
```

where *class* is the name of the class.

Note: Remember, the name of the share directory is the name of the class!

4. When the system prompts you, confirm your request:

y

5. The *clinst* menu appears on your screen.

clinst is the installation tool that handles the creation and removal of share and client trees from the server workstation. The *clinst* command works a lot like the *inst* command, so if you're familiar with *inst* you should have no trouble with *clinst*. There are two ways to install with *clinst*, Automatic and Manual.

5.1.1 Automatic Installation

If you are installing the software directly from a tape, you can select the first item on the menu, "Install software automatically". This automatically installs all the options you have selected from the tapes.

After each tape is installed, you are prompted for the next tape. Insert each tape as you are prompted, then select yes from the menu. When you have finished installing all the options from your installation tapes, select no. Do not restart the system.

Verify that the *nfs.sw.diskless* option has been installed. If not, select the *nfs.sw.diskless* option, and install it. When the installation is complete, select the item labeled "quit" to leave the menu.

5.1.2 Manual Installation

If you want to install selectively, or if you want to install the software from another location, select the second item on the menu, "Use manual installation features". When you select this item, another menu appears.

There are several items on the manual installation menu. If you are unsure about any of them, you can use the "help" selection.

Select the item labeled “from” to tell *clinst* where to get the software you want to install. For example, suppose you want to get software from a workstation called gilligan, in a directory called */little/buddy*. You would select “from” from the menu, then type the following line:

```
guest@gilligan:/little/buddy
```

Select the item labeled “select” to choose particular subsystems to install. (If you want to install everything, you don’t need this step.)

Return to the menu. Insert your NFS tape. Select “Use manual installation features”. When the manual installation menu appears, select “all”.

Select the item labeled “quit” to leave the menu when the installation is complete.

For more information about using *clinst*, see the *clinst(1M)* man page in your *IRIX System Administrator’s Reference Manual*, or type:

```
% man clinst
```

5.2 Errata: 2.3.5 Installing the Client Tree

Note that the procedure described in section 2.3.5 *Installing the Client Tree* does not involve software installation from tape. All software installed in the client tree is already present on the server disk. The software is moved to a separate area, to be used by the diskless machine.

Use the following procedure in place of step 9 of 2.3.5 *Installing the Client Tree*. This prompt appears on your screen:

```
>>
```

Set the *netaddr*, *bootfile*, and *diskless* variables using the *setenv* command by typing:

```
setenv diskless 1
setenv netaddr address
setenv bootfile bootp()servername:/usr/etc/boot/clientname/unix
```

where *address* is the internet address of the client workstation, *servername* is the name of the server, and *clientname* is the name of the client.

Disregard step 14 in Section 2.3.5 *Installing the Client Tree*.

