



Netra™ CT Server Release Notes

For the Netra CT 810 and Netra CT 410 Servers

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Netra CT Server Release Notes

The *Netra CT Server Release Notes* contain important and late-breaking information about the Netra™ CT 410 and CT 810 servers, including:

- [“Known Issues” on page 2](#)
- [“Enhancements and New Features” on page 3](#)
- [“Documentation Issues” on page 4](#)
- [“Solaris Operating System Version” on page 9](#)
- [“Firmware Versions” on page 10](#)
- [“Patches to Download and Apply” on page 11](#)

The most recent versions of the Netra CT 410 and CT 810 server documentation are available at:

<http://www.sun.com/products-n-solutions/hardware/docs/Servers/>

Known Issues

The following known issues (priorities 1-3) exist in this release of the Netra CT Server hardware and software.

TABLE 1 Known Issues

Bug ID	Problem	Comments or Workaround
4660329	Netra CP2160 and Netra CP2140 topology should have PMC slots.	MOH issue. Will fix in future release.
4761902	Acceptable_Fru_Types field is not readable for MOH on alarm card until alarm card is reset.	Reset the alarm card.
4808123	For MOH on host, <code>iftable</code> does not update to include newly created interfaces.	Will fix in future release.
4925119	Alarm card MOH does not get attribute change for <code>UpperThresholdNonCritical</code> .	Connect to the host in drawerview mode to receive the correct attribute change notification.
6255967	Provide a seamless interface between the MOH software and the Netra High Availability Suite (NHAS).	Will fix in a future release.
6403301	The RoHS Netra CP2140 board resets after returning from OpenBoot™ PROM (OBP), even though watchdog did not expire.	Do not use the <code>break</code> command to stop Solaris OS to get to the OBP prompt. If the system is stopped in this manner, executing a <code>go</code> command may cause the board to reboot.
6426465	Solaris 9 FCS Operating System fails to probe correctly the new RoHS DAT Tape HP72.	Apply the patches listed in TABLE 5 .
6434858	Pinging the alarm card while it is resetting causes MCNet driver to panic on the Netra CP2140 host board.	When resetting the alarm card, make sure there is no traffic across the McNet interface. Do this by bringing down the <code>mcn0</code> interfaces on the host board in the chassis.

Enhancements and New Features

The following paragraphs describe enhancements and new features.

RoHS Compliance

As of this release, this equipment complies with the Restriction of Hazardous Substances (RoHS) directive 2002/95/EC.

Beginning July 1, 2006, Directive 2002/95/EC, of the European Union (EU), restricts the use of certain hazardous substances in electrical and electronic equipment. Those substances are Lead, Mercury, Cadmium, Hexavalent Chromium, PBBs (polybrominated biphenyls) and PBDEs (polybrominated diphenyl ethers). Netra CT 410/810 servers are now compliant with the EU RoHS mandate.

For additional information, please contact your Sales Representative or, if appropriate, your OEM.

DVD Available as an X-Option Component

Previously, DVD (digital video disk) removeable media modules (RMMs) were installed during manufacturing and shipped as part of the standard configuration. Now, the DVDs are no longer included as part of the standard configuration, but are available as X-option components.

The DVD drive is RoHS compliant. The DVD drive is a Toshiba TS-H-352C, which is an IDE drive. The previous DVD drive was a SCSI drive.

Because the host interface is a SCSI interface, an adapter card from ACARD Technologies Corporation is used to convert from the SCSI to IDE interface. The functionality is transparent to the end user.

DAT Available as an X-Option Component

The DAT (digital audio tape) drive is now RoHS compliant and available as an X-option. The DAT drive is a 16 bit SCSI DAT-72 (72GB) standard tape drive. The media that works with this tape drive is DAT-72 tape. Be advised that Digital Data Storage (DDS), DDS-1, DDS-2, and DDS-DC cartridges are not supported in DAT-72 tape drives. DDS3 and DDS4 media are backward compatible.

Note – The media adaptor modules (MAMs) for the DVD and DAT drives are different in RoHS systems.



Caution – Use only DDS3, DDS4, and DAT-72 certified computer-grade cartridges. These cartridges are marked with the DDS or DAT-72 logo and must be approved by the DDS/DAT manufacturers' group. Use of audio grade media will result in high error rates and might damage the tape drive heads.

Documentation Issues

The following known issues exist in the current release of the Netra CT 410 and Netra CT 810 documentation. The changes described here will be documented in the appropriate documentation for the next major release.

Obtaining Alarm Card Debugging Data

A command for collecting alarm card debugging output to a log is available. This command outputs the name of the key process that exited and caused the alarm card reset, due to the process exit. The output includes a date stamp. This command will be documented in the *Netra CT Server System Administration Guide* with the next major release.

The command requires administrator (a) permissions:

```
hostname cli> debuglog -h
```

In addition to the command, an option to reset the debug log is provided:

```
hostname cli> debuglog reset
```

Using Interactive Commands in rsh

As documented in the *Netra CT Server System Administration Guide*, limitations precluded you from including `userpassword` as an interactive command in `rsh`. Now both `userpassword` and `mohuserpassword` commands are allowed as interactive commands in `rsh`.

Note – When using either command in `rsh`, a slight change in the command syntax is necessary.

- **Use the following syntax to use `userpassword` or `mohuserpassword` commands in `rsh`:**

```
# rsh mcnet-ip-addr -l command
```

where `mcnet-ip-addr` is the alarm card MCNet IP address.

Example: `rsh 192.168.13.8 -l userpassword`

After the command is accepted, users will be prompted for username and password.

Administering Accounts on the Alarm Card

Commands and associated software provide increased security for managing Managed Object Hierarchy (MOH). System administrators can separate MOH and CLI user accounts to better control access to the console and client.

The new commands are `mohuseradd`, `mohuserpassword`, `mohuserperm`, `mohuserdel`, and `mohusershow`. Use these commands to add user accounts, assign user passwords, manage permissions, delete user accounts, and view all MOH users.

Note – A maximum of five MOH user accounts can be established.

MOH accounts are set up and managed from the CLI by a CLI user who has `admin (a)` permissions. The help command includes the new commands under the Administration heading.

For information about administering CLI accounts on the alarm card, refer to the *Netra CT Server System Administration Guide*. For information about administering MOH accounts using the new commands, see the following information.

For MOH security to be in effect, the `mohsecurity` flag must be enabled (value is `true`). You can verify that it is enabled by using the `showmohsecurity` command.

▼ To Add and Manage MOH User Accounts

1. Log in to the alarm card.
2. Set up, modify permissions, or delete user accounts as follows:
 - To set up a new MOH user (username and password) account:

```
hostname cli> mohuseradd username  
hostname cli> mohuserpassword username
```

For username and password restrictions, refer to the *Netra CT Server System Administration Guide*.

By default, new accounts are created with read-only permission. Permission levels can be changed using the `mohuserperm` command.

- To change permissions for an MOH user account:

```
hostname cli> mohuserperm username -r OR -rw
```

Note – Users can have READONLY (r) or READWRITE (rw) permissions

- To delete an MOH user account:

```
hostname cli> mohuserdel username
```

▼ To Display MOH User Accounts

You can display information for a single user (by entering the username) or for all users.

Note – `admin` permission is not required to use this command.

```
hostname cli> mohusershow username
```

```
hostname cli> mohusershow
```

MOH Reporting of Memory Errors on Netra CT 410/810 Servers

The Managed Object Hierarchy (MOH) software generates SNMP traps when memory errors are detected on Netra CT 410 and Netra CT 810 servers. The `cediag` tool analyzes memory error events and makes recommendations based on the enhanced DIMM replacement policy. The MOH `ctmgx` agent interacts with the `cediag` tool periodically to monitor memory errors and generate appropriate traps.

Previously, the memory module from the CPU kernel reported errors to a log file (`/var/adm/messages`), and users had to monitor the log file and take necessary action.

Now, when one or more of the DIMM management rules are broken, an SNMP trap is generated. Both advice and findings strings are sent with the SNMP trap. In addition to the usual information (such as time stamp, `sysUptime`, `Timeticks`, etc.), the traps provide new information relating to memory errors.

The polling period is configurable using the `ctmgx.cediag.period` parameter in the `ctmgx.conf` file. The default value is the time period in milliseconds at which the `cediag` status is checked.

```
# ctmgx.cediag.period=1800000
```

Be careful when changing the default time period; setting it too low could back the system up with too many `cediag` processes.

The `cediag` default path is hardcoded to:

```
/opt/SUNWnetract/mgmt2.0/etc/ctmgx.conf
```

For systems that have not been upgraded and thus lack the required `cediag` tool, the MOH agent will check for the `cediag` tool upon startup, and enable or disable the enhancement accordingly.

Exceeding the Maximum telnet Connections

The maximum number of telnet connections to the alarm card has changed from 16 to 12. If you attempt more than 12 telnetd connections, telnetd exits.

This change will be documented in the appropriate documentation for the next major release.

Removing Alarm Cards

Starting with this release, the green Power LED on the system status panel for the alarm card will go OFF and the amber Okay to Remove LED light will be ON when it is okay to remove the alarm card. The change to the green Power LED status was made so that the behavior matches the behavior of all other card types. This change provides a consistent status indicator for technicians to know when it's okay to remove any of the cards.



Caution – Wait until the green Power LED stops blinking and is OFF before removing an alarm card. The amber Okay to Remove LED must be ON.

This change affects the following documentation, which will be updated in a subsequent documentation release:

- *Netra™ CT Server Product Overview*
- *Netra™ CT Server Service Manual*
- *Netra™ CT Server System Administration Guide*

Configuring Alarm Cards Using Basic Hot Swap

Although some users configure alarm cards using Basic Hot Swap (BHS) mode, this technique is not recommended. The problem with using BHS for configuring alarm cards is that after a host CPU reboot, alarm card watchdog reset, or graceful shutdown via the `reset ac` command, the alarm card comes up in a BHS disconnected or unconfigured state. All of the BHS configuration data is reset. The system administrator then must manually configure the card for BHS. Also, this scenario applies to intelligent CPUs such as satellites.

When using BHS mode with non-intelligent cards, the BHS configuration data loss after a reset is not an issue; you can use whatever mode you like.

- **To Reconfigure After a Reboot, Reset, or Shutdown**

In case you configured an alarm card using BHS and need to reconfigure the BHS data on the alarm card, enter the following commands at the host as `root` user:

```
#cfgadm -c connect AL-n  
  
#cfgadm -c configure AL-n
```

where value *n* is either a 1 for a Netra CT 410 or an 8 for a Netra CT 810. For more information about these commands, refer to *Netra CT Server System Administration Guide For the Netra CT 810 Server and Netra CT 410 Server*.

Solaris Operating System Version

Solaris 9 FCS Operating System (Solaris 9 FCS OS) with patches is required for using this release of the software for the Netra CT810 and Netra CT410 servers.

To obtain the Solaris 9 FCS OS, contact either your sales representative or field service technician. This OS version is available only by special order (part number SOLZS-09AC9AYM) through a qualified Sun representative.

Solaris 9 OS patches can be downloaded from SunSolve web sites as detailed in [“Patches to Download and Apply” on page 11](#).

Firmware Versions

For this release of the software, the Netra CT CPU board firmware must be at the following versions:

TABLE 2 CPU Board Firmware Versions

Firmware	Host CPU (Netra CP2140) Version	Satellite CPU (Netra CP2160) Version
Firmware (OpenBoot PROM)	1.1.19	1.0.21
SMCFW Flash Code	3.6.2	4.1.3
SMCFW Boot Code	3.15.9	3.15.9

To display the current firmware version, use the `.version` command at the OpenBoot PROM prompt.

If you do not have the correct versions of the firmware, go to the SunSolveSM Web site, <http://www.sun.com/sunsolve>, and download the most recent versions of the following firmware patches:

- 116345 (OpenBoot PROM and SMC firmware for Netra CP2140)
- 116346 (OpenBoot PROM and SMC firmware for Netra CP2160)

Refer to the Readme file in the patch for any special installation instructions, and to the *Netra CP2140 Technical Reference and Installation Manual* (816-4908) or *Netra CP2160 Technical Reference and Installation Manual* (816-5772) for instructions on upgrading the firmware.

The Netra CT server alarm card firmware must be at the following versions:

TABLE 3 Alarm Card Firmware Versions

Firmware	Version
Chassis Management firmware	2.0.34
Boot Control firmware	2.0.5
BMC firmware	2.4

To display the current version, use the `version` command at the alarm card CLI prompt. If you do not have the correct version of the firmware, go to the SunSolve Web site, <http://www.sun.com/sunsolve/point>, and download the following firmware patch: 116654.

Refer to the Readme file in the patch for any special installation instructions, and to the *Netra CT Server System Administration Guide* (816-2483) for instructions on upgrading the firmware on the alarm card.

Patches to Download and Apply

Note – These instructions apply to a new installation or to an upgrade from any previously released version. The base Solaris™ 9 Operating System (Solaris OS) is assumed.

This section provides information on the patches that you must download from the SunSolve web sites for the Netra CT server and instructions on how to apply these patches. These instructions are part of the Netra CT software installation procedures that are documented in the *Netra CT Server Installation Guide* (816-2481). At a particular point in the installation procedure, you are asked to perform these tasks.

There are two types of patches to download:

- *Regular patches* are available on the main SunSolve web site, <http://www.sun.com/sunsolve>. If you specify the base Patch ID number (the first six digits) in the Search SunSolve window, you see the most recent revision of the patch.
- *Point patches* are available on the point patch SunSolve web site, <http://www.sun.com/sunsolve/point>. If you specify the base Patch ID number (the first six digits) in the Point Patch Search window, the most recent revision of the patch is located, and the system prompts you to open or save the compressed patch file.

Note – When you search for point patch releases using the base patch number, the patch revision number is noted at the top of the Open/Save dialog box. Look for text such as “The file “115860-*nn*.zip” is of type...”

Downloading Required Patches

1. Download the most recent versions of the patches listed in [TABLE 4](#).

TABLE 4 Patches Required

Patch ID	Patch Location
112945	http://www.sun.com/sunsolve
113027	http://www.sun.com/sunsolve
114349	http://www.sun.com/sunsolve
115330	http://www.sun.com/sunsolve
117037	http://www.sun.com/sunsolve/point
117036	http://www.sun.com/sunsolve/point
115859	http://www.sun.com/sunsolve/point
115860	http://www.sun.com/sunsolve/point
112824	http://www.sun.com/sunsolve/point
116654	http://www.sun.com/sunsolve/point
116700	http://www.sun.com/sunsolve/point
116677	http://www.sun.com/sunsolve/point
118583	http://www.sun.com/sunsolve/point
118956	http://www.sun.com/sunsolve

1. If you are using a DAT drive in the system, download the patches listed in [TABLE 5](#).

TABLE 5 Patches for DAT Drive

Patch ID	Patch Location
112233	http://www.sun.com/sunsolve
112834	http://www.sun.com/sunsolve
113277	http://www.sun.com/sunsolve

2. Move the patch zip files you downloaded (listed in [TABLE 4](#) and, if applicable, in [TABLE 5](#)) into the `image_directory/Solaris_9/Patches` directory, where `image_directory` is the path to the directory where the Solaris 9 install image is stored.

Refer to the *Netra CT Server Installation Guide* for more information on the `image_directory` location.

3. Perform an `unzip` on all of the patches that you downloaded.
4. Apply the patches as follows.

Procedures for installing patches for the Netra CT vary depending upon the system you are applying them to.

- a. If you are applying patches to a boot disk (if you installed the Solaris OS onto an internal or external hard drive), go to [“Applying Patches to a Boot Disk” on page 13](#).
- b. If you are applying patches to a network installation image for diskless clients, go to [“Applying Patches to a Diskless Service” on page 14](#).

Following are instructions for installing patches. For additional information and detailed instructions for completing the software installation process, refer to the *Netra CT Server Installation Guide*.

Applying Patches to a Boot Disk

1. Perform a `patchadd` for each of the following patches *in the following order*:
 - 112945-35 (See Note)
 - 113027-05
 - 114349-04 (See Caution)
 - 115330-01
 - 117037-01
 - 117036-09
 - 115859-13
 - 115860-08
 - 112824-05
 - 116654-21
 - 116700-09
 - 118583-01
 - 118956-01
 - 116677-05

Note – At a minimum, you must have patch 112945 revision -21 applied. If the revision is -20 or earlier, an update is required. If you have revision -21 or newer and do not want to update it, you can skip this patch. However, we recommend that you update the software with the most recent patch. To determine the patch revision you currently have, use the `showrev -p grep '112945'` command.



Caution – For patch 114349, this patch replaces patch 116100. If patch 116100 is on the system, remove it using the `patchrm` command before applying 114349. Patch 114349 is no longer a T patch and is available through SunSolve.

2. If you are using a DAT drive in the system, apply the patches listed in [TABLE 5](#).
3. Reboot the server.
4. Refer to instructions in the *Netra CT Server Installation Guide* to complete the software installation procedures for a boot disk.

Applying Patches to a Diskless Service

1. Change directories to the `/usr/sadm/bin` directory.

```
# cd /usr/sadm/bin
```

2. Use the `smosservice patch` command to apply the patches to the diskless service in the following order:
 - 112945-35 (See Note)
 - 113027-05
 - 114349-04 (See Caution)
 - 115330-01
 - 117037-01
 - 117036-09
 - 115859-13
 - 115860-08
 - 112824-05
 - 116654-21
 - 116700-09
 - 118583-01
 - 118956-01
 - 116677-05

Note – At a minimum, you must have patch 112945 revision -21 applied. If the revision is -20 or earlier, an update is required. If you have revision -21 or newer and do not want to update it, you can skip this patch. However, we recommend that you update the software with the most recent patch. To determine the patch revision you currently have, use the `showrev -p grep '112945'` command.

Caution – For patch 114349, this patch replaces patch 116100. If patch 116100 is on the system, remove it using the `patchrm` command before applying 114349.

```
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/112945-35
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/113027-05
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/114349-04
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/115330-01
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/117037-01
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/117036-09
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/115859-13
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/115860-08
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/112824-05
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/116654-21
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/116700-11
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/118583-01
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/118956-01
# ./smosservice patch -u root -p root_password -- -a image_directory/Solaris_9/Patches/116677-05 -m -U
```

where `root_password` is the root password of the server and `image_directory` is the Solaris 9 installation image directory. You must add an additional `-m -U` option when you install the last patch to the installation image.

3. Manually apply the following patches:

```
# ./patchadd -R /export/root/clone/Solaris_9/sun4u image_directory/Solaris_9/Patches/112824-05
# ./patchadd -u -R /export/root/clone/Solaris_9/sun4u image_directory/Solaris_9/Patches/115859-13
# ./patchadd -R /export/root/clone/Solaris_9/sun4u image_directory/Solaris_9/Patches/115860-08
# ./patchadd -R /export/root/clone/Solaris_9/.copyofsun4u image_directory/Solaris_9/Patches/112824-05
# ./patchadd -u -R /export/root/clone/Solaris_9/.copyofsun4u image_directory/Solaris_9/Patches/115859-13
# ./patchadd -R /export/root/clone/Solaris_9/.copyofsun4u image_directory/Solaris_9/Patches/115860-08
# ./patchadd -R /export/root/clone/Solaris_9/.copyofsun4u image_directory/Solaris_9/Patches/116700-11
```

where `image_directory` is the Solaris 9 installation image directory.

4. Enter the following commands:

```
# /usr/sbin/rem_drv -b /export/root/clone/Solaris_9/sun4u cvc
# /usr/sbin/add_drv -b /export/root/clone/Solaris_9/sun4u -v -i "ssp-serial" cvc
# /usr/sbin/rem_drv -b /export/root/clone/Solaris_9/.copyofsun4u cvc
# /usr/sbin/add_drv -b /export/root/clone/Solaris_9/.copyofsun4u -v -i "ssp-serial" cvc
```

5. Refer to instructions in the *Netra CT Server Installation Guide* to complete the software installation process.

