READ THIS FIRST

Notes for Release 1.1

May 9, 1984

Release 1.1 is the *Sun base release*. This release corresponds to the final (not beta) Berkeley 4.2bsd release. Future Sun releases will be sent automatically only to customers with service contracts.

Operating Environment

Release 1.1 runs only on Sun Workstations™ with Sun-2™ CPU boards. The release can run on CPU boards with revision L, M, or N proms. Your machine has L or M proms if it is currently running Release 1.0. When your machine is powered on, it tells you what version of proms you have. Installing 1.1 with revision L or M proms requires some extra steps. Refer to *Installing with L or M Proms* below.

Revision N proms are required to run software that is tied to a particular *hostid*, for example *MicroINGRES™*. Revision N proms for models 100U and 150U fix the 4014 emulation feature that was broken in the revision L proms. 4014 emulation is not provided by any revision of proms for models 120 or 170. Other changes to the revision N proms are outlined in the *System Summary and Change Notes*. If you need revision N proms, send in the attached order form.

A file server and all its clients must be Sun-2's running Release 1.1. Mixing releases on a network is possible (see *Making 1.1 Networks Compatible with Existing Networks* in the *System Manager's Manual*), except between servers and their clients. Plan your upgrade to the Sun-2 and/or Release 1.1 accordingly.

Class C Internet addresses are recommended with 1.1. See *Making 1.1 Networks Compatible with Existing Networks* in the *System Manager's Manual*.

Release 1.1 running with Revision N proms obtains the Ethernet™ address from the CPU board ID proms, rather than the Ethernet controller proms. Because of this, the Ethernet address from the *ether* line in /etc/nd.local for a client will be different in 1.1 when running with Revision N proms. Also note that should you ever need to swap CPU boards, particularly in clients, the original ID proms must be reinstalled on the replacement CPU.

Manuals

Release 1.1 is shipped with one manual set per site. Additional manual sets can be ordered at the discounted price of $100 per set (limit, one set per machine). Order manuals from your sales office prior to July 31, 1984 to receive this discount.

The single copy of the documentation provided with Release 1.1 may be reproduced for use within your organization, provided that copyright notices are included and that no

more than one (1) copy per Sun Workstation is produced.

Installation Procedure

1. See the *Upgrading System Software* chapter in the *System Manager's Manual* for information on changing releases. This chapter talks about how to save files across releases. This is chapter 7 in the 100U/150U *System Manager's Manual* and chapter 6 in the 120/170 *System Manager's Manual*.

   Note: when changing from Version 7, use *tar* to backup files because */etc/dump* tapes are incompatible with Release 1.1. Either *tar* or *dump* files from 0.3, 0.4 and 1.0 can be read by 1.1.

2. If you're upgrading your hardware to the Sun-2, follow the instructions in the *Upgrade Installation Guide*.

3. Follow the Unix™ installation procedure in the 1.1 *System Manager's Manual*. Some changes have occurred from prior releases, particularly for the Sun-2/120™ with SCSI disks, and for determining Ethernet addresses. If you're installing 1.1 on a system with revision L or M proms, refer to the section below for additional instructions.
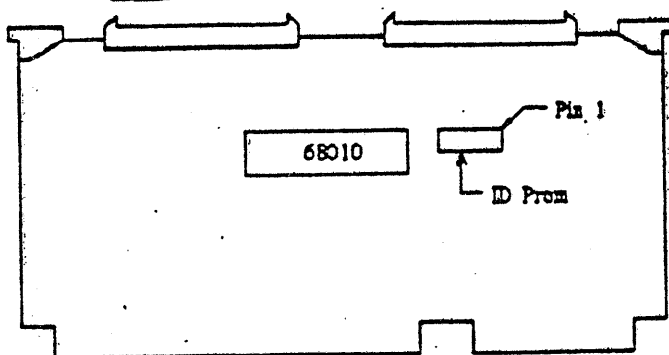
Installing with L or M Proms

To install with L or M proms, the following extra steps are needed. *These steps are only necessary for diskless workstations.*

1. Systems with Revision L and M proms use the Ethernet address in the Ethernet controller proms, not the CPU ID proms. To obtain the Ethernet address, follow the procedure documented in your 1.0 *System Manager's Manual*. It describes how to obtain the Ethernet address on the Ethernet controller stored in memory location *1e0400* (for 120/170) or *fe0400* (for 100U/150U).

   When *setup* asks for an Ethernet address for a particular workstation, this is the one to use. Note that 1.1 *setup* needs all six bytes of the Ethernet address separated by colons.

2. The CPU ID prom should be unplugged. Release 1.1 cannot auto-boot over the network with revision L or M proms when the CPU ID chip is installed.

   The CPU ID chip position is illustrated in the diagram below.

Be *sure* to keep the ID prom; you'll need to reinstall it should you ever use revision

If you reinstall the ID prom it *must* be replaced in its original orientation, otherwise damage to the prom could result. To orient the chip, one of the corner pins on the ID prom is marked with a dot on the underside of the chip. That pin is call "pin 1". Pin 1 should be in the position shown in the diagram above.

Important Differences

Release 1.1 includes, for the first time, a *System Summary and Change Notes* document. It documents changes between 0.4, 1.0 and 1.1, and differences between 1.1 and Berkeley 4.2bsd.

Known Problems

The following are known problems in Release 1.1.

Systems with terminals as consoles

Model 150U, 170, or 120/FS systems with a terminal as a console can hang when booting. As control of the UARTS is passed from the prom monitor to Unix during the boot procedure, the DTR signal can change, causing some terminals that depend on DTR to go off-line.

A "cheater" cable solves the problem. Connect pin 7 to pin 7, cross pins 2 and 3. On each side of the cable loopback pin 6 to 8 and 20, and loopback pin 4 to 5.

cron daemon

If the date is set forward, the *cron* daemon can go into an infinite loop. If this happens, /etc/cron should be killed (find the *cron* process id with *ps az*) and restarted by typing /etc/cron.

printer spooling

The line printer spooling protocol changed between the 0.4 and 1.0 releases. On a network where some workstations are running Release 0.3/0.4 and some are running Release 1.0/1.1, use the following command for printing.

        % cat *file* | rsh *lprhost* lpr

atof() bug

atof() loses some accuracy for numbers in certain ranges. Numbers with exponents between -31 and 31 are fine. Any program using *atof()* could be affected, including the compilers.

UUCP

uuxqt may fail because it can't open files due to permission problems. This can be fixed with the following command.

        # chmod 711 /usr/spool/uucp/{C.,D.,D.*systemname*}

Sendmail

When the system comes up multiuser for the first time, *sendmail* will try to run, leaving in the root directory one qf..... file and one af..... file. This does no harm, but can be avoided by installing *sendmail* just after running *setup*.

Demo software

The Makefile distributed with the demo software, /usr/demo/src/Makefile, does

/usr/demo manually.

The *chessgame* works properly only in windows.

vfont files

vfont files are included in the release. They are in the same *tar* file as the demos, manuals and games.

rdate

Release 1.1 *rdate* is incompatible with the Release 1.0 version.

Prom Order Form

Use this form to order Revision N proms. There is no charge for the proms, but we do ask that you return your old proms (a mailer will be sent with your new proms).

List your name, address, phone number and machines below. Use the serial number from the back of your workstation. For the model 120, use the serial number from the back of the pedestal. — —

The Revision N proms are available in three types. The type depends on the workstation model and kind of keyboard. The proms can be for the models 120/170, the models 100U/150U with all black keys on the keyboard, or the models 100U/150U with gray and black keys on the keyboard. Check one of the three machine type boxes for each of your machines.

Return this form to:

Sun Microsystems, Inc.
2550 Garcia Ave.
Mountain View, CA 94043
Attn: N-Proms, MS 2-15

Contact: _____

Ship to address: _____

_____

_____

_____

_____

Phone: - (____) _____

	Machine serial #	Machine/Prom Type (check one for each machine)		
		Model 100U or 150U		Model 120 or 170
		All Black Keys	Black *and* Grey Keys	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

If you have more than 10 machines, just attach copies of this form.