Sun SPARC Enterprise™ M3000 Server Product Notes

For XCP Version 1091

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Contents

Preface

These product notes contain important and late-breaking information about the Sun SPARC Enterprise M3000 server hardware, software, firmware, and documentation. This document is an update of the product notes for the XCP 1090 and XCP 1091 releases, and covers both. It is written for experienced system administrators with working knowledge of computer networks, and advanced knowledge of the Oracle Solaris Operating

Some references to server names are abbreviated for readability. For example, if you see a reference to the SPARC Enterprise M3000 server or simply the M3000 server, note that the full product name is the Sun SPARC Enterprise M3000 server.

Note – Generally, Product Notes content supersedes that of other product documentation because Product Notes are published with more frequency. However, in case of a conflict, compare the publication date on each document's title page.

Related Documentation

Related documents are listed in the following table. All are available online. See "Where to View Releated Documentation" on page ix.

Note – All glossaries in the following documents have been moved to the separate glossary document listed in the table.

Application	Title
Latest information	*Sun SPARC Enterprise M3000 Server Product Notes* *Sun SPARC Enterprise M4000/M5000 Servers Product Notes* *Sun SPARC Enterprise M8000/M9000 Servers Product Notes*
Overview	*Sun SPARC Enterprise M3000 Server Overview Guide* *Sun SPARC Enterprise M4000/M5000 Servers Overview Guide* *Sun SPARC Enterprise M8000/M9000 Servers Overview Guide*
Planning	*Sun SPARC Enterprise M3000 Server Site Planning Guide* *Sun SPARC Enterprise M4000/M5000 Servers Site Planning Guide* *Sun SPARC Enterprise M8000/M9000 Servers Site Planning Guide*
Safety/Compliance	*Sun SPARC Enterprise M3000 Server Safety and Compliance Guide* *Sun SPARC Enterprise M4000/M5000 Servers Safety and Compliance Guide* *Sun SPARC Enterprise M8000/M9000 Servers Safety and Compliance Guide*
Getting started	*Sun SPARC Enterprise M3000 Server Getting Started Guide* *Sun SPARC Enterprise M4000/M5000 Servers Getting Started Guide* *Sun SPARC Enterprise M8000/M9000 Servers Getting Started Guide* – Also provided in the shipping kit.
Planning/Installation	*Sun SPARC Enterprise Equipment Rack Mounting Guide (Sun Rack 1000, 900 and Sun Rack II)*
Installation	*Sun SPARC Enterprise M3000 Server Installation Guide* *Sun SPARC Enterprise M4000/M5000 Servers Installation Guide* *Sun SPARC Enterprise M8000/M9000 Servers Installation Guide* – Also provided in the shipping kit..
Service	*Sun SPARC Enterprise M3000 Server Service Manual* *Sun SPARC Enterprise M4000/M5000 Servers Service Manual* *Sun SPARC Enterprise M8000/M9000 Servers Service Manual*
Glossary	*Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Glossary*
Software administration	*Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*

Application	Title
Software administration	*Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual*
Software administration	*Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Dynamic Reconfiguration (DR) User's Guide*
Software administration	*Sun Management Center (Sun MC) Software Supplement*
Capacity on Demand administration	*Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Capacity on Demand (COD) User's Guide*

Where to View Releated Documentation

Hardware documents:

http://docs.sun.com/app/docs/prod/sparc.m3k~m3000-hw?l=en#hic
http://docs.sun.com/app/docs/prod/sparc.m4k~m4000-hw?l=en#hic
http://docs.sun.com/app/docs/prod/sparc.m5k~m5000-hw?l=en#hic
http://docs.sun.com/app/docs/prod/sparc.m8k~m8000-hw?l=en#hic
http://docs.sun.com/app/docs/prod/sparc.m9k~m9000-hw?l=en#hic

Software documents:

http://docs.sun.com/app/docs/prod/sparc.m9k~m9000-sw?l=en#hic

Oracle Solaris Operating System documents:

http://docs.sun.com

Documentation, Support, and Training

Sun Function	URL
Documentation	http://www.sun.com/documentation/
Support	http://www.sun.com/support/
Training	http://www.sun.com/training/

Note – For the latest patch information, go to:
http://sunsolve.sun.com

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Sun SPARC Enterprise M3000 Server Product Notes for XCP Version 1091, part number 821-1037-12.

CHAPTER 1

Sun SPARC Enterprise M3000 Server Product Notes for XCP 1091

This document covers changes introduced in the XCP 1090 and XCP 1091 firmware releases. This chapter contains the following sections:

What's New in XCP 1090 and XCP 1091

- The XCP 1091 firmware is the first XCP release to support the 2.75GHz SPARC64 VII processor on the Sun SPARC Enterprise M3000 server. Earlier XCP firmware releases do not support this faster version of the processor, which in other respects is functionally identical to all SPARC64 VII processors.
- The XCP 1091 firmware introduces the Active Directory and LDAP/SSL features and the following related XSCF commands:
  - `setad`(8)
  - `showad`(8)
  - `setldapssl`(8)
  - `showldapssl`(8).

  See "Active Directory and LDAP/SSL" on page 2, the man pages for these commands, and "Documentation Updates" on page 26.

- The XCP 1090 firmware was the first XCP release to support the new XSCF command `showdateoffset`(8). For details, see the man page.
- The XCP 1090 firmware was the first XCP release to support the Airflow and Power indicators. For more information, see "Airflow Indicator" on page 4 and "Power Consumption Monitoring" on page 5.

Upgrading to XCP 1090 or XCP 1091

For information about upgrading your firmware, refer to the *Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

Note – After upgrading XCP firmware, use the `rebootxscf`(8) command to reset the XSCF.

Active Directory and LDAP/SSL

The XCP 1091 release introduces support for the Active Directory and LDAP/SSL features.

- Active Directory is a distributed directory service from Microsoft® Corporation. Like an LDAP directory service, it is used to authenticate users.
- LDAP/SSL (originally called LDAP over SSL) offers enhanced security to LDAP users by way of Secure Socket Layer (SSL) technology. It uses LDAP directory service to authenticate users.

Note – For security reasons, XSCF uses only LDAP over SSL to communicate with an Active Directory server.

Active Directory and LDAP/SSL each provide both authentication of user credentials and authorization of the user access level to networked resources. They use authentication to verify the identity of users before they can access system resources, and to grant specific access privileges to users in order to control their rights to access networked resources.

User privileges are either configured on XSCF or learned from a server based on each user's group membership in a network domain. A user can belong to more than one group. Active Directory or LDAP/SSL authenticates users in the order in which the users' domains are configured. (A *user domain* is the authentication domain used to authenticate a user.)

Once authenticated, user privileges can be determined in the following ways:

- In the simplest case, users' privileges are determined directly through the Active Directory or LDAP/SSL configuration on the XSCF. There is a `defaultrole` parameter for both Active Directory and LDAP/SSL. If this parameter is configured or set, all users authenticated via Active Directory or LDAP/SSL are assigned privileges set in this parameter. Setting up users in an Active Directory or LDAP/SSL server requires only a password with no regard to group membership.
- If the `defaultrole` parameter is not configured or set, user privileges are learned from the Active Directory or LDAP/SSL server based on the user's group membership. On XSCF, the group parameter must be configured with the corresponding group name from the Active Directory or LDAP/SSL server. Each group has privileges associated with it which are configured on the XSCF. A user's group membership is used to determine the user's privileges once the user is authenticated.

Three types of groups can be configured: administrator, operator, and custom. To configure an administrator or operator group, only group name is required.

An administrator group has platadm, useradm, and auditadm privileges associated with it. An operator group has platop and auditop privileges associated with it. To configure a custom group, both group name and privileges are required. For each type of group, up to five groups can be configured. A user assigned to more than one group receives the sum of all privileges associated with those groups.

To support these new features, two new configuration screens (`Active Directory` and `LDAP/SSL`) have been added to the `Settings` menu of the XSCF Web. Remote users can log in and use the XSCF Web once they have been authenticated by Active Directory or LDAP/SSL.

Configuring XSCF for Active Directory Support

The commands `setad`(8) and `showad`(8) let you set and view the Active Directory configuration from the command line.

By default, Active Directory support is disabled. To enable Active Directory support, use the following command:

```
XSCF> setad enable
```

To disable Active Directory support, use the following command:

```
XSCF> setad disable
```

To show if Active Directory support is enabled or disabled, enter: :

```
XSCF> showad
```

Use the `setad`(8) command with its various parameters to configure AD. For example, you can use it to set up one primary and five alternate Active Directory servers, assign group names and privileges, configure a particular user domain, control logging of diagnostic messages, and more. User domain can be configured explicitly through the `setad userdomain` command on XSCF, or entered at login prompt using the form, *user@domain*.

See the `setad`(8) and `showad`(8) man pages, and the notes about these commands in TABLE 3-8.

Note – Once Active Directory has been configured and used, do not downgrade the firmware. If, however, you must downgrade to the XCP 1090 release or earlier, run the following command immediately after doing so:
`restoredefaults -c xscfu`.

Configuring XSCF for LDAP/SSL Support

The commands `setldapssl`(8) and `showldapssl`(8) let you set and view LDAP/SSL configuration from the command line. These commands do for LDAP/SSL what the setad(8) and showad(8) commands do for AD, and support many of the same parameters.

For more information, see the `setldapssl`(8) and `showldapssl`(8) man pages.

New `proxyuser` System Account

To support Active Directory and LDAP/SSL, this release features a new system account named `proxyuser`. Verify that no user account of that name already exists. If one does, use the `deleteuser`(8) command to remove it, then reset XSCF before using the Active Directory or LDAP/SSL feature.

Airflow Indicator

The Airflow indicator value indicates the volume of air exhausted from the M3000 server while it is running. The value does not include air emitted from peripheral devices.

Note – Airflow monitoring measurement values are for reference only.

To display the amount of exhaust air, use the `showenvironment air` command.

```
XSCF> showenvironment air
Air Flow:63CMH
```

Note – Airflow measurements might be incorrect if taken during or shortly after server power-on or power-off, or during or shortly after replacement of the power supply. For best results, check these values after at least one minute has passed.

For details of the `showenvironment`(8) command, refer to the man page. For installation details of the SPARC Enterprise M3000 server, see the *SPARC Enterprise M3000 Server Site Planning Guide* and the *SPARC Enterprise M3000 Server Installation Guide*.

You can also obtain the exhaust air data using the SNMP agent function. To obtain the data of exhaust air using the SNMP agent function, install the latest XSCF extension MIB definition file to the SNMP manager. For details on the XSCF extension MIB definition file, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

Power Consumption Monitoring

The power consumption monitoring function indicates the amount of power consumed while the SPARC Enterprise M3000 server is running. The value does not include that of peripheral devices.

Note – Power consumption monitoring measurement values are for reference only. The power consumption value of the server varies by the conditions such as the power supply in use, CPU types, system configurations, or system load. For more information, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

To display the power consumption, use the `showenvironment power` command.

```
XSCF> showenvironment power
Permitted AC power consumption:470W
Actual AC power consumption:450W
```

Note – Power measurements might be incorrect if taken during or shortly after server power-on or power-off, or during or shortly after replacement of the power supply.

For details of the `showenvironment(8)` command, see the man page. For installation details of the SPARC Enterprise M3000 server, see the *SPARC Enterprise M3000 Server Site Planning Guide*.

You can also obtain the power consumption data using the SNMP agent function. To obtain the power consumption data using the SNMP agent function, install the latest XSCF extension MIB definition file to the SNMP manager. For details on the XSCF extension MIB definition file, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

Minimum Required Firmware, Operating Systems, and Browsers

Note – This section was updated in May 2010.

The Solaris Operating System software is preinstalled on new M3000 servers.

TABLE 1-1 lists the earliest firmware and operating system (OS) versions that are required in this release...

TABLE 1-1 Minimum Required Firmware and Operating System Versions

Processor Type	Minimum XCP Version	Minimum Operating System Version
SPARC64 VII processors, 2.52GHz	XCP 1080	Solaris 10 10/08 – with no patches required
SPARC64 VII processors, 2.52GHz with 8GB DIMMs	XCP 1081	Solaris 10 10/08 – with no patches required
SPARC64 VII processors, 2.75GHz	XCP 1091	Solaris 10 10/08 – with the Solaris 10 10/09 Patch Bundle required. Solaris 10 10/09 – with no patches required

Note – As for all releases, installation of the SunAlert Patch Cluster is recommended. Also, note that the Solaris 10 10/09 Patch Bundle is also known as MU8.

Many web browsers support the XSCF Web. The browsers in TABLE 1-2 have demonstrated compatibility with the XSCF Web through testing.

TABLE 1-2 Tested Web Browser Versions

Web Browser Application	Version
Firefox	2.0 and 3.0
Microsoft Internet Explorer	6.0 and 7.0

Solaris Patch Requirements

This section lists mandatory patches, patch bundles, and SunAlert patch clusters for the M3000 server. Always refer to the patch README for information about patch requirements and special installation instructions.

The patch identifiers listed in this section represent the *minimum* level of the patches that must be installed. The two-digit suffix represents the minimum revision level of the patch. Check `http://sunsolve.sun.com` for the latest patch revision. Apply patches in the order listed.

Solaris 10 5/09 with SPARC64 VII 2.75 GHz Processors

The Solaris 10 10/09 Patch Bundle is required, and the SunAlert Patch Cluster is recommended. See:

`http://sunsolve.sun.com/show.do?target=patches/patch-access`

Solaris 10 10/08 with SPARC64 VII 2.75 GHz Processors

The Solaris 10 10/09 Patch Bundle is required, and the SunAlert Patch Cluster is recommended. See:

`http://sunsolve.sun.com/show.do?target=patches/patch-access`

Obtaining Solaris Patches

The Sun[s] Connection Update Manager can be used to reinstall the patches if necessary or to update the system with the latest set of mandatory patches. For more information about the Sun Connection Update Manager, refer to the *Sun Update Connection System Administration Guide* at:

`http://docs.sun.com/app/docs/prod/updconn.sys`

Or visit:

http://wikis.sun.com/display/SunConnection/Update+Manager

Installation information and README files are included in the patch downloads.

Two options are available to register your system and to use the Sun Connection Update Manager to obtain the latest Solaris OS patches:

- Use the Update Manager GUI to obtain patches.

  For more information, refer to the Sun Update Connection documentation at the links mentioned previously.

- Use the `smpatch`(1M) command to obtain patches.

  For more information, refer to the `smpatch`(1M) man page or the reference manual collection for your version of Solaris.

Patches for Emulex PCI Express (PCIe) Cards

The following Emulex cards require drivers supplied in patch 120222-26 or later:

- XSEFC402AF Sun StorageTek™ Enterprise Class 4-Gigabit Dual-Port Fiber Channel PCIe HBA
- XSEFC401AF Sun StorageTek Enterprise Class 4-Gigabit Single-Port Fiber Channel PCIeHBA

Functionality Issues and Limitations

This section describes issues and limitations known at the time of this release.

Note – Do not use the Service Processor (SP) as the Network Time Protocol (NTP) server. Using an independent NTP server provides optimal reliability in maintaining consistent time on the SP and the domains. For more information about NTP, see the Sun Blueprint document, *Using NTP to Control and Synchronize System Clocks*: http://www.sun.com/blueprints/0701/NTP.pdf

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- For power-on after power-off, wait at least 30 seconds before turning the system power back on, by using the main line switch or the circuit breakers on the distribution panel.

- You cannot use the following user account names, as they are reserved for system use: `adm`, `admin`, `apache`, `bin`, `daemon`, `default`, `ldap`, `nobody`, `ntp`, `operator`, `proxyuser`, `root`, `rpc`, `rpcuser`, and `sshd`.
- If your M3000 server is running the Solaris 10 10/09 OS and IPMP, you must disable probe-based failure detection to correct for CR 6888928. See InfoDoc 211105 (86869).
- When you use the external power control interface of the external power controller, the following notification signals are not supported:
  - The OS panic or the server hardware error signal (*CPUN/RTNU).
  - The server hardware error signal (power fail, temperature error, and fan error) (*ALARM).
- When you import XCP or update the firmware using the XSCF you might see Web session ID errors displayed on the web browser. When you specify the timeout period as over 30 minutes in the Autologout setting Internal Server Errors might be displayed. To reconnect to the XSCF Web close the current browser and open the new browser.
- For this XCP release, the XSCF browser user interface (XSCF Web) does not support the External I/O Expansion Unit Manager feature.
- The use of the External I/O Expansion Unit to connect the host server to an external boot disk drive is not supported.
- Disable pop-up blocking and remove any plug-ins such as the search tool installed with the browser when you use the XSCF Web.
- XSCF-LAN is compliant with auto-negotiation. Set the network device that connects with XSCF-LAN to the auto-negotiation mode. Otherwise, when you connect the XSCF-LAN and the network device (fixed to the full-duplex mode, according to the IEEE 802.3 rule), the XSCF-LAN communicates in half-duplex mode and network communication speed might slow or communication errors may occur.
- For information about I/O options and storage, such as the number of cards supported in a domain, see the Sun Cross Platform IO Support page:

  `http://wikis.sun.com/display/PlatformIoSupport/Home/`
- The `setsnmp`(8) and `showsnmp`(8) commands do not notify the user of authorization failure. Upon such failure, confirm that the SNMP trap host is working and re-execute the command using the correct user name.
- If you must downgrade from XCP 1091 to XCP 1090, execute the following command to clear old-style audit logs:

```
XSCF> restoredefaults -c xscfu
```

Additional Information and Procedures

This section describes additional issues and limitations known at the time of this release.

Sun Java Enterprise System

The Sun Java™ Enterprise System software is a comprehensive set of software and life cycle services that make the most of your software investment. The software and installation instructions can be found at the following web address:

`http://www.sun.com/software/javaenterprisesystem/index.jsp`

The software might not include patches that are mandatory for your server. After installing the software, refer to "Obtaining Solaris Patches" on page 8 for information about checking for and installing required patches.

For an overview and documentation, go to:

`http://www.sun.com/service/javaes/index.xml`

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.

Logging In to the System

In addition to the standard *default* login, M3000/M4000/M5000/M8000/M9000 servers are delivered with a temporary login called `admin` to enable remote initial login, through a serial port. The `admin` user privileges are fixed to `useradm` and cannot be changed. You cannot log in as temporary `admin` using the standard UNIX user name and password authentication or SSH public key authentication. The temporary `admin` account has no password, and one cannot be added for it.

The temporary `admin` account is disabled after someone logs in as the default user, or after someone logged in as temporary `admin` has successfully added the first user with valid password and privileges.

If, before the default login is used, you cannot log in as temporary `admin`, you can determine if someone else has done so by executing the `showuser -l` command.

Booting From a WAN Boot Server

The WAN boot installation method enables you to boot and install software over a wide area network (WAN) by using HTTP. To support booting the M3000 server from a WAN boot server, you must have the appropriate `wanboot` executable installed and OpenBoot™ version 4.24 or above to provide the needed hardware support.

For information about WAN boot servers, refer to the *Solaris 10 Installation Guide: Network-Based Installations* for the version of Solaris 10 OS that you are using. You can find Solaris 10 OS documentation here:

`http://docs.sun.com/app/docs/prod/solaris.10`

If you do not upgrade the `wanboot` executable, the server will panic, with messages similar to the following:

```
krtld: load_exec: fail to expand cpu/$CPU
krtld: error during initial load/link phase
panic - boot: exitto64 returned from client program
```

Enabling Web Console SMF Service

▼ To Enable the Web Console SMF Service:

- **Log in to a terminal as `root`, then type:**

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

If you have to reload the software, go to the following web site for download and installation instructions:

`http://www.sun.com/software/preinstall`

If you download a fresh copy of software, that software might not include patches that are mandatory for your server. Before installing the software, refer to "Obtaining Solaris Patches" on page 8 for information about checking for and installing required patches.

Identifying Degraded Memory in a System

▼ To Identify Degraded Memory in a System:

1. **Log in to XSCF.**
2. **Type the following command:**

```
XSCF> showstatus
```

3. The following example reveals that DIMM number 0A on the Motherboard unit has degraded memory:

```
XSCF> showstatus
    MBU_A Status: Normal;
      MEM#0A Status:Degraded
```

CHAPTER 2

Information About Hardware

This chapter describes special instructions and issues about M3000 server hardware.

Notes on the Use of 200V Power Supply

For servers that have the B-type plug, confirm that a 15A overcurrent protection device is available outside the server. If one is not available, prepare an external 15A overcurrent protection that can be achieved by means of no-fuse breakers (NFBs) or fuses. The B-type plug refers to plugs other than grounding-type ones with two parallel blades, such as the NEMA L6-30, L6-20, L6-15, and L5-15.

Notes on Power-On After Power-Off

Wait at least 30 seconds before turning on the system power, which you turned off by way of unplugging the power cable or using the circuit breakers on the panel.

Connecting an SAS Device With Multiple SAS Targets to Onboard External SAS Interface Not Supported

It is not supported to connect an SAS device containing multiple SAS targets to the onboard external SAS interface. Instead, use a Sun StorageTek Host Bus Adaptor (SG-XPCIE8SAS-E-Z). [CR 6765239]

Booting Multiple Systems From a Single J4200 JBOD Storage Array

Sun Storage J4200 SAS JBOD arrays have six general-purpose SAS connectors. With FW version 3A32 or higher, each of them can be connected to separate SAS initiators, therefore up to six systems can be connected to the array. Each system can use a different disk on the array as its boot device. J4200 arrays have 12 disks, so each boot device can be mirrored for higher reliability.

J4200 SAS arrays can be configured into multiple zones to provide a more secure environment.

Related Information

- Sun StorageTek Common Array Manager Software documentation, at:
  `http://docs.sun.com/app/docs/prod/stor.arrmgr#hic`
  See especially:
  - *Sun StorageTek Common Array Manager Software Release Notes 6.4.1*

Sun StorageTek Common Array Manager User Guide for Open Systems

Notes on the Use of USB Memory

To execute the `dumpconfig(8)`, `restoreconfig(8)` or `snapshot(8)` command, if you specify USB memory as the destination to store data, prepare the USB memory as a medium in advance.

The data stored will include the information about the system. To use USB memory, you need to pay attention to the management of the USB memory in which the data stored, from the data security viewpoint.

We do not provide guarantees on the proper operation and connectivity to the XSCF of every USB memory currently manufactured on the market. Depending on the USB memory in use, defects such as the XSCF firmware error or reset may occur. In case such defects occurred, stop the use of USB memory immediately.

To connect the USB memory to the USB port for the XSCF, connect the USB memory directly to the USB port. If connected via the USB hub or USB extension, it might cause errors.

Hardware Documentation Updates

This section contains late-breaking hardware information and corrections that became known after the documentation set was published.

TABLE 2-1 lists known documentation updates.

TABLE 2-1 Hardware Documentation Updates

Title	Page Number	Update
SPARC Enterprise M3000 Server Overview Guide	1-25	1.4.6.2 "SAS Port" The article on "SAS Port" will be replaced by the following. The SAS port connects the server to an external device, such as a tape drive, which has an SAS interface. For information on which devices can be connected, contact a service engineer. Note that the transfer rate of this port is up to 600MB/s (3Gbps x 2wide).

CHAPTER 3

Information About Software

This chapter describes specific software and firmware issues and workarounds. It includes the following sections:

To obtain patches and to check for availability of new patches that fix these issues, go to:

`http://sunsolve.sun.com`

XCP Issues and Workarounds

TABLE 3-1 lists XCP issues and possible workarounds.

TABLE 3-1 XCP Issues and Workarounds *(1 of 2)*

ID	Description	Workaround
6760740 and 6894410	The XSCF might go down and require a reboot, or you might see console error messages and a core dump (`ereport.chassis.software.core`) when one of these conditions occurs: • A local account has been created with a user ID explicitly assigned to a value larger than 65536 (`adduser -u` *uid*). • An LDAP account has been used that has a UID value larger than 65536.	Use only user accounts with a user ID (UID) value between 100 and 60000. This is the range of auto-assigned UIDs for the XSCF command `adduser`.

TABLE 3-1 XCP Issues and Workarounds *(2 of 2)*

ID	Description	Workaround
6789066	In the `settimezone -c adddst` command, when you set eight or more letters to the abbreviation of time zone and the name of Daylight Saving Time, execution of the `showlogs` command induces a segmentation fault and results in an error.	Specify the abbreviation of time zone and the name of Daylight Saving Time in seven letters or less.
6851009	If certain changes occur on a standalone NTP server, the XSCF connection to the NTP server is lost, and XSCF uses instead its local clock. This problem occurs with a standalone NTP server, that is, with an NTP server that syncs the time with its own local clock (LCL), not with a higher-stratum NTP server. Changes that can trigger this change include: • Rebooting the NTP server • Modifying the date by even one second • Changing the NTP server stratum	Check whether the XSCF LCL and the NTP server are both set to 127.127.1.0. If so, change one of them. **Note -** Before making any changes, ensure that your change has no impact on other NTP clients. • To change the value on the NTP server, change the NTP host configuration file (`/etc/inet/ntp.conf`) to a different value, then reboot the XSCF to apply the changes. Other values include 127.127.1.1, 127.127.1.2, and 127.127.1.3. • To change the value on the XSCF side, use the `setntp` command, as in the following example: `setntp -m localaddr=2` – sets the value to 127.127.1.2
6879471	Audit log shows Advanced Directory or LDAP/SSL users as "proxyuser" rather than their actual user ID. This error might be seen when viewing audit logs created from previous XCP versions, after downgrading to a previous XCP version and viewing logs created by a later XCP release, and in some other cases.	None.
6893578	Users who have been authenticated via Active Directory or LDAP/SSL can run the `console`(8) command to obtain a domain console. The `showconsolepath`(8) command displays such console users as `proxyuser` rather than as their real username.	There is no workaround.

Solaris OS Issues and Workarounds

This section contains information about Solaris OS issues. The following tables list issues you might encounter, depending in part on which Solaris OS release you are using.

Solaris Issues for All Supported Releases

TABLE 3-2 lists Solaris OS issues that you might encounter in any Solaris release. If your domains are not running the latest Solaris release, also take notice of CRs fixed in releases later than yours, as noted in the tables that follow.

TABLE 3-2 Solaris OS Issues and Workarounds for All Supported Releases *(1 of 3)*

CR ID	Description	Workaround
6531036	The error 'message network initialization failed' appears repeatedly after a boot net installation.	No workaround is available. This message can be safely ignored.
6532215	volfs or dscp services might fail when a domain is booted.	Restart the service. To avoid the problem, issue the following commands. **# svccfg -s dscp setprop start/timeout_seconds=count: 300** **# svccfg -s volfs setprop start/timeout_seconds=count: 300** **# svcadm refresh dscp** **# svcadm refresh volfs**

TABLE 3-2 Solaris OS Issues and Workarounds for All Supported Releases *(2 of 3)*

CR ID	Description	Workaround

6660168	If a `ubc.piowbeue-cpu` error occurs on a domain, the Solaris Fault Management cpumem-diagnosis module might fail, causing an interruption in FMA service. If this happens, you will see output similar to the following sample in the console log:
	`SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor`
	`EVENT-TIME: Fri Apr 4 21:41:57 PDT 2008`
	`PLATFORM: SUNW,SPARC-Enterprise, CSN: 2020642002, HOSTNAME: <hostname>`
	`SOURCE: fmd-self-diagnosis, REV: 1.0`
	`EVENT-ID: 6b2e15d7-aa65-6bcc-bcb1-cb03a7dd77e3`
	`DESC: A Solaris Fault Manager component has experienced an error that required the module to be disabled. Refer to http://sun.com/msg/FMD-8000-2K for more information.`
	`AUTO-RESPONSE: The module has been disabled. Events destined for the module will be saved for manual diagnosis.`
	`IMPACT: Automated diagnosis and response for subsequent events associated with this module will not occur.`
	`REC-ACTION: Use fmdump -v -u <EVENT-ID> to locate the module. Use fmadm reset <module> to reset the module`
		If `fmd` service fails, issue the following command on the domain to recover:
		# **`svcadm clear fmd`**
		Then restart cpumem-diagnosis:
		# **`fmadm restart cpumem-diagnosis`**

6668237	After DIMMs are replaced the corresponding DIMM faults are not cleared on the domain.	Use the following commands: # **`fmadm repair`** *fmri*|*uuid* # **`fmadm rotate`**
6723202	The `raidctl` command cannot be used to create a hardware RAID using the onboard SAS/LSI controller on the M3000 server. The `raidctl` command can be used to view disk/controller status, and can be used on any PCI Host Bus Adapter (HBA) installed in the system.	No workaround is available.
6745410	Boot program ignores the `Kadb` option which causes the system not to boot.	Use `kmdb` instead of `kadb`.

TABLE 3-2 Solaris OS Issues and Workarounds for All Supported Releases *(3 of 3)*

CR ID	Description	Workaround
6872501	Cores are not offlined when requested by the XSCF. This CR affects only Solaris 10 5/09 and Solaris 10 10/09 releases.	There is no workaround.
6888928	IPMP interface fails since probe packets are not sent through that interface. Problem occurs with M3000/M4000/M5000/M8000/M9000 servers running the Solaris 10 10/09 OS and IPMP, or any Solaris release running IPMP with Patch 141444-09 installed.	Disable probe-based failure detection. See InfoDoc 211105 (86869).

Solaris Issues Fixed in Solaris 10 10/09

TABLE 3-4 lists issues that have been fixed in Solaris 10 10/09 OS. You might encounter them in earlier releases.

TABLE 3-3 Solaris OS Issues and Workarounds Fixed in Solaris 10 5/09

CR ID	Description	Workaround
6572827	The `prtdiag -v` command reports PCI bus types incorrectly. It reports “PCI” for PCI-X leaf devices and “UNKN” for legacy PCI devices.	No workaround is available.

Solaris Issues Fixed in Solaris 10 5/09

TABLE 3-4 lists issues that have been fixed in Solaris 10 5/09 OS. You might encounter them in earlier releases.

TABLE 3-4 Solaris OS Issues and Workarounds Fixed in Solaris 10 5/09

CR ID	Description	Workaround
6623226	The Solaris command `lockstat`(1M) or the dtrace lockstat provider might cause a system panic.	Do not use the Solaris `lockstat`(1M) command or the dtrace lockstat provider.
6680733	Sun Quad-port Gigabit Ethernet Adapter UTP (QGC) & Sun Dual 10 GigE Fiber XFP Low Profile Adapter (XGF) NICs might panic under high load conditions.	There is no workaround available.
6689757	Sun Dual 10 GigE Fiber XFP Low Profile Adapter (XGF) with a single or improperly installed XFP optical transceivers might cause the following error to show on the console: `The XFP optical transceiver is broken or missing.`	Check and make sure that both XFP optical transceivers are firmly seated in the housing. Do not mix INTEL and Sun XFP optical transceivers in the same Adapter. Do NOT plumb a port with the `ifconfig` command if the port does not contain an XFP optical transceiver or it contains one but the transceiver is not in use.
6725885	`cfgadm` will display non-existent M3000 system boards (SB1 to SB15).	The `cfgadm` output for SB1-SB15 can be ignored.

Solaris Issues Fixed in Solaris 10 10/08

TABLE 3-5 lists issues that have been fixed in Solaris 10 10/08 OS. You might encounter themin earlier releases..

TABLE 3-5 Solaris OS Issues and Workarounds Fixed in Solaris 10 10/08

CR ID	Description	Workaround
6556742	The system panics when DiskSuite cannot read the `metadb` during DR. This bug affects the following cards: • SG-XPCIE2FC-QF4, 4-Gigabit PCI-e Dual-Port Fiber Channel HBA • SG-XPCIE1FC-QF4, 4-Gigabit PCI-e Single-Port Fiber Channel HBA • SG-XPCI2FC-QF4, 4-Gigabit PCI-X Dual-Port Fiber Channel HBA • SG-XPCI1FC-QF4, 4-Gigabit PCI-X Single-Port Fiber Channel HBA	Panic can be avoided when a duplicated copy of the `metadb` is accessible via another Host Bus Adaptor.
6608404	Hot-plug of the X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP card might cause other network devices to fail.	There is no workaround.
6720261	If your domain is running Solaris 10 5/08 OS, the system might panic/trap during normal operation:	Set the following parameter in the system specification file (`/etc/system`): `set heaplp_use_stlb=0` Then reboot the domain.

6737039	WAN boot of M3000 servers fails intermittently with a panic early in the boot process. Sample output:
	`ERROR: Last Trap: Fast Data Access MMU Miss`
	`%TL:1 %TT:68 %TPC:13aacc %TnPC:13aad0 %TSTATE:1605`
	`%PSTATE:16 ( IE:1 PRIV:1 PEF:1 )`
	`DSFSR:4280804b ( FV:1 OW:1 PR:1 E:1 TM:1 ASI:80 NC:1 BERR:1 )`
	`DSFAR:fda6f000 DSFPAR:401020827000 D-TAG:6365206f66206000`
		Power off and power on the chassis, then retry the operation.

Documentation Updates

This section contains late-breaking information that became known after the listed document was published or that was very recently added.

Note – Online man pages are updated more frequently than the *SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers XSCF Reference Manual*.

SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers XSCF Reference Manual

The following changes are not included in the XCP 1090 edition of this document dated August 2009.

TABLE 3-6 XSCF Reference Manual

man page	Change
Advanced Directory and LDAP/SSL man pages	Not yet added: The new `setad`(8), `setldapssl`(8), `showad`(8), and `showldapssl`(8) man pages. You can use the `man`(1) command to view these man pages online. Also see the notes about `setad`(8) and `setldapssl`(8) in TABLE 3-7
`password`(8) and `setpasswordpolicy`(8)	Not yet added: Most value ranges are `1 - 999999999`.
`setdualpowerfeed`(8)	Not yet added: "The dual power feed mode cannot be used with 100V power on M4000/M5000 servers."
`sethttps`(8)	Not yet added to EXTENDED DESCRIPTION: "The size of the file to be generated by `sethttps`(8) grows with the total character count typed in the operands for configuring self-certification authority, creating a self-signed web server certificate, and creating a CSR. If the file to be generated is too large for XSCF, the command fails with an error. If you see this error, reduce the number of characters in the operands and execute the `sethttps`(8) command again"

TABLE 3-6 XSCF Reference Manual

man page	Change

setnameserver(8)	• Not yet added to OPERANDS:
	"You cannot specify the loopback address (127.0.0.0/8), the network address, or a broadcast address."
	• Not yet added to OPTIONS:
	New options for registering a specified domain name to the DNS search path:
	`-c addsearch`
	`-c delsearch`
	Along with the addition of DNS search path, related descriptions for DNS search path will be added to applynetwork(8), sethostname(8), and shownameserver(8). For details, see the online versions of these man pages as of the XCP 1091 release.

setnetwork(8)	Not yet added to OPERANDS: "You cannot specify the loopback address (127.0.0.0/8), the network address, a broadcast address, or a class D or E (224.0.0.0 - 255.255.255.255) address."
setntp(8),	• Not yet added to OPERANDS: "You cannot specify the loopback address (127.0.0.0/8), the network address, or a broadcast address." • Not yet added to OPTIONS: A new option for setting the local clock of XSCF: `-m localaddr=`*value.* Along with the addition of clock address, related descriptions for local addresses will be added to showntp(8). For details, see the online version of the setntp(8) and showntp(8) man pages.
setroute(8)	• Not yet added to OPTIONS: "You cannot specify the loopback address (127.0.0.0/8), the network address, or a broadcast address." • Not yet changed in OPTIONS: Old text – "If you specified 0.0.0.0 in the `-n` option, do not specify the `-m` option." New text – "If you specified 0.0.0.0 in the `-n` option, you must specify 0.0.0.0 in the `-m` option or you must omit the `-m` option."
setupfru(8)	Not yet added to EXTENDED DESCRIPTION: "Although a CMU with two CPUMs can be configured into Quad-XSB mode on an M8000/M9000 server, the server generates a "configuration error" message for these XSBs because they do not have at least one CPUM and memory."
showdevices(8)	Not yet added to EXTENDED DESCRIPTION: "The showdevices(8) command displays a complete list of devices when executed right after a Solaris OS boot or a DR operation. However, when executed at other times, showdevices does not display a complete list if the Solaris OS has unloaded drivers for any unused devices. To be certain the displayed list is complete, run the devfsadm command with the `-v` option on the domain before running showdevices. For more information about the devfsadm command, see the Solaris devfsadm(1M) man page."

TABLE 3-6 XSCF Reference Manual

man page	Change
showenvironment(8)	Not yet added: "Airflow volume information is not supported on the M4000/M5000 servers." Not yet replaced: Old text – "The power consumption information is displayed on the M3000/M4000/M5000 servers." New text – "The power consumption information is displayed on the M3000 server."
showhardconf(8)	Not yet added to EXAMPLES: A new example of a M3000 server with DC power.

Online man pages

Online man pages were updated at the XCP 1091 release. This section shows changes that were not included. Note that the man pages for the Advanced Directory and LDAP/SSL features – setad(8), setldapssl(8), showad(8), and showldapssl(8) – were included in the XCP 1091 release, but that the changes to them shown here were not.

TABLE 3-7 Online man pages

man page	Change
setad(8)	• Not yet added to OPERANDS: "A user domain can be configured explicitly through the setad userdomain command on XSCF, or entered at login prompt using the form, *user@domain*." • Future change expected: Addition to SYNOPSIS and OPTIONS: "-p *proxy* specifies the proxy server to be used for transfers. The default transfer type is http, unless modified using the -t *proxy_type* option. The value for proxy must be in the format *servername*:*port*." "-t *proxy_type* specifies the proxy type as http, socks4, or socks5. The deafult is http." • Not yet changed in the description of the timeout operand: "Configure transaction timeout, in seconds. *seconds* can be 1 to 20. The default is 4. If the specified timeout is too brief for the configuration, the login process or retrieval of user privilege settings could fail." • Not yet changed in Example 6: "userdomain can take the form of UserPrincipalName (UPN) or Distinguished Name (DN)."

TABLE 3-7 Online man pages

man page	Change
setldapssl(8)	• Not yet changed in OPERANDS: "Enable or disable use of the usermap. When enabled, user attributes specified with the `usermap` operand, rather than userdomain, are used for user authentication." • Future change expected: Addtion to SYNOPSIS and OPTIONS: "`-p` *proxy* specifies the proxy server to be used for transfers. The default transfer type is `http`, unless modified using the `-t` *proxy_type* option. The value for proxy must be in the format *servername*:*port*." "`-t` *proxy_type* specifies the proxy type as `http`, `socks4`, or `socks5`. The deafult is `http`." • Not yet changed in Example 6: "`userdomain` can take the form of Distinguished Name (DN) only." • Future change expected: Addition of Examples for the `binddn`, `bindpw`, and `searchbase` operands. • Not yet changed in the description of the `timeout` operand: "Configure transaction timeout, in seconds. *seconds* can be 1 to 20. The default is 4. If the specified timeout is too brief for the configuration, the login process or retrieval of user privilege settings could fail."

SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers XSCF User's Guide

The following changes were added to or not included in the August 2009 edition of this document.

TABLE 3-8 Documentation Updates

Subject	Change
Active Directory and LDAP/SSL	Not yet added. See "Active Directory and LDAP/SSL" on page 2 of these Product Notes.
Power Consumption Monitoring Limitation	Added in the 1090 update of this document: In the following cases, inaccurate power consumption values might be shown in the MIB, in the showenvironment power command output, and on the XSCF Web: • During or for a short time after server power-on or power-off. • During or for a short time after active replacement of a power supply unit. To ensure the values are accurate, wait one minute, then check the values again.

TABLE 3-8 Documentation Updates

Subject	Change
XSCF Unit/Firmware Updates	Not yet changed in Chapter 8.1.10: Replace steps 2 and 3 in these sections: • Confirming That the XSCF Firmware is Updated When the XSCF Unit is Replaced (in a System with a Single XSCF Unit or Both Replacement in a System with Redundant XSCF Units • Confirming That the XSCF Firmware is Updated When the MBU is Replaced (in the M3000 Server) The replacement steps are: 2. If the replacement unit and the replaced unit have different versions, a message is displayed. In this case, the firmware is not updated automatically. The operator must match the number of the firmware versions. 3. When you update, follow the procedure in "Updating XCP From External Media" or "Updating XCP from the Network." After updating, confirm the version.