

Sun Netra T5440 Server

Product Notes



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Important Information About the Sun Netra T5440 Server

This document contains late-breaking information about the Sun Netra T5440 server from Oracle®.

Topics include:

- [“Updating System Firmware” on page 2](#)
- [“Required Patch Information” on page 5](#)
- [“Technical Support and Documentation” on page 6](#)
- [“Supported PCI Slot Configurations” on page 8](#)
- [“Enabling IPsec Cryptographic Hardware Acceleration” on page 9](#)
- [“Supported Versions of Oracle Solaris and Sun Java Enterprise System Software and System Firmware” on page 10](#)
- [“Preinstalled and Preloaded Software” on page 11](#)
- [“Managing Power Use by Idle Disk Drives” on page 16](#)
- [“Changed Behavior When Operating the Oracle Solaris OS With Logical Domains” on page 16](#)
- [“Processor Identification” on page 17](#)
- [“Issue With Opening Front Bezel” on page 18](#)
- [“General Issues” on page 18](#)

Note – Review these product notes and the SunSolve web pages for the most recent system firmware release. The system firmware postings contain a README file detailing the fixes and new features.

Updating System Firmware

The System Firmware includes several software components, such as the Integrated Lights Out Manager (ILOM) software and OpenBoot™ (host) firmware. When you update the System Firmware, each of the components (such as the ILOM software and OpenBoot firmware) are updated.

The method you use to update the System Firmware depends on how you configured your service processor (SP) as follows:

- The SP is accessible through the SP network management port (NET MGT), and you have a local TFTP server on the network. Use the ILOM `load source` command to update the SP firmware from your TFTP server. Refer to the *Sun Netra T5440 Server Installation Guide* for instructions.
- The SP is *not* connected to a network through the network management port (NET MGT), or you do not have an TFTP server. The firmware must first be placed on the host so that the firmware can be downloaded to the SP from the host and installed. See [“To Update the System Firmware Directly From the Host Server” on page 3](#). In order to perform the procedure documented in this section you must first upgrade to Sun System Firmware 7.2.0 or later.

▼ To Display the System Firmware Version

1. Log in to the ILOM CLI.

2. Type:

```
-> show /HOST

/HOST
  Targets:
    bootmode
    diag
    domain

  Properties:
    autorestart = reset
    autorunonerror = false
    bootfailrecovery = poweroff
    bootrestart = none
    boottimeout = 0
    hypervisor_version = Hypervisor 0.1 2008/11/30 02:28
    macaddress = 00:14:4f:6f:67:be
    maxbootfail = 3
    obp_version = OBP 4.30.1 2008/11/30 00:07
    post_version = POST 4.30.1 2008/11/30 00:29
    send_break_action = (none)
    status = Powered on
    sysfw_version = Sun System Firmware 7.2.0.x

  Commands:
    cd
    set
    show
```

▼ To Update the System Firmware Directly From the Host Server

If you do not have access to a local TFTP server to upload firmware directly to the service processor (SP), use the `sysfwdownload` utility as described in this procedure.

Note – The following procedure requires that you are logged into an account with root privileges.

1. Download the latest System Firmware for your server from SunSolveSM (<http://www.sunsolve.sun.com>) to the host.

Firmware updates are provided as patch release zip files.

2. On the server for which the firmware will be installed, gain access to the SP through the serial port.

The examples in this procedure use the ILOM CLI. As an alternative, you can use the ALOM CMT compatibility UI, which requires the creation of the `admin` user account. For further information about using the ALOM CMT compatibility CLI with the `sysfwdownload` utility, see the `sysfwdownload` README file (included in the System Firmware update package).

Refer to the *Sun Integrated Lights Out Manager (ILOM) 3.0 Supplement for Sun Netra T5440 Servers* for more information about using the ILOM and ALOM CMT compatibility CLIs.

3. Access the host console.

Access to the console requires that you log into an account with an `admin` role on the SP.

Example:

```
-> start /SP/console
#
```

4. Transfer the System Firmware patch release (a zip file) to the host for which the firmware will be installed.

Example:

```
# cp path_to_downloaded_zip_file /var/tmp
```

5. Unzip the zip file.

Example:

```
# unzip /var/tmp/firmware_patch_number.zip
```

6. Change directories to the directory created by the previous step.

Example:

```
# cd /var/tmp/firmware_patch_number
```

7. Transfer the System Firmware package to the SP using the `sysfwdownload` command.

Example:

```
# /var/tmp/firmware_patch_number/sysfwdownload -u Sun_System_Firmware-7_2-Sparc_Enterprise_5440.pkg
```

The `sysfwdownload` command might take 5 minutes to complete. The command might take 30 minutes if performed within an LDoms environment. When the `sysfwdownload` command is done, the following steps have been completed:

- The system firmware package has been transferred to the SP.
- The host has been powered off.
- The system firmware has been installed.
- The SP has been reset.
- The host has been powered on.

Required Patch Information

Patches are available at <http://www.sun.com/sunsolve>. The following table lists the patches required for your server. There are currently no preinstalled patches. Check for future required patch information in later versions of this document.

TABLE 1 Mandatory Patches

Patch ID	Description
138312-01	Fixes Sun Netra T5440 server DVD installation issue (CR 6563214). Note – This patch is not preinstalled. You must download and install it.
125952-17	Portal server patch. Note – This patch is not preinstalled. You must download and install it.
139445-01	(Optional) System Firmware 7.2.x

Note – Before contacting support, ensure that all mandatory patches are installed on your server. Check the SunSolve web site on a regular basis for the availability of new patches. To determine if a patch is present, see [“To Download Patches” on page 6](#).

▼ To Download Patches

1. Determine whether the patches have been installed on your system.

For example, using the `showrev` command, type the following for each patch number:

```
# showrev -p | grep "Patch: 119578"
```

- If you see patch information listed for the queried patch, and the dash extension (the last two digits) matches or exceeds the required version, your system has the proper patches already installed and no further action is required.

For example, if Patch 119578-16 or later is installed, your system has the required version of this patch.

- If you do not see patch information listed for the queried patch, or if the dash extension precedes the required version, go to [Step 2](#).

For example, if no version of the 119578 patch, or a version with an extension of -15 or earlier is installed, you must download and install the new patch.

2. Go to <http://www.sun.com/sunsolve> to download the patches.

Using the SunSolve PatchFinder tool, specify the base Patch ID number (the first six digits) to access the current release of a patch.

3. Follow the installation instructions provided in a specific patch's README file.

Patches for Option Cards

If you add option cards to your server, refer to the documentation and README files for each card to determine if additional patches are needed.

Technical Support and Documentation

This section includes where to obtain technical support, software, and documentation.

Technical Support

If you have any technical questions or issues that are not addressed in the Sun Netra T5440 server documentation, contact your local support services representative. For customers in the U.S. or Canada, call 1-800-USA-4SUN (1-800-872-4786). For customers in the rest of the world, find the World Wide Solution Center nearest you by visiting the web site:

<http://www.sun.com/service/contacting/solution.html>

Cryptographic Support

The UltraSPARC® T2 multicore processor provides hardware-assisted acceleration of several types of cryptographic operations:

- Symmetric (AES, 3DES, and RC4)
- Asymmetric (RSA, DSA, Diffie Hellman, and Elliptic Curve)
- Hashing (SHA1, SHA256, and MD5)
- Random number generation

The Oracle Solaris 10 5/08 OS or later provides the multithreaded device drivers that support the hardware-assisted cryptography.

Downloading Documentation

Instructions for installing, administering, and using your server are provided in the Sun Netra T5440 server documentation set. The entire documentation set is available for download from the following web site:

<http://docs.sun.com/app/docs/prod/server.nebs>

Note – Information in these product notes supersedes the information in the Sun Netra T5440 documentation set.

Impact of ILOM 3.0 Upgrade on Platform Documentation

The information in the following ILOM 3.0 base documentation supersedes the information in the ILOM 2.0 base documentation:

- *Sun Integrated Lights Out Manager (ILOM) 3.0 Concepts Guide* (820-6410)
- *Sun Integrated Lights Out Manager (ILOM) 3.0 Web Interface Procedures Guide* (820-6411)
- *Sun Integrated Lights Out Manager (ILOM) 3.0 CLI Procedures Guide* (820-6412)
- *Sun Integrated Lights Out Manager (ILOM) 3.0 SNMP and IPMI Procedures Guide* (820-6413)
- *Sun Integrated Lights Out Manager (ILOM) 3.0 Getting Started Guide* (820-5523)

ILOM 2.0 documentation remains correct for platforms that have not upgraded to ILOM 3.0. Once upgraded, platforms using ILOM 3.0 require the instructions and explanations in the ILOM 3.0 base documentation and the *Sun Integrated Lights Out Manager (ILOM) 3.0 Supplement for Sun Netra T5440 Servers*.

ILOM procedures in current editions of documents such as the *Sun Netra T5440 Server Installation Guide*, *Sun Netra T5440 Server Administration Guide*, and *Sun Netra T5440 Server Service Manual* should be understood as ILOM 2.0 procedures, not ILOM 3.0 procedures.

Additional Documentation

The SPARC® Enterprise T5140 and T5240 servers and the Sun Netra T5440 server share certain characteristics. You can consult the *Sun SPARC Enterprise T5140 and T5240 Servers Product Notes* (820-3312) for additional documentation coverage.

Supported PCI Slot Configurations

This section lists the various PCI slot configurations and provides suggestions for thermal control and cooling (CR 6726521).

PCI Slots in the PCI_AUX Board

Slot 0 and Slot 1 are the 133 MHz PCI-X slots supported form factor PCI-X cards. The maximum power for Slots 0 and 1 is 25 W.

Slot 2 and Slot 3 are x8 PCIe with x16 mechanical connectors. Slots 2 and 3 support form factor PCIe cards. Slots 2 and 3 support the highest power 75 W PCIe cards, but only one 75 W PCIe card can be installed in either slot at one time. It is suggested to install the 75 W card in Slot 2 for better cooling.

PCI Slots in PCI Mezzanine Board

PCIe Slot 4 through Slot 9 are the x8 PCIe slots and support low profile PCIe cards. The maximum power for slots 4 through 9 is 25 W.

PCIe Slot 4 and PCIe Slot 5 are combination slots that support XAUI cards (XAUI4 and XAUI5). The following restrictions apply:

- If a XAUI card is installed in Slot 4 (XAUI4), the PCIe Slot 4 cannot be used and the Ethernet Port 1 on the motherboard will be disabled.
- If a XAUI card is installed in Slot 5 (XAUI5), the PCIe Slot 5 cannot be used and the Ethernet Port 0 on the motherboard will be disabled.

High Bandwidth PCIe Cards Installation in the PCIe Slots

To balance the PCIe bus bandwidth from the upstream of the PCIe buses, it is suggested to limit the numbers of high bandwidth PCIe cards installed in the system and plug the high bandwidth PCIe cards in the assigned slots. For example:

- If one or two XAUI cards are installed in the system, it is suggested to install two high bandwidth PCIe cards (in Slot 2 and Slot 8).
- If there are no XAUI cards installed in the system, it is suggested to install four high bandwidth PCIe cards (in Slot 2, Slot 4, Slot 8, and Slot 9).

Enabling IPsec Cryptographic Hardware Acceleration

To enable IPsec cryptographic operations to use the cryptographic hardware on the UltraSPARC T2 Plus processor, you must obtain and install the IPsec activation package, when it becomes available. Until the activation file and required patch are available, you can use software acceleration.

For information about obtaining the IPsec activation package, visit:

<http://www.sun.com/ipsec>

Once you have the IPsec activation package, use the `pkgadd` command to install the activation package and the `patchadd` command to install the patches as shown in the following example:

```
# patchadd 127111-xx
# pkgadd sol-10-u4-ga-sparc-cryptoactivation.pkg
# patchadd 122642-xx
```

Note – You must reboot the system after installing the activation package to complete the activation.

Installing the package and patch enables IPsec to automatically and transparently use the UltraSPARC T2 Plus cryptographic hardware. For more information about IPsec, refer to the *IPsec and IKE Administration Guide* at: <http://docs.sun.com>

Supported Versions of Oracle Solaris and Sun Java Enterprise System Software and System Firmware

The following are the minimum supported versions of firmware and software for this release of the Sun Netra T5440 server:

- Oracle Solaris 10 5/08 Operating System (OS)
- Sun Java™ Enterprise System 5 Update 1 software (Sun Java ES 5U1)
- Sun™ System Firmware 7.1.0, which includes:
 - Integrated Lights Out Manager (ILOM) 2.0 firmware version 2.0.4.23
 - OpenBoot 4.28.6 firmware
 - POST firmware version 4.28.6
 - Hypervisor firmware version 1.6.0
 - VBSC firmware version 1.6.4

Preinstalled and Preloaded Software

This section describes the preinstalled and preloaded software on your server. The preinstalled software is ready to use. The preloaded software must first be installed from the preloaded location.

Note – The Oracle Solaris OS is preinstalled both in root disk Slice 0 for normal operations, and in Slice 3 along with Live Upgrade software to provide an Alternate Boot Environment (ABE). The ABE allows upgrading the OS or performing system maintenance tasks without reducing performance. An identical (bootable) copy of the root partition (including the OS, EIS, and applications) is installed an ABE in Slice 3.

The following table lists the software preinstalled on your server.

TABLE 1-1 Preinstalled Software

Software	Location	Function
Oracle Solaris 10 5/08	Root disk Slice 0 (and on Slice 3 in the ABE)	Operating system
Sun Studio	/opt/SUNWspro	C, C++, and Fortran compiler
CMT Tools	/opt/SUNWspro/extra/bin	Sun Studio Developer Tools
Sun Code Generator for SPARC Systems	/opt/gcc and /opt/SUNW0scgfss	Cool Tools GCC compiler for SPARC Systems
LDoms Manager	/opt/LDoms_Manager-1_0_1-RR/Product and /opt/SUNWldm/	Manages logical domains
LDoms MIB	/opt/SUNWldmib	LDoms Management Information Base

The following table lists the software preloaded on your server. To use this software you must first install it from the preloaded location.

TABLE 1-2 Preloaded Software

Software	Location	Function
Sun Java Enterprise Server	/var/spool/stage/JES5/Solaris_sparc	Optimizes software investment

Cool Tools for Sun Servers With CoolThreads Technology

Cool Tools provide a collection of freely available tools designed to enable fast and efficient development and deployment of optimally configured software solutions on CoolThreads™ servers. These tools significantly improve performance and time-to-market for applications running on these servers.

An overview of the Cool Tools and full documentation is available at the following URL:

<http://www.sun.com/servers/coolthreads/overview/cooltools.jsp>

Not all of the Cool Tools listed on the Cool Tools web page are preinstalled on your server. The following are not included:

- Consolidation Tool
- CoolTuner
- Cool Stack
- Corestat
- Cooltst
- Sun Application Porting Assistant

Note – The Sun Code Generator GCC compiler is preinstalled. For a list of preloaded and preinstalled software, see [TABLE 1-1](#) and [TABLE 1-2](#).

Logical Domains

Using Logical Domains (LDoms) software increases your server usage, efficiency, and return on investment. LDoms also reduces your server footprint. The LDoms Manager software creates and manages logical domains and maps logical domains to physical resources.

Note – The LDoms MIB must be configured before it is ready to use. A README file with configuration instructions is located in the LDoms MIB installation directory, `/opt/ldoms_mib`.

Note – Due to an issue in the Oracle Solaris OS (CR 6653726), it is necessary to configure host memory according to the following rules.

Configuring Host Memory for Logical Domains

1. System configurations must contain 8, 16, or 32 FB-DIMMs. Each memory branch should contain the same amount of memory, using the same capacity FB-DIMMs in corresponding slots.
2. Request and bind the entire memory allocation for each domain once for each domain. Do not add or remove memory from a domain after its creation. If you want to add a domain, remove a domain, or change the memory allocation of a domain, unbind all of the existing domains. Then make whatever changes that you require following the rules stated in No. 1, and then bind all of the remaining domains.
3. Memory allocation for logical domains must follow one or the other of these two rules (a or b). Allocate memory using one of the supported allocation rules:
 - a. Each domain's memory allocation can be a multiple of 1 GByte, with a minimum of 2 GByte per domain.
 - b. If you prefer to use a smaller memory page size, you can allocate memory by a multiple of 256 MByte with a minimum of 8 GByte per domain.

Note – Combinations of the two allocation rules are not allowed on the same system.

4. If POST takes a FB-DIMM offline, you must replace it immediately. If replacing the failed FB-DIMM is not possible or desired immediately, you must disable the corresponding FB-DIMM (using the ILOM Automatic System Recovery (ASR) `set /SYS/component component_state=disabled` command or the ALOM CMT compatibility shell `disablecomponent asr-key` command) on the other CMP's corresponding memory branch to guarantee a contiguous memory configuration. For example:

Use the ILOM DMTF CLP `show components` command or the ALOM compatibility shell's `showcomponent` command to print out a list of enabled and disabled devices. For each FB-DIMM device that is disabled, disable the corresponding FB-DIMM associated with the other CMP. For example, if the following device was disabled:

```
/SYS/MB/CMP0/BR0/CH0/D0
```

You would then disable the following device:

```
/SYS/MB/CMP1/BR0/CH0/D0
```

For more information on LDoms, go to:

<http://www.sun.com/servers/coolthreads/ldoms/>

Sun Java Enterprise Server and Oracle Solaris OS

The Sun Java Enterprise Server is a comprehensive set of software and lifecycle services that make the most of your software investment.

For an overview and documentation, go to:

<http://www.sun.com/service/javaes/index.xml>

The Oracle Solaris OS and Sun Java Enterprise Server software are preinstalled.

Note – Due to an issue that arises from the installation of the Java Enterprise System 5 Update 1 on your system (CR 6644798), it might be necessary to enable the WebConsole SMF service.

▼ To Enable the WebConsole SMF Service

- **Log in to a terminal as `root` then type the following command:**

```
# svcadm enable svc:/system/webconsole:console
```

If it becomes necessary to reload the software, go to the following web site for download and installation instructions:

<http://www.sun.com/software/preinstall>

Note – If you download a fresh copy of software, that software might not include patches that are mandatory for your server. After installing the software, see “Required Patch Information” on page 5 for a procedure to check for the presence of patches on the system.

Oracle Solaris Live Upgrade

Oracle Solaris Live Upgrade technology significantly reduces service outage during an OS upgrade. This technology enables the Oracle Solaris OS to run normally during an upgrade or normal maintenance on an inactive boot environment.

Your server is configured with a `liveupgrade` partition on Slice 3 on the boot disk that contains an exact duplicate of the `root` partition (including the OS, EIS, and applications). This `liveupgrade` partition is an Alternate Boot Environment (ABE).

For more information about Oracle Solaris Live Upgrade, go to:

<http://www.sun.com/software/solaris/liveupgrade/>

Oracle Solaris Live Upgrade software is preinstalled on your server. You might need to install a different version of Oracle Solaris Live Upgrade depending on which Oracle Solaris OS version you are installing or upgrading. For more information on installing the correct version of Oracle Solaris Live Upgrade, go to:

<http://www.sun.com/software/preinstall>

Sun Studio - C, C++, and Fortran Compilers and Tools

Sun Studio delivers high performance by optimizing C, C++, and Fortran compilers for the Oracle Solaris OS on multicore systems.

For an overview and documentation, go to:

<http://developers.sun.com/sunstudio/index.jsp>

Supported Sun Explorer Utility Version

The Sun Netra T5440 servers are supported by the Sun Explorer 5.10 (or later) data collection utility, but are not supported by earlier releases of the utility. Installing Sun Cluster or Sun Net Connect software from the preinstalled Java ES package could automatically install an earlier version of the utility on your system. After installing any of the Java ES software, determine whether an earlier version of the Sun Explorer product has been installed on your system by typing the following:

```
# pkginfo -l SUNWexpl0
```

If an earlier version exists, uninstall it and install version 5.10, or later. To download version 5.10, go to:

<http://www.sun.com/sunsolve>

Managing Power Use by Idle Disk Drives

The Sun Netra T5440 server supports Oracle Solaris OS disk power management features. To learn how to use these features, visit this article on BigAdmin:

http://www.sun.com/bigadmin/features/articles/disk_power_saving.jsp

The article, *Managing the Power Used by Idle Disks in Servers Running the Solaris 8 OS or Above*, describes when and how to manage the power used by idle disks on servers running the Oracle Solaris 8 OS and above.

Changed Behavior When Operating the Oracle Solaris OS With Logical Domains

This section describes the changes in behavior in using the Oracle Solaris OS that occur once a configuration has been created by the Logical Domains Manager.

Note – OpenBoot firmware is not available after the Oracle Solaris OS has started, because it is removed from memory. To reach the `ok` prompt from the Oracle Solaris OS, you must halt the domain. You can use the Oracle Solaris OS `halt` command to halt the domain.

Results From Halting or Rebooting the Control Domain

TABLE 1-3 shows the expected behavior of halting or rebooting the control (primary) domain.

TABLE 1-3 Expected Behavior of Halting or Rebooting the Control (Primary) Domain

Command	Other Domain Configured?	Behavior
halt	No	Host powered off and stays off until powered on at the SP.
	Yes	Resets and boots up if the variable <code>auto-boot?=true</code> . Resets and halts at <code>ok</code> prompt if the variable <code>auto-boot?=false</code> .
reboot	No	Reboots the host, no power off.
	Yes	Reboots the host, no power off.
shutdown -i 5	No	Host powered off, stays off until powered on at the SP.
	Yes	Resets and reboots.

Processor Identification

Processor IDs Might Not Start at 0, and Might Not be Contiguous

Different platforms and platforms of the same model might have different processor IDs for identical configurations. For example, on UltraSPARC® T1 CPU based platforms, the processor IDs start with processor ID 0. But other platforms, including those based on the UltraSPARC T2 Plus CPU, might not have a processor ID 0. The Oracle Solaris `psrinfo` command might display output similar to the following for platforms based on the UltraSPARC T2 Plus processor:

```
8      on-line  since 09/18/2007 21:26:25
9      on-line  since 09/18/2007 21:26:30
16     on-line  since 09/18/2007 21:26:30
17     on-line  since 09/18/2007 21:26:30
```

The processor IDs exported to a guest domain on a platform running multiple guest domains with a virtual machine manager might represent a virtual abstraction. Within each guest domain, each processor ID visible to the software will be a unique integer value.

Software running in different guest domains on the same physical machine might see the same or different sets of virtual processor IDs. If domaining is enabled, the virtual processor IDs and physical processor IDs are never the same. For information about the mapping between virtual and physical CPU numbers, see the *Logical Domains (LDDoms) 1.0.2 Administration Guide*.

Processor IDs are simply unique integer values in the domain where the software is running. The integer value will fit in the type `processorid_t`. Also refer to the `p_online(2)` man page.

Issue With Opening Front Bezel



Caution – Do not open the front bezel while the server is on a flat surface. If opened on a flat surface, the bezel hinges will break.

The server must either be rackmounted, or the front of the server (including bezel hinges) *must extend* over the edge of a table or desktop surface before opening the bezel.

General Issues

This section describes firmware and software issues known to exist at this release of Oracle's Sun Netra T5440 server.

Patch 125952-16 Causes Portal Server Failure (CR 6734390)

The -16 version of the 125952 patch causes the Portal server to fail when using `webserver` as the container in the Sun Netra T5440 server pre-installed image.

Workaround: Remove Patch 125952-16. Install the latest version of this patch, which is currently Patch 125952-17.

capi_get_sensors Fault Occurs With Extended ILOM 2.0 Usage (CR 6726829)

ILOM 2.0 might go in to an unresponsive state when exercised extensively by the `ipmitool` on the BMC interface.

Workaround: Reset ILOM with one of the following commands:

- When logged in as `sunservice`: Type `init 6`
- When using the ALOM compatibility CLI: Type `resetsc`
- When using the ILOM CLI: Type `reset /SP`

nxge Device Has Intermittent Read Fails From xcvr Register (CR 6726465)

Intermittently the MDIOs to the BCM `xcvr` fail, and the driver sends `xcvr` failures to the hardware. This situation is immediately corrected and operations continue as normal.

Errors can be found in `/var/adm/messages` that look similar to the following:

```
"nxge: [ID 752849 kern.warning] WARNING: nxge1 : nxge_mii_check:
Unable to check MII "
"nxge: [ID 590206 kern.info] NOTICE: nxge1: Adapter now in
external1000 loopback mode
nxge2: Adapter now in external1000 loopback mode
nxge: [ID 752849 kern.warning] WARNING: nxge2 : nxge_mii_read:
Failed to read mii on xcvr 27
nxge: [ID 752849 kern.warning] WARNING: nxge2 :
nxge_check_mii_link: Failed to check link port<2>
nxge: [ID 590206 kern.info] NOTICE: nxge1: Adapter now in
external100 loopback mode
nxge: [ID 590206 kern.info] NOTICE: nxge2: Adapter now in
external100 loopback mode"
```

Internal DVD Drive Appears Offline in the OpenBoot Prompt Intermittently (CR 6725493)

When the `use-nvramrc?` option is set to `false`, the DVD drive does not show up.

To bring the DVD drive back online, set the `use-nvramrc?` to `true`:

```
{0} ok setenv use-nvramrc? true
{0} ok show-disks
{0} reset-all
sc> poweroff
sc> poweron -c
{0} show-disks
```

AC_POK Indicator in the `prtdiag` Utility for DC Powered Systems (CR 6727840)

AC_POK appears in the `prtdiag -v` command for DC powered systems. This situation could indicate that the NAC name could be incorrect for the indicator. This indicator should not show up in the display.