Sun Netra CP32x0 Advanced Rear Transition Module

Product Notes

Part No. 820-3261-14
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Contents

CHAPTER

Sun Netra CP32x0 Advanced Rear Transition Module Product Notes

This document contains important and late-breaking information about Oracle's Sun Netra CP32x0 Advanced Rear Transition Modules (ARTMs).

This document contains the following:

Caution – This release is for evaluation purposes only. Compliance testing has not been completed on this release.

Known Issues

The following known issues exist with this release.

TABLE 1 Known Issues

Bug ID	Problem	Comments/Workaround
6792790	Opening ARTM's hotswap latch may or may not cause an OS panic.	Shutdown the payload OS before opening the ARTM's hotswap latch.

Enhancements

The ARTM-HD now supports 300GB capacity SAS hard disk drives (HDs), with various options. When you order the product, choose the part number corresponding to the capacity (in gigabytes) that you want in either single or dual HDs.

Note – The 146GB capacity is being discontinued.

The LSI SAS 1068e hard disk drive controller is enhanced. The following summarizes the controller's features:

- 8 lane PCIe generation 1 (full duplex 2.5Gb/sec), compatible with generation 2 PCIe node blades
- 8 SAS ports (3.0Gb/sec) with 4 ports to the external connectors, 2 ports - 1 to each HD, and 2 ports to the Zone 3 connector (1 to each AMC).
- LSI Integrated hardware RAID support for RAID 0, RAID 1, and RAID 1E.

With the ATCA R3U3 release, support for `autofwupgrade` tool is available for use with the Sun Sun Netra CP32x0 ARTM. The tool is enhanced to include support for products released since R3U2, to increase reliability, and to reduce upgrade durations.

The following new command line options are provided with the R3U3 release.

TABLE 2 `autofwupgrade` Command Line Options

Option	Description
`- q`	For a specified release, queries the XML database and displays released/qualified FW versions for all covered components in the shelf.
`- v`	For a specified release, displays all current information and adds a summary line per slot stating the latest FW release that all covered components versions match, otherwise states the component versions match no releases.
`- v -a`	For a specified release, displays all current information and states whether all covered components versions match the release, otherwise states the components versions do not match the release.

Note – These options do not apply to downgrades.

The firmware upgrade tool provides a single automated upgrade of Sun Netra CT 900 servers and Sun Netra products. This tool reduces the labor and time needed to upgrade your servers, boards/blades, AMCs, and ARTMs to a new or updated release.

The `autofwupgrade` command is available on the ShMM and supports automatic firmware upgrades from the R2.0.3 and newer releases to R3U3 for the following:

- Midplane FRU (when `-m` flag is used)
- System firmware (Sun Netra CP3060 and Sun Netra CP3260)
- IPMC boot firmware (Sun Netra CP3010, Sun Netra CP3020, Sun Netra CP3060, Sun Netra CP3220, Sun Netra CP3250, Sun Netra CP3260)
- IPMC firmware (Sun Netra CP3010, Sun Netra CP3020, Sun Netra CP3060, Sun Netra CP3220, Sun Netra CP3250, and Sun Netra CP3260)
- MMC firmware for XCP32X0-RTM-HDD, XCP32X0-RTM-FC (display only), and XCP32X0-RTM-NT (display only)

For detailed instructions on how to use the firmware upgrade tool and how to roll back an upgrade, refer to the README included with the R3U3 package.

Note – To access and use the automated firmware upgrade tool for ARTMs, you must upgrade the ShMM firmware to R3U3 before running the automated upgrade tool.

The following firmware are *not* upgraded by the `autofwupgrade` tool and must be upgraded manually. (For manual upgrade instructions, refer to README files included in the release download package.)

- NIC and BIOS firmware
- ATCA switch card firmware
- ShMM firmware
- OBP for Sun Netra CP3010 boards

For users who do not have access to the ShMM or who want manual control of the firmware upgrade process, use upgrade tools such as `upgradefw` and others instead of the ShMM `autofwupgrade`. Refer to the README for instructions.

Documentation

Three different Sun Netra CP32x0 ARTMs are offered by Sun. This section provides descriptions of the documentation available for each ARTM.

Sun Netra CP32x0 Quad GbE, Dual Fibre Channel, Advanced Rear Transition Module

The following documents ship with the Sun Netra CP32x0 ARTM-FC:

- *Important Safety Information for Sun Hardware Systems* (821-1590)
- *Sun Netra CP32x0 Quad GbE, Dual Fibre Channel, Advanced Rear Transition Module Start Here* (820-3149)

Refer to the *Sun Netra CP32x0 Quad GbE, Dual Fibre Channel, Advanced Rear Transition Module, Start Here* for information on obtaining the rest of the documentation, or go to the following web site.

`http://docs.sun.com/app/docs/prod/cp32x0.4gbefc?l=en#hic`

Sun Netra CP32x0 10GbE Advanced Rear Transition Module, Dual Port

The following documents ship with the Sun Netra CP32x0 ARTM-10G:

- *Important Safety Information for Sun Hardware Systems* (821-1590)
- *Sun Netra CP32x0 10GbE Advanced Rear Transition Module, Dual Port Start Here* (820-3151)

Refer to the *Sun Netra CP32x0 10GbE Advanced Rear Transition Module, Dual Port Start Here* for information on obtaining the rest of the documentation, or go to the following web site.

http://docs.sun.com/app/docs/prod/cp32x0.10gbee?l=en#hic

Sun Netra CP32x0 SAS Advanced Rear Transition Module, Dual HD

The following documents ship with the Sun Netra CP32x0 ARTM-HD:

- *Important Safety Information for Sun Hardware Systems* (821-1590)
- *Sun Netra CP32x0 SAS Advanced Rear Transition Module, Dual HD Start Here* (820-0460)

Refer to the *Sun Netra CP32x0 SAS Advanced Rear Transition Module, Dual HD Start Here* for information on obtaining the rest of the documentation, or go to the following web site.

http://docs.sun.com/app/docs/prod/cp32x0.sas?l=en#hic

Obtaining the nxge Driver for the ARTM-10G

The nxge driver is the Gigabit Ethernet driver that operates the Sun Netra CP32x0 ARTM-10G in a Solaris or Linux environment. The nxge driver is managed by the dladm command-line utility, which allows VLANs to be defined on top of nxge instances and for nxge instances to be aggregated. See the dladm(1M) man page for more details on configuring the data-link interfaces and link aggregations.

A driver must be loaded on your system to operate the ARTM-10G. All operating systems use a variant of a driver design called nxge. New versions of this driver must be used to recognize and operate the new ARTM-10G hardware.

Refer to the following documentation to download and install the driver:

- README file for the most current information about this driver and the Patch ID/package name.
- *Sun Netra CP32x0 10GbE Advanced Rear Transition Module, Dual Port User's Guide* (820-3150) for detailed download and installation instructions.

Upgrading the Software and Firmware

Upgrade your ARTM to obtain the most up-to-date features, enhancements, and bug fixes. Using an earlier release could limit your use of features and enhancements, and could affect your systems with known issues.

Note – ARTMs are manufactured with a base release, and typically there are newer releases available when you receive your shipment.

This section provides information on software and firmware packages that you can download from the Sun Download Center℠ (SDLC) web site for the Sun Netra CP32x0 ARTMs and instructions on how to apply the contents of the packages.

To upgrade your ARTMs, blade servers, and Sun Netra CT 900 server at the same time, invoke the autofwupgrade command from the ShMM. For instructions, refer to the the README and *Sun Netra CT 900 Server Product Notes*.

For users who do not have access to the ShMM or who want manual control of the firmware upgrade process, use upgrade tools such as upgradefw and others instead of the ShMM autofwupgrade. Refer to the README for instructions.

▼ To Download Required Packages

1. **Download the most recent packages listed at the SDLC site:**

   `http://www.sun.com/download/`

   Find the package for the release you want to download, for example, "Sun_Netra_CT_900-R*x*U*x*."

2. **After the compressed package is downloaded, expand the files by entering the following commands.**

```
# gunzip Sun_Netra_CT900_Rx_Ux_.tar.gz

# tar xvf Sun_Netra_CT900_Rx_Ux_.tar
```

   where R*x_Ux_* is the release's version and update number.

3. **Refer to instructions in the following sources to complete the software upgrade and installation process:**
   - `README` **files in the release package**
   - *Sun Netra CP32x0 Quad GbE, Dual Fibre Channel, Advanced Rear Transition Module User's Guide*
   - *Sun Netra CP32x0 10GbE Advanced Rear Transition Module, Dual Port User's Guide*
   - *Sun Netra CP32x0 SAS Advanced Rear Transition Module, Dual HD User's Guide*
   - *Sun Netra CT 900 Server Installation Guide*
   - *Sun Netra CT 900 Server Administration and Reference Manual*

Upgrading Sun Netra CT 900 Systems

If you are using the ARTMs in a Sun Netra CT 900 server, refer to the upgrade instructions in the following sources:

- *Sun Netra CT 900 Server Upgrade Guide* (820-3255)
- *Sun Netra CT 900 Product Notes* (819-1180)
- README files included in the release package

Release packages are available from SDLC at `sun.com/download`.

Obtaining ARTM FRU ID

You can access the ARTM `fruid` using the `clia` command.

▼ To Obtain ARTM FRU ID

- **Log in to ShMM, and enter the following `clia` command:**

```
# clia fruinfo <addr> <fruid>
```

Where <*addr*> is the IPMB address, and <*fruid*> is the value for the ARTM. The `clia fru` command returns the ARTM's `fruid` number. The standard value for the ARTM FRU ID is 1.