Netra™ X1 Server Product Notes

Sun Microsystems, Inc.
901 San Antonio Road
Palo Alto, CA 94303-4900 U.S.A.
650-960-1300

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Introduction

These Product Notes provide information that became available after the *Netra X1 Server User's Guide* went to print.

The document contains the following sections:

Preinstalled Software

The Netra X1 server is preinstalled with the Solaris 8 operating environment. To see which version is installed on your server, type:

```
# cat /etc/release

Solaris 8 10/00 s28s_u2wos_11b SPARC
Copyright 2000 Sun Microsystems, Inc.  All Rights Reserved.
Assembled 31 August 2000
```

When you type this command, the first line of text that appears on the screen states the major version of Solaris (in this case Solaris 8) and the date of the update release (in this case 10/00). In the example above, the system is installed with Solaris 8 Update 2.

The preinstalled software on the Netra X1 server represents the “entire distribution” of the system software. In other words, it includes all the software that would be installed on the server if you had run the Solaris 8 interactive installation software and selected the “entire distribution” option.

Front Bezel

There is a blank nameplate built into the bezel, just below the *Netra X1* badge. This is for you to use to attach a unique identifier to the server.

The front bezel is not removeable. Do not attempt to remove it, because if you do, it could break and become impossible to reattach to the server.

Precautions for Using the System Configuration Card

The Netra X1 Server contains a memory card (located on the back panel) called the system configuration card. This card contains the system's MAC address, serial number, and other configuration settings. It is designed to be removable so that, if you ever need to replace an entire server, you can transfer the host ID and configuration data onto the new server. This makes the replacement of the server transparent to your network.

Caution – Never remove the system configuration card when the server is booting or running Solaris. Power the server off or down to standby mode before removing or inserting the system configuration card.

Caution – Do not handle the system configuration card unless you need to transfer it to another system. If you need to handle it for this reason, avoid contact with the gold terminals on the underside of the card.

For information about transferring the system configuration card from one server to another, refer to the *Netra X1 Server User's Guide* (part number: 806-5980-10).

Re-installing the Solaris 8 Operating Environment

Note – The earliest version of the Solaris 8 operating environment supported on the Netra X1 server is Solaris 8 (10/00).

The Netra X1 server comes pre-installed with:

- The Solaris 8 operating environment (64 bit).
- Lights Out Management (LOM) packages.
- The Netra X1 dmfe Fast Ethernet driver.

Because the Netra X1 server does not contain a CD-ROM drive, if you need to re-install the Solaris 8 operating environment, you must do so from a network install server which does have a CD-ROM drive.

Further information about installing the Solaris 8 operating environment from a network install server is available in the *Solaris 8 Advanced Installation Guide*, which is supplied with the Solaris 8 operating environment CDs. It can also be downloaded from `http://docs.sun.com`.

Before you can install Solaris 8 onto the Netra X1, there are some software updates specific to the Netra X1, which you must install onto the system you will use as a network install server. The following section tells you how to do this.

▼ To Download the Netra X1 Mandatory Software for the Network Install Server

1. **On the system you are going to use as the network install server, make a directory called** `/var/tmp/netra-x1` **by typing:**

```
# mkdir -m 755 /var/tmp/netra-x1
```

2. **Go to** `http://www.sun.com/netra` **and, in the 'Downloads' section, click on 'Netra X1 Software Drivers'.**

   (If you have not used the download service before, you will be invited to register before proceeding.)

3. **Log into the download service.**

4. **Click "Download Netra X1 Driver Software" and save the packages to the directory** `/var/tmp/netra-x1.`

   The file you download is called `mis.netra-x1.259-3836-03.zip`. This file contains the following Netra X1 specific software:

   - Netra X1 dmfe Fast Ethernet driver.
   - Lights Out Management (LOM) packages.
   - The patches listed in the table below.

   (This is the correct version number at the time of writing. Because this file is likely to be updated, the final two digits in the name of the file you download may be higher than -03. This indicates that you are downloading the most recent version of the software updates for the Netra X1 Server.)

5. **At the Solaris prompt on the system you are going to use as the network install server, unzip the files you have downloaded. To do this, type:**

```
# cd /var/tmp/netra-x1
# unzip mis.netra-x1.259-3836-03.zip
```

Note – The software updates you have downloaded include all the mandatory patches for Solaris and the Netra X1 server: you do not need to download these patches separately. However, you can download and find information about the latest software patches for both the Netra X1 server and the Solaris operating environment at `http://sunsolve.sun.com`.

Patch Number	Patch Title
110383-01 or later	SunOS 5.8: libnvpair patch
108528-07 or later	SunOS 5.8: kernel update patch
108664-06 or later	SunOS 5.8: Support for Network Service
109793-07 or later	SunOS 5.8: su driver patch
108974-09 or later	SunOS 5.8: dada, uata, dad, sd and scsi patch
110208-09 or later	Netra Lights Out Management 2.0 patch
110693-01 or later	Netra X1 dmfe ethernet driver, Link light
111092-02 or later	Netra X1 time of day driver

Creating a Network Install Server

To install the Solaris software over the network, you must create an install server. To do this follow the instructions in the chapter entitled “Preparing to Install Solaris Software Over the Network” in the *Solaris 8 Advanced Installation Guide*. This document is supplied with the Solaris 8 software CDs.

When you have finished setting up the install server, do the following:

1. **Change to the directory in which you placed** `mis.netra-x1.259-3836-03.zip` **by typing:**

```
# cd /var/tmp/netra-x1
```

2. **Add the patches and packages automatically to the network install server image by typing:**

```
# ./modify_install_server.netra -d install_dir_path
```

where *install_dir_path* is the path to the install image on your install server.

Known Issues

The following sections cover some known issues with the Netra X1 server.

64 Bit Support

When installing a system, ensure that the selected install option supports the 64 bit kernel.

Note – The install option that takes up the least disk space, labelled “Core System Support”, supports 32 bit operation only and is not compatible with the Netra X1 server.

WebStart Install Not Supported

Installing a server over the network by using the WebStart tool, as documented in the Solaris 8 *Advanced Installation Guide,* 806-0957-10 (page 217, step 16), is not supported on the Netra X1 server.

Sending Break During Boot Process Can Result In Failure To See Disk On Reset

If a break is sent to the system console while the system is booting, there is a small chance of a subsequent failure to detect the boot disk. The prom may report:

```
Boot device: disk  File and args:
Bad checksum in disk label
Can’t open disk label package
Evaluating: boot

Can’t open boot device
```

To recover, power the system off for 1 minute and then power it back on.

No Auto Power-On When Power is Removed and Restored Within 10 Seconds

If you disconnect the server from its power source while it is powered on, and then reconnect it within 10 seconds of the disconnection, the server automatically attempts to power on. However, it does not reinitialize successfully and hangs after giving the following console output:

```
LOMlite starting up.

CPU type: H8/3437S, mode 3
Ram-test: 2048 bytes OK
Initialising i2c bus: OK
Searching for EEPROMs: 50(cfg)
I2c eeprom @50: OK
i2c bus speed code 01... OK
Probing for lm80s: none
Probing for lm75s: 48
Initialising lm75 @48: OK
System functions: PSUs fans breakers rails gpio temps host CLI ebus
clock
Unexpected reset

LOMlite console
lom>
LOM event: +0h0m0s LOM FAULT: unexpected reset
lom>
LOM event: +0h0m0s host power on
```

If your system hangs when you have disconnected power and then restored it within 10 seconds of the disconnection, do either of the following:

- Type a carriage return and then type the LOM escape sequence (a hash character, followed by a dot: #.). At the LOM prompt, type `poweroff`. At the next LOM prompt, type `poweron`. The system will power on.
- Hold the rocker switch in the OFF position until the console reports the time-stamped `host power off` LOM event, then put the rocker switch into the ON position. The system will then power on.

If you have the NVRAM `diag-switch?` parameter set to `true` (by default, it is set to `false` and the console output is as shown above), the system will provide additional, Open Boot PROM output during the boot process. In this case, if you restore power within 10 seconds of removing it, the system hangs after reporting the following message:

```
Probing/pci@1f,0 Device a usb
```

To restore power, use either of the two methods described above.

Note – Any interruption and subsequent restoration of mains power within 10 seconds could cause this fault to occur.

Optional Components

There is an error on page 4 of the Netra X1 Server User's Guide. The part number for the 512-Mbyte DIMM is incorrectly given as X7084A. The correct part number is X7092A.

Safety and Compliance Information

- There is an alteration to the *Netra X1 Safety and Compliance Guide* to correct the maximum ambient operating temperature figure.
- Some information contained in the guide relates to equipment operating from a DC power source only, and this information can be disregarded in relation to the Netra X1 server.

The following sections contain more details.

Ambient Operating Temperatures

The first caution in the 'Placement of a Sun Product' section refers to a maximum ambient operating temperature of 55 degrees Celsius. This temperature should be 40 degrees Celsius (104 degrees Fahrenheit), as shown in the correct text below.

Caution – If the system is installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may exceed the room ambient. Ensure that rack environment ambient temperature does not exceed 40 degrees Celsius (104 degrees Fahrenheit).

The following Caution is incorrect in relation to the Netra X1 server and should be disregarded:

Caution – Netra X1 units are designed to work with DC power. Units designed to work with DC power are shipped with a connector to be used with a customer supplied 48V power cord for the customer to connect to the DC power source. Always connect DC powered units to a DC power source only.

DC Source Site Requirements

The Netra X1 is an AC-only product. Disregard the paragraphs in the *Netra X1 Safety and Compliance Guide* which refer to DC source site requirements.