

## Netra SPARC S7-2 Server Product Notes

ORACLE®

Part No: E73204-03  
December 2016



**Part No: E73204-03**

Copyright © 2016, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS. Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

**Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

**Access to Oracle Support**

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

**Référence: E73204-03**

Copyright © 2016, Oracle et/ou ses affiliés. Tous droits réservés.

Ce logiciel et la documentation qui l'accompagne sont protégés par les lois sur la propriété intellectuelle. Ils sont concédés sous licence et soumis à des restrictions d'utilisation et de divulgation. Sauf stipulation expresse de votre contrat de licence ou de la loi, vous ne pouvez pas copier, reproduire, traduire, diffuser, modifier, accorder de licence, transmettre, distribuer, exposer, exécuter, publier ou afficher le logiciel, même partiellement, sous quelque forme et par quelque procédé que ce soit. Par ailleurs, il est interdit de procéder à toute ingénierie inverse du logiciel, de le désassembler ou de le décompiler, excepté à des fins d'interopérabilité avec des logiciels tiers ou tel que prescrit par la loi.

Les informations fournies dans ce document sont susceptibles de modification sans préavis. Par ailleurs, Oracle Corporation ne garantit pas qu'elles soient exemptes d'erreurs et vous invite, le cas échéant, à lui en faire part par écrit.

Si ce logiciel, ou la documentation qui l'accompagne, est livré sous licence au Gouvernement des Etats-Unis, ou à quiconque qui aurait souscrit la licence de ce logiciel pour le compte du Gouvernement des Etats-Unis, la notice suivante s'applique:

U.S. GOVERNMENT END USERS. Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

Ce logiciel ou matériel a été développé pour un usage général dans le cadre d'applications de gestion des informations. Ce logiciel ou matériel n'est pas conçu ni n'est destiné à être utilisé dans des applications à risque, notamment dans des applications pouvant causer des dommages corporels. Si vous utilisez ce logiciel ou matériel dans le cadre d'applications dangereuses, il est de votre responsabilité de prendre toutes les mesures de secours, de sauvegarde, de redondance et autres mesures nécessaires à son utilisation dans des conditions optimales de sécurité. Oracle Corporation et ses affiliés déclinent toute responsabilité quant aux dommages causés par l'utilisation de ce logiciel ou matériel pour ce type d'applications.

Oracle et Java sont des marques déposées d'Oracle Corporation et/ou de ses affiliés. Tout autre nom mentionné peut correspondre à des marques appartenant à d'autres propriétaires qu'Oracle.

Intel et Intel Xeon sont des marques ou des marques déposées d'Intel Corporation. Toutes les marques SPARC sont utilisées sous licence et sont des marques ou des marques déposées de SPARC International, Inc. AMD, Opteron, le logo AMD et le logo AMD Opteron sont des marques ou des marques déposées d'Advanced Micro Devices. UNIX est une marque déposée d'The Open Group.

Ce logiciel ou matériel et la documentation qui l'accompagne peuvent fournir des informations ou des liens donnant accès à des contenus, des produits et des services émanant de tiers. Oracle Corporation et ses affiliés déclinent toute responsabilité ou garantie expresse quant aux contenus, produits ou services émanant de tiers, sauf mention contraire stipulée dans un contrat entre vous et Oracle. En aucun cas, Oracle Corporation et ses affiliés ne sauraient être tenus pour responsables des pertes subies, des coûts occasionnés ou des dommages causés par l'accès à des contenus, produits ou services tiers, ou à leur utilisation, sauf mention contraire stipulée dans un contrat entre vous et Oracle.

**Accessibilité de la documentation**

Pour plus d'informations sur l'engagement d'Oracle pour l'accessibilité à la documentation, visitez le site Web Oracle Accessibility Program, à l'adresse <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

**Accès aux services de support Oracle**

Les clients Oracle qui ont souscrit un contrat de support ont accès au support électronique via My Oracle Support. Pour plus d'informations, visitez le site <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> ou le site <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> si vous êtes malentendant.

# Contents

---

- Using This Documentation** ..... 7
  - Product Documentation Library ..... 7
  - Feedback ..... 7
  
- Late-Breaking Information** ..... 9
  - New Features ..... 9
  - Enhancements ..... 10
  - Preinstalled Software ..... 10
    - ▼ IMPORTANT - Install Latest OS Updates, Patches, and Firmware ..... 11
  - Minimum Supported Versions of the Firmware, OS, and Software ..... 11
  - Mandatory Oracle Solaris 11 OS Package Updates ..... 13
  - Mandatory Oracle Solaris 10 OS Patches ..... 13
    - Oracle Solaris 10 Mandatory Patches ..... 13
      - ▼ Obtain Oracle Solaris 10 Patches ..... 14
  - Oracle Solaris Fallback Miniroot Image Must Be Installed on a New SP ..... 14
  - Known Issues ..... 15
    - Many eReports and Faults Seen After Assigning VFs to Guest Domain (23492040) ..... 15
    - Ready to Remove LED Not Operating as Expected (23278084) ..... 15
    - InfiniBand Software Not Supported ..... 15
    - Component Device Property ..... 16
    - Error Report ..... 16



## Using This Documentation

---

- **Overview** – Contains late-breaking information for Oracle's Netra SPARC S7-2 server.
- **Audience** – Technicians, system administrators, and authorized service providers
- **Required knowledge** – Advanced experience troubleshooting and replacing hardware

## Product Documentation Library

Documentation and resources for this product and related products are available at <http://www.oracle.com/goto/netra-s7-2/docs>.

## Feedback

Provide feedback about this documentation at <http://www.oracle.com/goto/docfeedback>.



## Late-Breaking Information

---

These topics provide important information and late-breaking news about the server.

- “New Features” on page 9
- “Enhancements” on page 10
- “Preinstalled Software” on page 10
- “IMPORTANT - Install Latest OS Updates, Patches, and Firmware” on page 11
- “Minimum Supported Versions of the Firmware, OS, and Software” on page 11
- “Mandatory Oracle Solaris 11 OS Package Updates” on page 13
- “Oracle Solaris Fallback Miniroot Image Must Be Installed on a New SP” on page 14
- “Known Issues” on page 15

## New Features

This release provides the following new features and added product compatibility.

- DC power supply  
Refer to the *Netra SPARC S7-2 Server Installation Guide*
- Compatibility for the Oracle Dual Port EDR InfiniBand Adapter  
Documentation at: [https://docs.oracle.com/cd/E66148\\_01](https://docs.oracle.com/cd/E66148_01)
- Compatibility for the Oracle Dual Port QDR InfiniBand Adapter M4  
Documentation at: [https://docs.oracle.com/cd/E64144\\_01](https://docs.oracle.com/cd/E64144_01)
- Compatibility for the Sun Dual Port 10 GbE PCIe 2.0 Networking Cards with Intel 82599 10 GbE Controller.  
Documentation at: <http://www.oracle.com/us/products/networking/ethernet/dual-port-10gbe-pcie-nic/overview/index.html>
- Compatibility for the Sun Quad Port PCIe 2.0 Gigabit Ethernet Networking cards.  
Documentation at: <http://www.oracle.com/us/products/servers-storage/networking/ethernet/sun-quad-port-pcie-20-gigabit/overview/index.html>

## Enhancements

This release provides the following enhancements.

- Sun System Firmware versions 9.7.3.c and 9.7.4 are available on MOS:
  - Version 9.7.3.c is required to support the new DC power supplies.
  - Version 9.7.4 is required to support the InfiniBand adaptors.
- Corrects the Ready to Remove Blue LED behavior (23278084).  
Earlier systems might still experience this issue.

## Preinstalled Software

The servers are preinstalled with an OS, software, and firmware. For more information, refer to the [Netra SPARC S7-2 Server Installation Guide](#).

Software	Location	Description
Oracle Solaris 11.3 OS SRU9	OS is installed on drive 0, using a ZFS file system.	Host OS.
Oracle VM Server for SPARC 3.4	/opt/SUNWldm	Manages logical domains.  This software component is part of the Oracle Solaris 11 OS distribution.
Oracle VTS 8.1.0	/usr/sunvts	Provides hardware validation tests.  This software component is part of the Oracle Solaris 11 OS distribution.
Hardware Management Pack 2.3.5.6		

The preinstalled OS is ready to be configured at the appropriate point when you first apply power to the server.

Mandatory package updates might not be preinstalled. Ensure that you obtain and install all mandatory updates before you put the server into production. See [“Mandatory Oracle Solaris 11 OS Package Updates” on page 13](#).

Refer to the Oracle Solaris documentation for instructions on installing and configuring the Oracle Solaris OS.

You can reinstall the OS along with mandatory package updates or patches instead of using the preinstalled OS. See [“Minimum Supported Versions of the Firmware, OS, and Software” on page 11](#).

## ▼ IMPORTANT - Install Latest OS Updates, Patches, and Firmware

Some product features are enabled only when the latest versions of patches or firmware are installed. To retain optimal performance, security, and stability, installing the latest available patches or firmware is required.

Confirm that the latest server firmware version is installed.

### 1. Check the system firmware.

- From the ILOM web interface, click **System Information** → **Summary**, then view the property value for the **System Firmware Version** in the **General Information** table.
- From the command prompt, type:

```
>show /HOST
```

### 2. Ensure that the server firmware version is at the minimum required version or a newer release, if available.

See “[Preinstalled Software](#)” on page 10.

### 3. If required, download the latest available software release version from My Oracle Support at:

<https://support.oracle.com>

### 4. If required, update the server firmware.

Refer to the information about performing firmware updates in the *Oracle ILOM Administrator's Guide for Configuration and Maintenance*. Ensure that you perform the preparatory steps described in that document before updating the firmware.

## Minimum Supported Versions of the Firmware, OS, and Software

You are required to install the latest available and supported versions of the system firmware, OS, and patches, for optimal performance, security, and stability. See “[IMPORTANT - Install Latest OS Updates, Patches, and Firmware](#)” on page 11.

Oracle Solaris 11 is the recommended OS for the Netra SPARC S7-2 server. Oracle Solaris 11 provides simplified installation and maintenance, enhanced virtualization capabilities, and performance improvements. A more detailed list of Oracle Solaris 11 advantages is available at <http://www.oracle.com/technetwork/server-storage/solaris11/overview/index.html>.

---

**Note** - If you configure the server with Oracle VM Server for SPARC, you can install various combinations of the minimum (or newer) versions of the OS. For example, use Oracle Solaris 11.3 for the control domain, and Oracle Solaris 10 1/13 in a guest domain.

---

---

**Note** - Solaris 10 8/11 is no longer supported. If you have this version, you must upgrade to Solaris 10 1/13 and available patches.

---

Software	Minimum Supported Versions
Sun System Firmware	9.7.2 or newer.
Oracle Solaris 11	Includes Oracle ILOM 3.2.6. Oracle Solaris 11.3.  For the control domain, guest domains, and non-virtualized configurations, includes these software components: <ul style="list-style-type: none"><li>■ Oracle VM Server for SPARC</li><li>■ Oracle VTS</li></ul> Also see "Mandatory Oracle Solaris 11 OS Package Updates" on page 13.
Oracle Solaris 10 OS	Oracle Solaris 10 1/13. <i>For virtual guest domains only.</i>  Includes Oracle VTS 7 PS15.  To use with Oracle VM Server 3.4, see the required patches listed in the "Fully Qualified Oracle Solaris OS Versions" section of the Oracle VM Server for SPARC 3.4 installation Guide.
Java SE Development Kit	JDK 7u85.
Oracle Database Enterprise Edition	12.1.0.2, plus required bundle patch.  Required on Oracle Solaris 11.3 for in-memory features.

---

---

**Note** - Some PCIe cards and devices have other minimum requirements. For details, including what is required for a device to be bootable, refer to the product notes and other documentation for that device.

---

## Mandatory Oracle Solaris 11 OS Package Updates

If you reinstall the OS, you might need to install certain package updates before you put the server and optional hardware or software components into production.

Install the most recent Oracle Solaris 11.3 Support Repository Update (SRU). Taking this action ensures that your server has the latest software for the best performance, security, and stability.

Use the `pkg info entire` command to display which SRU is currently installed on your server.

Use the `pkg` command or the package manager GUI to download any available SRUs from: <https://pkg.oracle.com/solaris/support>.

---

**Note** - To access the Oracle Solaris 11 package update repository, you must have an Oracle support agreement that enables you to install a required SSL certificate and support key.

---

## Mandatory Oracle Solaris 10 OS Patches

If you choose to install the Oracle Solaris 10 OS in a guest domain, you must also install additional patches and in some cases, a patch bundle.

### Oracle Solaris 10 Mandatory Patches

This version of the OS is supported only in guest domains.

---

#### OS and Patches

---

These mandatory patches:

- All patches up to October 2015.
- KU150400-29.

To install Oracle Solaris 10, you must patch the miniroot of the installation media with KU150400-29, or higher. You can use the Oracle Solaris 10 JumpStart technology and finish scripts to patch the installed image. Refer to MOS article 1501320.1 for instructions on how to patch a packed miniroot at [My Oracle Support \(https://myoraclesupport.com\)](https://myoraclesupport.com).

If you are unfamiliar with the Oracle Solaris 10 JumpStart technology, contact your support representative or Oracle Support for documentation that describes how to configure an Oracle Solaris 11 zone as an Oracle Solaris 10 1/13 JumpStart server.

---

## ▼ Obtain Oracle Solaris 10 Patches

1. **Sign in to My Oracle Support:**

<https://support.oracle.com>

2. **Select the Patches & Updates tab.**

3. **Search for a patch using the Patch Search panel.**

When searching for a patch using the Patch Name or Number field, you must specify the complete name or number of the patch. For example:

- Solaris 10 1/13 SPARC Bundle
- 13058415
- 147159-03

To search using a patch number without the revision number (last two digits), type % in place of the revision number. For example:

147159-%

4. **After you locate the patch, access the README and download the patch from the site.**

The patch README provides the patch installation instructions.

## Oracle Solaris Fallback Miniroot Image Must Be Installed on a New SP

When you replace the motherboard in a server, you must install a fallback miniroot image on the new SP that corresponds to the version of Oracle Solaris that you are using. The miniroot image is not part of the OS or firmware image that you install on the server. You must also update the miniroot image when you install a new version of Oracle Solaris on the server, so that the fallback image matches that version and SRU of Oracle Solaris.

Errors will occur if the fallback miniroot is missing from the SP or if the version does not match the OS installed on the server. For example, if the miniroot is missing, output from the Oracle ILOM `show faulty` command will include `defect.ilom.fs.miniroot-missing`.

You must download the fallback miniroot image for your hardware and your Oracle Solaris version from My Oracle Support at <https://support.oracle.com>. Then follow the procedure

"How to Update the Fallback Image" in *Booting and Shutting Down Oracle Solaris 11.3 Systems*.

See additional information about use of the fallback miniroot on the SPM in "Uploading a New Solaris Miniroot Package From SP to Host" in *Oracle ILOM Administrator's Guide for Configuration and Maintenance*.

## Known Issues

These are known issues for the server.

- [“Many eReports and Faults Seen After Assigning VFs to Guest Domain \(23492040\)”](#) on page 15
- [“Ready to Remove LED Not Operating as Expected \(23278084\)”](#) on page 15
- [“InfiniBand Software Not Supported”](#) on page 15
- [“Component Device Property”](#) on page 16
- [“Error Report”](#) on page 16

### **Many eReports and Faults Seen After Assigning VFs to Guest Domain (23492040)**

After creating 31 VFs when connected to a switch, you might see multiple ereports.

### **Ready to Remove LED Not Operating as Expected (23278084)**

The Ready to Remove blue LED on HDDs might flicker during normal operation. The flicker is visible with the front cover removed and is easy to differentiate from the LED being in the Off state or the LED being in the solid On state. This flicker does not indicate an error. Do not interpret this flicker as an indication that the HDD is ready to remove.

### **InfiniBand Software Not Supported**

The current version of the firmware and software does not support the InfiniBand software.

## Component Device Property

Debug messages are seen during system initialization. These messages are part of debug firmware and are not seen when production firmware is installed. These messages are benign and can be safely ignored.

```
DEBUG: Unable to create component device path property, nac: /SYS/MB/CMP1/IOS1/RP0
```

```
DEBUG: Unable to create component device path property, nac: /SYS/MB/CMP1/IOS1/RP0/  
EPSC
```

```
DEBUG: Unable to create component device path property, nac: /SYS/MB/CMP1/IOS1/RP0/IB
```

## Error Report

If you see an error report such as 2016-03-28/22:17:47 ereport.chassis.invalid-config@/SYS/DBP, contact Oracle Support personnel.