Sun Integrated Lights Out Manager (ILOM) 2.0

Supplement for the Sun Netra X4250 Server

Part No. 820-4060-11
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Contents

Preface

This supplement contains information about the Sun Integrated Lights Out Manager (ILOM) 2.0 firmware running on Oracle's Sun Netra X4250 server's service processor (SP). The SP enables you to remotely manage and administer your servers.

For a complete discussion of ILOM 2.0 and its capabilities along with user procedures, see the *Sun Integrated Lights Out Manager 2.0 User's Guide* and the *Addendum to the Sun Integrated Lights Out Manager 2.0 User's Guide*.

Typographic Conventions

Typeface	Meaning	Examples
`AaBbCc123`	The names of commands, files, and directories; on-screen computer output	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
`AaBbCc123`	What you type, when contrasted with on-screen computer output	`% su` `Password:`
AaBbCc123	Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values.	Read Chapter 6 in the *User's Guide*. These are called *class* options. You *must* be superuser to do this. To delete a file, type `rm` *filename*.

Note – Characters display differently depending on browser settings. If characters do not display correctly, change the character encoding in your browser to Unicode UTF-8.

Related Documentation

The documents listed as online are available at:

http://docs.sun.com/app/docs/prod/nt4250.srvr#hic

Application	Title	Part Number	Location
Planning	*Sun Netra X4250 Server Site Planning Guide*	820-4053	Online
Installation	*Sun Netra X4250 Server Installation Guide*	820-4055	Online
Issues & updates	*Sun Netra X4250 Server Product Notes*	820-4059	Online
System management	*Sun Integrated Lights Out Manager 2.0 User's Guide*	820-1188	Online
	Addendum to the Sun Integrated Lights Out Manager 2.0 User's Guide	820-4198	Online
	Sun Integrated Lights Out Manager (ILOM) 2.0 Supplement for the Sun Netra X4250 Server	820-4060	Online
Service	*Sun Netra X4250 Server Service Manual*	820-4056	Online
Safety and compliance	*Sun Netra X4250 Server Safety and Compliance Guide*	816-7190	Online
	Important Safety Information for Sun Hardware Systems	821-1590	Shipping kit
General	*Sun Netra Rack Server Getting Started Guide*	820-3016	Shipping kit

Documentation, Support, and Training

These web sites provide additional resources:

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

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Sun Integrated Lights Out Manager (ILOM) 2.0 Supplement for Sun Netra X4250 Server, part number 820-4060-11

CHAPTER 1

ILOM for the Sun Netra X4250 Server

This chapter introduces ILOM for the Sun Netra X4250 server.

This chapter contains the following sections:

Platform Specific ILOM Features

ILOM operates on many platforms, supporting features that are common to all platforms. There are some ILOM features that belong to a subset of platforms and not to all. This document describes features that belong to the Sun Netra X4250 server, augmenting the set of features described in the *Sun Integrated Lights Out Manager 2.0 User's Guide*.

ILOM Control of the Telco Alarm Port

When an ILOM alarm is asserted, the proper LED is turned on and the corresponding alarm signals are sent to the Alarm port on the rear panel. When an alarm is turned off, the LED is turned off and the alarm port signal is reset. See "Managing Alarms Indicators" on page 9 for more information.

In a telecommunications environment, the Alarm port connects to the central office alarming system. See Appendix A in the *Sun Netra X4250 Server Service Manual* for alarm connector pinouts and signals.

CHAPTER 2

Managing the Service Processor

This chapter contains information on ILOM properties on the Sun Netra X4250 server that augment the array of properties that are common to ILOM on other platforms. In particular, this chapter covers properties in the `/SP` namespace. This chapter consists of:

Storing Customer Information Using the SP

This section describes ILOM features that enable you to store information (for purposes such as inventory control or site resource management) on the SP and FRU PROMs.

▼ To Change System Identification Information Using the CLI

Use the `/SP system_identifier` property to store customer identification information.

- **At the -> prompt, type the following command:**

```
-> set /SP system_identifier=data
```

▼ To Change Customer Identification Information Using the Web Interface

ILOM provides features that enable you to assign and store system identifier information on the SP.

1. **Log into the ILOM web interface as Administrator (`root`) to open the web interface.**
2. **Select System Information -> Identification Information.**
3. **View the SP Hostname.**
4. **Edit the SP System Identifier field.**
5. **Click Save.**

Changing Service Processor Settings to Factory Defaults

This section describes how to set service processor settings back to the factory defaults.

▼ To Reset the Service Processor Settings to Factory Default Values Using the CLI

Use the reset_to_defaults property to set all ILOM configuration properties back to their factory default values. The all option sets the ILOM configuration and all user information back to the factory default values.

1. At the -> prompt, type the following command:

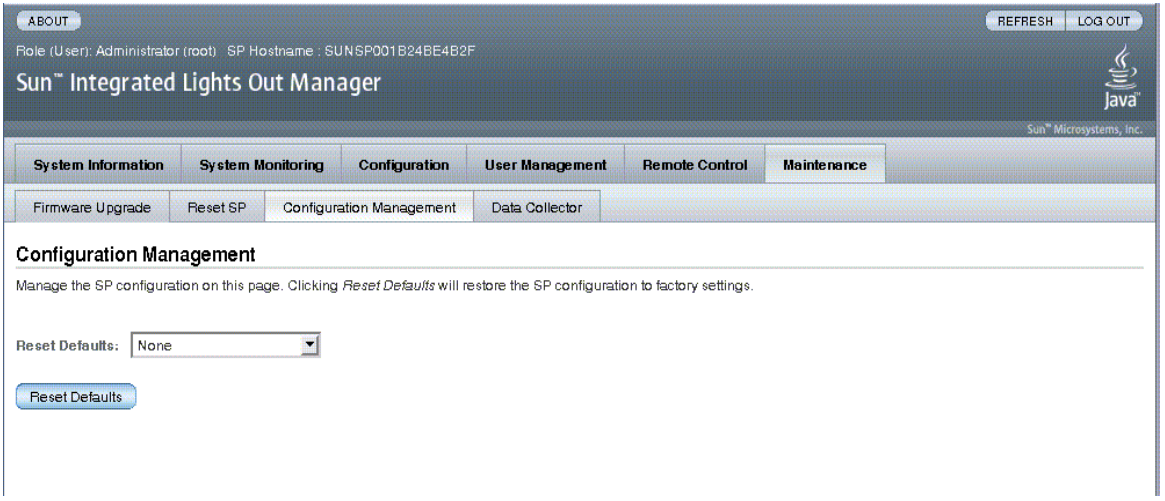
```
-> set /SP reset_to_defaults=all
```

where reset_to_defaults can be set to one of the following:

- none – Make no changes.
- configuration – Preserve the user database.
- all – Reset (clear) the user database.

2. Reset the service processor so that the new property value can take effect.

▼ To Reset the Service Processor Settings to Factory Defaults Using the Web Interface



1. **Log into the ILOM web interface as Administrator (`root`) to open the web interface.**
2. **Select Maintenance -> Configuration Management.**
3. **Select a Reset Defaults value (None, All, or Factory)**
4. **Click Reset Defaults.**

Managing SSH Server Settings

▼ To Change the Type of SSH Keys Using the CLI

Use the `set /SP/services/ssh generate_new_key_type` command to change the type of Secure Shell (SSH) host keys generated on your server. After changing the type, you must use the `set /SP/services/ssh generate_new_key_action` command to generate a new set of keys of the new type.

- **At the -> prompt, type the following command:**

```
-> set /SP/services/ssh generate_new_key_type=value
```

where *value* can be `rsa` or `dsa`.

▼ To Generate a New Set of SSH Keys Using the CLI

Use the `set /SP/services/ssh generate_new_key_action` command to generate a new set of Secure Shell (SSH) host keys.

- **At the -> prompt, type the following command:**

```
-> set /SP/services/ssh generate_new_key_action=true
```

▼ To Restart the SSH Server Using the CLI

Use the `set /SP/services/ssh restart_sshd_action` command to restart the SSH server after you have generated new host keys using the `set /SP/services/ssh generate_new_key_action` command. This command reloads the keys into the server's dedicated data structure in memory.

- **At the -> prompt, type the following command:**

```
-> set /SP/services/ssh restart_sshd_action=true
```

▼ To Enable or Disable the Remote Connection Using the CLI

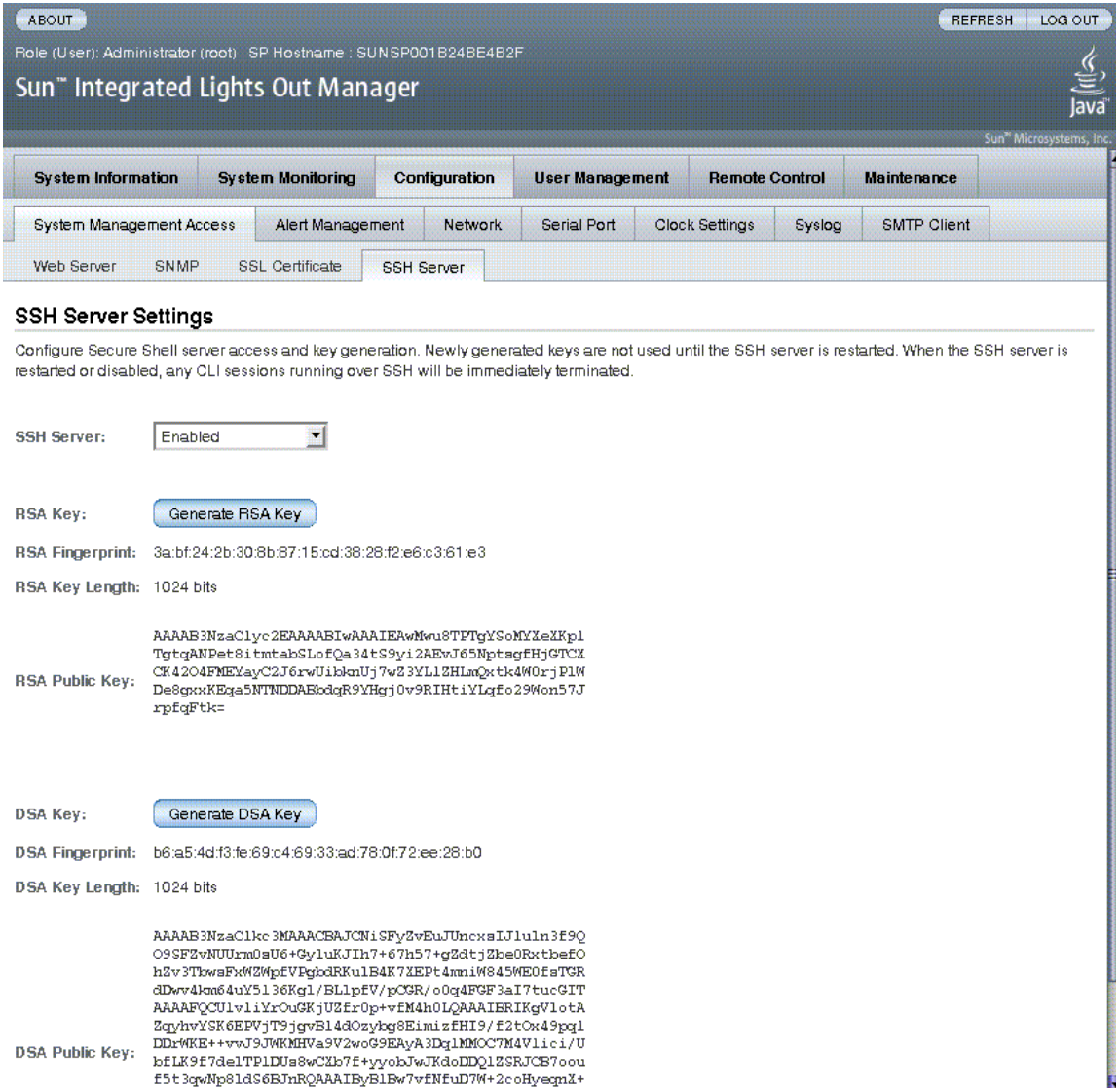
Use the `/SP/services/ssh state` property with the `set` command to specify or disable the remote connection.

- **At the -> prompt, type the following command:**

```
-> set /SP/services/ssh state=value
```

where *value* is `enabled` or `disabled`.

▼ To Manage SSH Server Settings Using the Web Interface



1. **Log into the ILOM web interface as Administrator (`root`) to open the web interface.**
2. **Select Configuration -> SSH Server Settings.**

3. **Select an action from the SSH Server pulldown menu.**

4. **Click Generate RSA Key or Click Generate DSA Key to generate a new key type and a new key.**

   If you have generated a new key, you must restart the SSH server for the new key to take effect.

Note – When the SSH server is restarted or disabled, any CLI sessions running over SSH will be terminated immediately.

Managing Alarms Indicators

The alarm indicators are managed using the ILOM CLI or web interface, or the `IPMItool` utility. Setting an alarm indicator to ON enables the corresponding alarm on the rear panel alarm port and the front panel alarm LED. Use the following procedures to set or reset an alarm.

▼ To Set an Alarm Indicator On or Off Using the CLI

Use the `/SYS/ALARM/ value` property with the `set` command to set an alarm on or off.

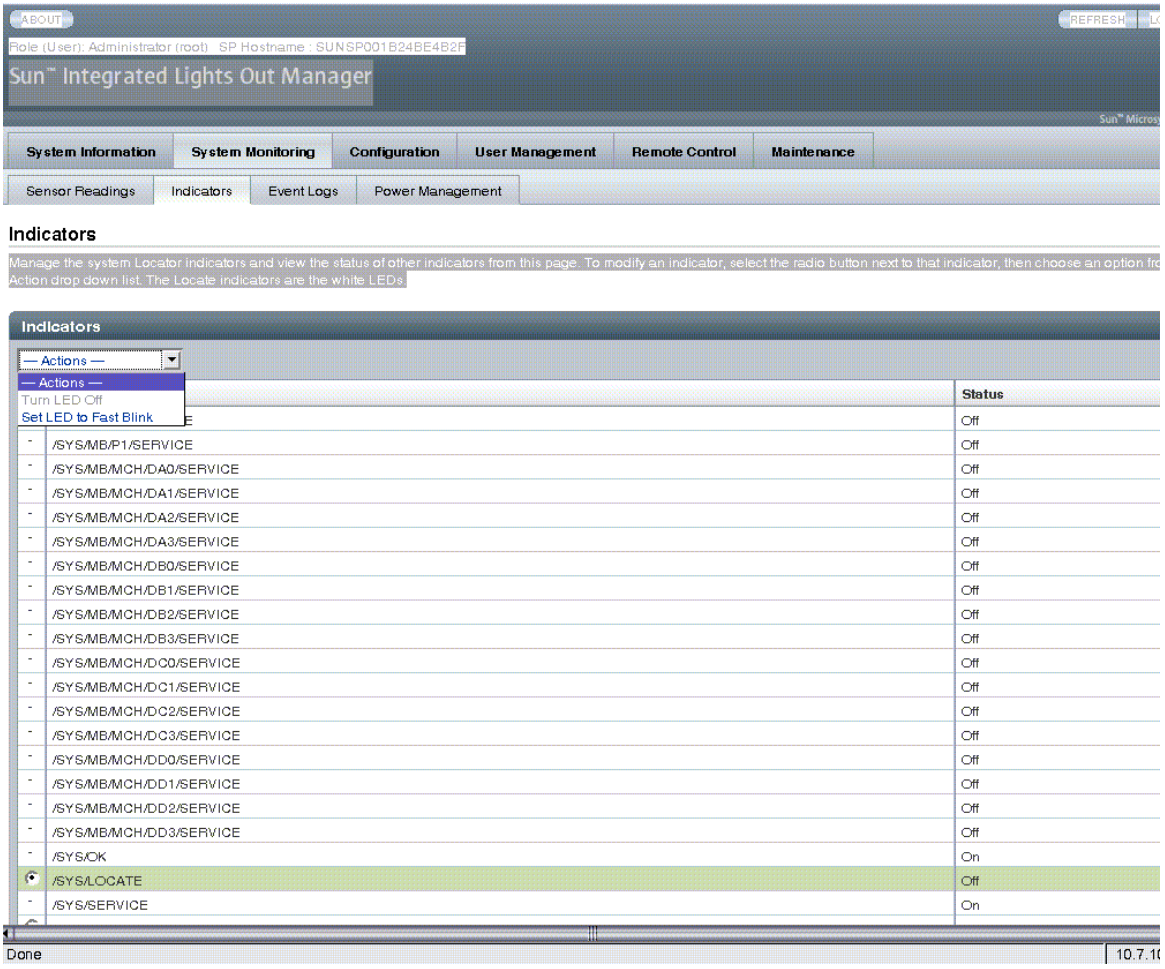
- ***At the `->` prompt, type one of the following command:**

```
-> set /SYS/ALARM/CRITICAL value=state
-> set /SYS/ALARM/MAJOR value=state
-> set /SYS/ALARm/MINOR value=state
-> set /SYS/ALARM/USER value=state
```

where *state* is `on` or `off`.

▼ To Reset an Alarm Indicator Using Web Interface

The ILOM web interface *only* allows you to turn off an alarm indicator that has been turned on.



1. **Log into the ILOM web interface as Administrator (`root`) to open the web interface.**
2. **Select System Monitoring -> Indicators.**
3. **Select the radio button next to that indicator, then choose an option from the Action drop down list.**

4. **Click Save.**

▼ To Manage Alarm Indicators Using `ipmitool`

▼ To Get Status for All Alarm Indicators

- **Type the following command:**

```
ipmitool -H ilom_ipaddr -U user -P passwd sunoem sbled get all
```

where *ilom_ipaddr* is the server's ILOM IP address, *user* is the user name, *passwd* is the password.

▼ To Get Status for a Single Alarm Indicator

- **Type the following command:**

```
ipmitool -H ilom_ipaddr -U user -P passwd sunoem sbled get alarm
```

where *ilom_ipaddr* is the server's ILOM IP address, *user* is the user name, *passwd* is the password, and *alarm* values are `CRITICAL_ALARM`, `MAJOR_ALARM`, `MINOR_ALARM`, or `USER_ALARM`.

▼ To Turn Off an Alarm Indicator

- **Type the following command:**

```
ipmitool -H ilom_ipaddr -U user -P passwd sunoem sbled set alarm off
```

where *ilom_ipaddr* is the server's ILOM IP address, *user* is the user name, *passwd* is the password, and *alarm* values are `CRITICAL_ALARM`, `MAJOR_ALARM`, `MINOR_ALARM`, or `USER_ALARM`.

▼ To Turn On an Alarm Indicator

- **Type the following command:**

```
ipmitool -H ilom_ipaddr -U user -P passwd sunoem sbled set alarm on
```

where *ilom_ipaddr* is the server's ILOM IP address, *user* is the user name, *passwd* is the password, and *alarm* values are `CRITICAL_ALARM`, `MAJOR_ALARM`, `MINOR_ALARM`, or `USER_ALARM`.

APPENDIX **A**

Sun Netra X4250 ILOM Reference Information

This appendix contains reference information about the Sun Netra X4250 server:

Sun Netra X4250 Sensors, Indicators, and Components

TABLE A-1 Sun Netra X4250 Sensors

Type	Name	Description	Unit of measure or Value
Entity Presence	/SYS/MB/P0/PRSNT	Motherboard (MB), CPU 0 (P0)	Present or Absent
	/SYS/MB/P1/PRSNT	Motherboard (MB), CPU 1 (P1)	Present or Absent
	/SYS/SASBP/PRSNT	Disk backplane, (SAS controller)	Present or Absent
	/SYS/PS0/PRSNT	Power supply 0 (PS0)	Present or Absent
	/SYS/PS1/PRSNT	Power supply 1 (PS1)	Present or Absent
	/SYS/HDD0/PRSNT	Disk drive (HDD0)	Present or Absent
	/SYS/HDD1/PRSNT	Disk drive (HDD1)	Present or Absent
	/SYS/HDD2/PRSNT	Disk drive (HDD2)	Present or Absent
	/SYS/HDD3/PRSNT	Disk drive (HDD3)	Present or Absent

TABLE A-1 Sun Netra X4250 Sensors *(Continued)*

Type	Name	Description	Unit of measure or Value
Current	/SYS/PS0/I_IN	Power supply (PS0) input current	Amps
	/SYS/PS0/I_OUT	Power supply (PS0) output current	Amps
	/SYS/PS1/I_IN	Power supply (PS1) input current	Amps
	/SYS/PS1/I_OUT	Power supply (PS1) output current	Amps
Fan	/SYS/FT0/F0/TACH	System fan (F0)	RPM
	/SYS/FT0/F1/TACH	System fan (F1)	RPM
	/SYS/FT0/F2/TACH	System fan (F2)	RPM
	/SYS/FT1/F0/TACH	Hard disk drive (HDD) fan (F0)	RPM
	/SYS/FT1/F1/TACH	Hard disk drive (HDD) fan (F2)	RPM
	/SYS/FT2/F0/TACH	Power distribution board (PDB) fan	RPM
	/SYS/PS0/F0/TACH	Power supply (PS0) fan (F0)	RPM
	/SYS/PS1/F0/TACH	Power supply (PS1) fan (F1)	RPM
Power Unit	/SYS/VPS	Source output power	Watts
	/SYS/PS0/INPUT_POWER	Power supply (PS0) input power	Watts
	/SYS/PS0/OUTPUT_POWER	Power supply (PS0) output power	Watts
	/SYS/PS1/INPUT_POWER	Power supply (PS1) input power	Watts
	/SYS/PS1/OUTPUT_POWER	Power supply (PS1) output power	Watts
Power Supply	SYS/PS0/VINOK	Power supply (PS0) voltage in OK	Deasserted or Asserted
	SYS/PS0/PWROK	Power supply (PS0) power OK	Deasserted or Asserted
	SYS/PS0/CUR_FAULT	Power supply (PS0) current fault	Deasserted or Asserted
	SYS/PS0/VOLT_FAULT	Power supply (PS0) voltage fault	Deasserted or Asserted
	SYS/PS0/FAN_FAULT	Power supply (PS0) fan fault	Deasserted or Asserted
	SYS/PS0/TEMP_FAULT	Power supply (PS0) temperature fault	Deasserted or Asserted
	SYS/PS1/VINOK	Power supply (PS1) voltage in OK	Deasserted or Asserted
	SYS/PS1/PWROK	Power supply (PS1) power OK	Deasserted or Asserted
	SYS/PS1/CUR_FAULT	Power supply (PS1) current fault	Deasserted or Asserted
	SYS/PS1/VOLT_FAULT	Power supply (PS1) voltage fault	Deasserted or Asserted
	SYS/PS1/FAN_FAULT	Power supply (PS1) fan fault	Deasserted or Asserted
	SYS/PS1/TEMP_FAULT	Power supply (PS1) temperature fault	Deasserted or Asserted

TABLE A-1 Sun Netra X4250 Sensors *(Continued)*

Type	Name	Description	Unit of measure or Value
Temperature	/SYS/MB/T_AMB0	Motherboard ambient temperature 0	Degrees C
	/SYS/MB/T_AMB1	Motherboard ambient temperature 1	Degrees C
	/SYS/MB/T_AMB2	Motherboard ambient temperature 2	Degrees C
	/SYS/MB/T_AMB3	Motherboard ambient temperature 3	Degrees C
	/SYS/PS0/T_AMB	Power supply (PS0) ambient temperature	Degrees C
	/SYS/PS1/T_AMB	Power supply (PS1) ambient temperature	Degrees C
Voltage	/SYS/ALARM/INPUT	Alarm input state	Deasserted or Asserted
	/SYS/MB/P0/V_VCC	CPU 0 (P0) voltage	Volts
	/SYS/MB/P1/V_VCC	CPU 1 (P1) voltage	Volts
	/SYS/MB/V_+12V	Motherboard +12V	Volts
	/SYS/MB/V_VTT	Motherboard VTT	Volts
	/SYS/MB/V_+1V5	Motherboard +1.5V	Volts
	/SYS/MB/V_+3V3	Motherboard +3.3V	Volts
	/SYS/MB/V_+5V	Motherboard +5V	Volts
	/SYS/MB/V_NIC	Motherboard NIC	Volts
	/SYS/MB/V_+3V3STBY	Motherboard +3.3V standby	Volts
	/SYS/MB/V_+2V5STBY	Motherboard +2.5V standby	Volts
	/SYS/MB/V_+1V8	Motherboard +1.8V	Volts
	/SYS/PDB/+5V0_POK	Power distribution board (PDB) +5V	Deasserted or Asserted
	/SYS/PS0/V_IN	Power supply (PS0) input voltage	Volts
	/SYS/PS0/V_OUT	Power supply (PS0) output voltage	Volts
	/SYS/PS1/V_IN	Power supply (PS1) input voltage	Volts
	/SYS/PS1/V_OUT	Power supply (PS1) output voltage	Volts

TABLE A-2 Sun Netra X4250 Indicators

Type	Name
System	/SYS/LOCATE
	/SYS/OK
	/SYS/SERVICE

TABLE A-2 Sun Netra X4250 Indicators *(Continued)*

Type	Name
Alarm	/SYS/ALARM/CRITICAL
	/SYS/ALARM/MAJOR
	/SYS/ALARM/MINOR
	/SYS/ALARM/USER
Disk drive	/SYS/HDD0/SERVICE
	/SYS/HDD1/SERVICE
	/SYS/HDD2/SERVICE
	/SYS/HDD3/SERVICE
	/SYS/HDD0/OK2RM
	/SYS/HDD1/OK2RM
	/SYS/HDD2/OK2RM
	/SYS/HDD3/OK2RM
CPU	/SYS/MB/P0/SERVICE
	/SYS/MB/P1/SERVICE
DIMM	/SYS/MB/MCH/DA0/SERVICE
	/SYS/MB/MCH/DA1/SERVICE
	/SYS/MB/MCH/DA2/SERVICE
	/SYS/MB/MCH/DA3/SERVICE
	/SYS/MB/MCH/DB0/SERVICE
	/SYS/MB/MCH/DB1/SERVICE
	/SYS/MB/MCH/DB2/SERVICE
	/SYS/MB/MCH/DB3/SERVICE
	/SYS/MB/MCH/DC0/SERVICE
	/SYS/MB/MCH/DC1/SERVICE
	/SYS/MB/MCH/DC2/SERVICE
	/SYS/MB/MCH/DC3/SERVICE
	/SYS/MB/MCH/DD0/SERVICE
	/SYS/MB/MCH/DD1/SERVICE
	/SYS/MB/MCH/DD2/SERVICE
	/SYS/MB/MCH/DD3/SERVICE

TABLE A-3 Sun Netra X4250 Components

Name	Description
/SYS	Host system
/SYS/ALARM	Indicator module
/SYS/MB	Motherboard
/SYS/MB/BIOS	BIOS
/SYS/MB/CPLD	NVRAM
/SYS/MB/MCH/DA0	DIMM (DA0)
/SYS/MB/MCH/DA1	DIMM (DA1)
/SYS/MB/MCH/DA2	DIMM (DA2)
/SYS/MB/MCH/DA3	DIMM (DA3)
/SYS/MB/MCH/DB0	DIMM (DB0)
/SYS/MB/MCH/DB1	DIMM (DB1)
/SYS/MB/MCH/DB2	DIMM (DB2)
/SYS/MB/MCH/DB3	DIMM (DB3)
/SYS/MB/MCH/DC0	DIMM (DC0)
/SYS/MB/MCH/DC1	DIMM (DC1)
/SYS/MB/MCH/DC2	DIMM (DC2)
/SYS/MB/MCH/DC3	DIMM (DC3)
/SYS/MB/MCH/DD0	DIMM (DD0)
/SYS/MB/MCH/DD1	DIMM (DD1)
/SYS/MB/MCH/DD2	DIMM (DD2)
/SYS/MB/MCH/DD3	DIMM (DD3)
/SYS/MB/NET0	Network interface
/SYS/MB/NET1	Network interface
/SYS/MB/NET2	Network interface
/SYS/MB/NET3	Network interface
/SYS/PCI_MEZZ	PCI tray
/SYS/PDB	Power distribution board (PDB)
/SYS/PS0	Power supply (PS0)
/SYS/PS1	Power supply (PS1)

TABLE A-3 Sun Netra X4250 Components *(Continued)*

Name	Description
/SYS/SASBP	Disk backplane/SAS card
/SYS/SP	Service processor
/SYS/SP/NET0	Network interface (BMC Controller)

Oracle's Sun Netra X4250 SNMP Traps From SUN-HW-TRAP-MIB

TABLE A-4 Traps for All Hot Pluggable Components

Trap
sunHwTrapFruInserted
sunHwTrapFruRemoved

TABLE A-5 Traps for BIOS Reported Errors

Trap
sunHwTrapPreOSError

TABLE A-6 Traps Corresponding to Sensors and Components in the SDR

Traps	Sensor or Components
sunHwTrapComponentError	/SYS/ALARM/INPUT /SYS/NMIBTN-HIDDEN /SYS/PDB/+5V0_POK ACPI
sunHwTrapComponentOk	/SYS/ALARM/INPUT /SYS/PDB/+5V0_POK
sunHwTrapFanSpeedCritThresholdDeasserted	/SYS/PS0/F0/TACH /SYS/PS1/F0/TACH

TABLE A-6 Traps Corresponding to Sensors and Components in the SDR *(Continued)*

Traps	Sensor or Components
sunHwTrapFanSpeedCritThresholdExceeded	/SYS/PS0/F0/TACH
	/SYS/PS1/F0/TACH
sunHwTrapFanSpeedFatalThresholdDeasserted	/SYS/FT0/F0/TACH
	/SYS/FT0/F1/TACH
	/SYS/FT0/F2/TACH
	/SYS/FT1/F0/TACH
	/SYS/FT1/F1/TACH
	/SYS/FT2/F0/TACH
	/SYS/PS0/F0/TACH
	/SYS/PS1/F0/TACH
sunHwTrapFanSpeedFatalThresholdExceeded	/SYS/FT0/F0/TACH
	/SYS/FT0/F1/TACH
	/SYS/FT0/F2/TACH
	/SYS/FT1/F0/TACH
	/SYS/FT1/F1/TACH
	/SYS/FT2/F0/TACH
	/SYS/PS0/F0/TACH
	/SYS/PS1/F0/TACH
sunHwTrapPowerSupplyError	/SYS/PS0/CUR_FAULT
	/SYS/PS0/FAN_FAULT
	/SYS/PS0/PWROK
	/SYS/PS0/TEMP_FAULT
	/SYS/PS0/VINOK
	/SYS/PS0/VOLT_FAULT
	/SYS/PS1/CUR_FAULT
	/SYS/PS1/FAN_FAULT
	/SYS/PS1/PWROK
	/SYS/PS1/TEMP_FAULT
	/SYS/PS1/VINOK
	/SYS/PS1/VOLT_FAULT

TABLE A-6 Traps Corresponding to Sensors and Components in the SDR *(Continued)*

Traps	Sensor or Components
sunHwTrapPowerSupplyOk	/SYS/PS0/CUR_FAULT /SYS/PS0/FAN_FAULT /SYS/PS0/PWROK /SYS/PS0/TEMP_FAULT /SYS/PS0/VINOK /SYS/PS0/VOLT_FAULT /SYS/PS1/CUR_FAULT /SYS/PS1/FAN_FAULT /SYS/PS1/PWROK /SYS/PS1/TEMP_FAULT /SYS/PS1/VINOK /SYS/PS1/VOLT_FAULT
sunHwTrapSensorCritThresholdDeasserted	/SYS/VPS
sunHwTrapSensorCritThresholdExceeded	/SYS/VPS
sunHwTrapSensorFatalThresholdDeasserted	/SYS/VPS
sunHwTrapSensorFatalThresholdExceeded	/SYS/VPS
sunHwTrapSensorNonCritThresholdExceeded	/SYS/VPS
sunHwTrapSensorThresholdOk	/SYS/VPS
sunHwTrapTempCritThresholdDeasserted	/SYS/MB/T_AMB0 /SYS/MB/T_AMB1 /SYS/MB/T_AMB2 /SYS/MB/T_AMB3
sunHwTrapTempCritThresholdExceeded	/SYS/MB/T_AMB0 /SYS/MB/T_AMB1 /SYS/MB/T_AMB2 /SYS/MB/T_AMB3
sunHwTrapTempNonCritThresholdExceeded	/SYS/MB/T_AMB0 /SYS/MB/T_AMB1 /SYS/MB/T_AMB2 /SYS/MB/T_AMB3
sunHwTrapTempOk	/SYS/MB/T_AMB0 /SYS/MB/T_AMB1 /SYS/MB/T_AMB2 /SYS/MB/T_AMB3

TABLE A-6 Traps Corresponding to Sensors and Components in the SDR *(Continued)*

Traps	Sensor or Components
sunHwTrapVoltageCritThresholdDeasserted	/SYS/MB/V_+12V
	/SYS/MB/V_+1V5
	/SYS/MB/V_+1V8
	/SYS/MB/V_+2V5STBY
	//SYS/MB/V_+3V3
	/SYS/MB/V_+3V3STBY
	/SYS/MB/V_+5V
	/SYS/MB/V_NIC
	/SYS/MB/V_VTT
	/SYS/PS0/V_OUT
	/SYS/PS1/V_OUT
sunHwTrapVoltageCritThresholdExceeded	/SYS/MB/V_+12V
	/SYS/MB/V_+1V5
	/SYS/MB/V_+1V8
	/SYS/MB/V_+2V5STBY
	/SYS/MB/V_+3V3
	/SYS/MB/V_+3V3STBY
	/SYS/MB/V_+5V
	/SYS/MB/V_NIC
	/SYS/MB/V_VTT
	/SYS/PS0/V_OUT
	/SYS/PS1/V_OUT
sunHwTrapVoltageFatalThresholdDeasserted	/SYS/MB/V_+12V
	/SYS/MB/V_+1V5
	/SYS/MB/V_+1V8
	/SYS/MB/V_+2V5STBY
	//SYS/MB/V_+3V3
	/SYS/MB/V_+3V3STBY
	/SYS/MB/V_+5V
	/SYS/MB/V_NIC
	/SYS/MB/V_VTT
	/SYS/PS0/V_OUT
	/SYS/PS1/V_OUT

TABLE A-6 Traps Corresponding to Sensors and Components in the SDR *(Continued)*

Traps	Sensor or Components
sunHwTrapVoltageFatalThresholdExceeded	/SYS/MB/V_+12V
	/SYS/MB/V_+1V5
	/SYS/MB/V_+1V8
	/SYS/MB/V_+2V5STBY
	//SYS/MB/V_+3V3
	/SYS/MB/V_+3V3STBY
	/SYS/MB/V_+5V
	/SYS/MB/V_NIC
	/SYS/MB/V_VTT
	/SYS/PS0/V_OUT
	/SYS/PS1/V_OUT
sunHwTrapVoltageNonCritThresholdExceeded	/SYS/PS0/V_OUT
	/SYS/PS1/V_OUT
sunHwTrapVoltageOk	/SYS/PS0/V_OUT
	/SYS/PS1/V_OUT