Fujitsu SPARC M12 and Fujitsu M10/SPARC M10

XSCF Reference Manual
for XCP Version 305x/235x

FUJITSU

ORACLE

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Contents

Preface

This manual describes the man pages for the XSCF firmware for SPARC M12/M10 Systems from Oracle and Fujitsu.

The XCP firmware which is described in this document might no longer be the latest available version, or the version now installed on your particular server. For the current firmware release, always refer to the Product Notes for the firmware installed and the one for the latest firmware release.

Fujitsu SPARC M12 is sold as SPARC M12 by Fujitsu in Japan.
Fujitsu SPARC M12 and SPARC M12 are identical products.

Fujitsu M10 is sold as SPARC M10 by Fujitsu in Japan.
Fujitsu M10 and SPARC M10 are identical products.

Audience

This document is written for experienced system administrators with working knowledge of computer networks and advanced knowledge of the Oracle Solaris.

Related Documentation

All documents for your server are available online at the following locations.

- Sun Oracle software-related manuals (Oracle Solaris, etc.)

  http://docs.oracle.com/en/

- Fujitsu documents

  Global site:

  http://www.fujitsu.com/global/products/computing/servers/unix/sparc/downloads/manuals/

  Japanese site:

  http://www.fujitsu.com/jp/products/computing/servers/unix/sparc/downloads/manual/

For a system using the SPARC M12, see the manuals listed in "Documentation Related to the SPARC M12."

For a system using the SPARC M10, see the manuals listed in "Documentation Related to the SPARC M10."

Documentation Related to the SPARC M12 (*1)
Fujitsu SPARC M12 Product Notes
Fujitsu SPARC M12 Quick Guide
Fujitsu SPARC M12 Getting Started Guide (*2)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Important Legal and Safety Information (*2)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Safety and Compliance Guide
Software License Conditions for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Security Guide
Fujitsu SPARC Servers/SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual
Fujitsu SPARC M12-1 Installation Guide
Fujitsu SPARC M12-2 Installation Guide
Fujitsu SPARC M12-2S Installation Guide
Fujitsu SPARC M12 PCI Card Installation Guide

Documentation Related to the SPARC M12 (*1)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 RCIL User Guide (*3)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF MIB and Trap Lists
Fujitsu SPARC M12-1 Service Manual
Fujitsu SPARC M12-2/SPARC M12-2S Service Manual
Crossbar Box for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual
PCI Expansion Unit for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Glossary
External USB-DVD Drive user guide

*1 The listed manuals are subject to change without notice.
*2 Printed manuals are provided with the product.
*3 This document applies specifically to the SPARC M12/M10 and FUJITSU ETERNUS disk storage system.

Documentation Related to the SPARC M10 (*1)
Fujitsu M10/SPARC M10 Systems Product Notes
Fujitsu M10/SPARC M10 Systems Quick Guide
Fujitsu M10/SPARC M10 Systems Getting Started Guide (*2)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Important Legal and Safety Information (*2)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Safety and Compliance Guide
Software License Conditions for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Security Guide
Fujitsu SPARC Servers/SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual
Fujitsu M10-1/SPARC M10-1 Installation Guide
Fujitsu M10-4/SPARC M10-4 Installation Guide
Fujitsu M10-4S/SPARC M10-4S Installation Guide
Fujitsu M10/SPARC M10 Systems PCI Card Installation Guide

Documentation Related to the SPARC M10 (*1)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 RCIL User Guide (*3)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF MIB and Trap Lists
Fujitsu M10-1/SPARC M10-1 Service Manual
Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual
Crossbar Box for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual
PCI Expansion Unit for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual
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Notes on Safety

Read the following documents thoroughly before using or handling SPARC M12/M10.

- *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Important Legal and Safety Information*
- *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Safety and Compliance Guide*

Text Conventions

This manual uses the following fonts and symbols to express specific types of information.

Font/Symbol	Meaning	Example
AaBbCc123	What you type, when contrasted with on-screen computer output. This font is used to indicate an example of command input.	XSCF> **adduser jsmith**
AaBbCc123	The names of commands, files, and directories; on-screen computer output. This font is used to indicate an example of command output.	XSCF> **showuser -P** User Name: jsmith Privileges: useradm auditadm
Italic	Indicates the name of a reference manual, a variable, or userreplaceable text.	See the *Fujitsu M10-1/SPARC M10-1 Installation Guide*.
" "	Indicates the names of chapters, sections, items, buttons, or menus.	See "Chapter 2 Network Connection."

Command syntax in the text

While the XSCF commands have the section number of (8) or (1), it is omitted from the text. Each command has the section number in a command name when prompting users to refer to it.

Syntax of the Command-Line Interface (CLI)

The command syntax is as follows:

- A variable that requires the input of a value must be put in Italics.
- An optional element must be enclosed in [ ].
- A group of options for an optional keyword must be enclosed in [ ] and delimited by |.

Notation of This Manual

Here describes the notation used in this manual.

`Intro`(1) provides the XSCF shell commands and the brief description of them in the alphabetical order.

Each XSCF shell command is described in the order of sections below. When there's no relevant description provided, the section itself is omitted.

Section	Description
NAME	This section gives the names of the XSCF shell commands, followed by a brief description of what they do.

Section	Description
SYNOPSIS	This section gives the syntax of commands. The use of font style complies with the following rule. `bold` Enters the command name or the constants as displayed. *Italic* Substitutes the variables and so forth with the appropriate values when the command executed. The use of symbols such as parenthesis complies with the following rule. [ ] Brackets. The OPTIONS or OPERANDS enclosed in these brackets can be omitted. Those not enclosed can't be omitted. { } Braces. The OPTIONS or OPERANDS enclosed in these braces are treated as a unit. | Separator. You should specify one of the OPTIONS or OPERANDS delimited with this symbol "|". ... Ellipsis. You can specify multiple OPTIONS or OPERANDS just before.
DESCRIPTION	This section gives the detailed description such as the command function. It describes the behavior after the command executed and the content to be displayed. It doesn't describe how to specify the OPTIONS or OPERANDS.
Privileges	This section gives the privileges required for command execution. In case that what can be executed varies by the user privileges, it is described here.
OPTIONS	This section gives the meaning of and how to specify the OPTIONS. In case the OPERANDS required for the OPTIONS, it is described here. To specify multiple 1-character OPTIONS, you may specify the first OPTION followed by the alphabetic part of the second. e.g. `fmadm -a -i` `fmadm -ai`
OPERANDS	This section gives the meaning of and how to specify the OPERANDS. The OPERANDS which follows the OPTIONS are described in "OPTIONS."

Section	Description
EXTENDED DESCRIPTION	This section gives the description in case the supplementary explanation required in addition to the content written in "DESCRIPTION." Also used to divide the description prolonged in "DESCRIPTION."
EXAMPLES	This section gives the examples of command execution. The explanation of examples, the execution command, and the messages returned from the system as a result of execution.
EXIT STATUS	This section gives the status which shows whether or not the command executed normally terminated. "0" for normal termination, and ">0" for abnormal termination.
SEE ALSO	This section gives the related command names.

Documentation Feedback

If you have any comments or requests regarding this document, please take a moment to share it with us by indicating the manual code, manual title, and page, and stating your points specifically through the following websites:

- Global site:

  http://www.fujitsu.com/global/contact/

- Japanese site:

  http://www.fujitsu.com/jp/products/computing/servers/unix/sparc/contact/

Reference

List of XSCF Commands

NAME

Intro - Displays the list of commands provided by the XSCF firmware.

DESCRIPTION

The `Intro` page lists the user commands (`exit`(1), `man`(1), and `who`(1)) and the system management commands (all commands starting with `addboard`(8)), which are provided by the XSCF firmware of the SPARC M12/M10 systems. The XSCF commands include the commands with the same names as ones of Oracle Solaris. However, their usages are not the same. For details, see the man page of each command.

XSCF supports the following commands.

`exit`	Ends the XSCF shell.
`man`	Displays the manual page of the XSCF shell command.
`who`	Displays list of user accounts logged in to XSCF.
`addboard`	Incorporates or assigns a physical system board (PSB) to a physical partition (PPAR).
`addcodactivation`	Adds the CPU Activation key to the system.
`addfru`	Adds the Field Replaceable Unit (FRU) and a chassis.
`addpowerschedule`	Adds a schedule for powering on/off the automatic power control system (APCS).
`adduser`	Creates an XSCF user account.
`addvbootcerts`	Adds X.509 public key certificates used for performing Verified Boot of Oracle Solaris.
`applynetwork`	Applies the contents of the XSCF network to the XSCF.
`clearremotepwrmgmt`	Deletes the management information of the remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems.
`console`	Connects to the control domain console.
`deleteboard`	Releases the physical system board (PSB) from the physical partition (PPAR) configuration.
`deletecodactivation`	Deletes the CPU Activation key from the system.
`deletepowerschedule`	Deletes a schedule for powering on/off the automatic power control system (APCS).
`deleteuser`	Deletes an XSCF user account.

deletevbootcerts	Deletes X.509 public key certificates used for performing Verified Boot of Oracle Solaris.
diagxbu	Diagnoses crossbar cable and crossbar unit (XBU).
disableuser	Disables an XSCF user account.
dumpcodactivation	Saves the CPU Activation key in a file.
dumpconfig	Saves the XSCF configuration information in a file.
enableuser	Enables an XSCF user account.
flashupdate	Updates the firmware.
getflashimage	Downloads a firmware image file.
getremotepwrmgmt	Obtains the setup file of the remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems.
initbb	Detach the SPARC M12-2S/M10-4S and the crossbar box from the system and initialize it to the factory default.
ioxadm	Manages the cards connected to the PCI Expansion Unit, link card, and host server.
nslookup	Refers to the Internet name server for the host name.
password	Sets the password of the XSCF user account and the effective period.
ping	Sends the ECHO_REQUEST packet of ICMP to the host on the network.
poweroff	Shuts down the physical partition (PPAR).
poweron	Starts the physical partition (PPAR).
prtfru	Displays the FRUID data on the system and the PCI Expansion Unit.
rastest	Causes a fault virtually.
rebootxscf	Reboots XSCF.
replacefru	Replaces the Field Replaceable Unit (FRU) and chassis.
reset	Resets the specified physical partition (PPAR) or a logical domain (guest domain).
resetdateoffset	Resets the difference between the system time and the time of each physical partition (PPAR).

`restorecodactivation`	Restores the CPU Activation key.
`restoreconfig`	Restores the XSCF configuration information.
`restoredefaults`	Restores settings of the XSCF unit and its back-up information to the factory default.
`sendbreak`	Sends a break signal to the control domain of the specified physical partition (PPAR).
`setad`	Configure Active Directory.
`setaltitude`	Sets the altitude of the system.
`setaudit`	Manages the audit function of the system.
`setautologout`	Sets the session timeout time of XSCF shell.
`setcod`	Sets up the CPU core resources to be used in physical partitions (PPAR).
`setdate`	Sets the date and time of the XSCF clock.
`setdomainconfig`	Specifies the logical domain configuration when the physical partition (PPAR) is started.
`setdualpowerfeed`	Sets the dual power feed mode.
`setemailreport`	Sets the e-mail report function.
`sethostname`	Sets the host names and DNS domain names of the master chassis and chassis whose XSCF is standby.
`sethsmode`	Enables/Disables the high speed mode of the CPU.
`sethttps`	Sets the start and halt of the HTTPS service used in the XSCF network. Also it performs authentication-related settings.
`setinterimpermit`	Enables/Disables CPU Activation Interim Permit.
`setldap`	Configure the Service Processor as a Lightweight Directory Access Protocol (LDAP) client.
`setldapssl`	Configure LDAP over SSL.
`setlocator`	Sets the blinking status of the CHECK LED of the operation panel.
`setloginlockout`	Enables or disables the lockout function when logging in.
`setlookup`	Enable or disable the use of the Lightweight Directory Access Protocol (LDAP) server for authentication and privilege lookup.

setnameserver	Sets or deletes the name server and search path used in XSCF network.
setnetwork	Sets or deletes the network interface to be used in XSCF.
setntp	Sets the time synchronization for XSCF.
setpacketfilters	Sets the IP packet filtering rules used in the XSCF network.
setpasswordpolicy	Manages the password policy of the system.
setpcl	Sets the physical partition (PPAR) configuration information (PCL).
setpciboxdio	Configures each PCI slot setting of whether to enable the direct I/O function for a PCI card mounted in the PCI expansion unit for the SPARC M12-2/M12-2S/M10-4/M10-4S.
setpowercapping	Sets caps for power consumption.
setpowerschedule	Sets the schedule operation information.
setpowerupdelay	Sets the warm-up operation time of the system and the wait time before start.
setpparmode	Sets the operation mode of the physical partition (PPAR).
setpparparam	Execute forced rewriting of OpenBoot PROM environment variables and registration or deletion of boot scripts of the control domain.
setprivileges	Assigns the user privileges.
setremotepwrmgmt	Sets up the remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems.
setremotestorage	Manages connection to remote storage.
setroute	Sets the routing information of the XSCF network interface.
setservicetag	Enables or disables the servicetag agents.
setsmtp	Sets the Simple Mail Transfer Protocol (SMTP) service.
setsnmp	Manages the SNMP agent.
setsnmpusm	Sets the User-based Security Model (USM) of the SNMPv3 agent.

setsnmpvacm	Sets the View-based Access Control Model (VACM) settings of the SNMPv3 agent.
setsscp	Assigns the IP address of the SP to SP communication protocol (SSCP).
setssh	Sets Secure Shell (SSH) service used in the XSCF network.
settelnet	Starts or halts Tenet service used in the XSCF network.
settimezone	Sets the time zone and daylight saving time of XSCF.
setupfru	Sets the hardware of devices.
setvbootconfig	Configures the Verified Boot policy of Oracle Solaris and enables/disables X.509 public key certificates used for performing Verified Boot.
showad	Show Active Directory configuration and messages.
showaltitude	Displays the altitude of the system.
showaudit	Displays the current status of the audit system.
showautologout	Displays the session timeout time of the XSCF shell.
showbbstatus	Display the status of the SPARC M12/M10 systems chassis.
showboards	Displays the information of the physical system board (PSB).
showcod	Displays the registered and setup information of CPU Activations.
showcodactivation	Displays the current CPU Activation key information added to the system.
showcodactivationhistory	Displays the logs to add and delete the CPU Activation keys (Capacity on Demand (CoD) logs).
showcodusage	Display the usage information of CPU core resources.
showconsolepath	Displays the information of the domain console that is currently connected to the physical partition (PPAR).
showdate	Displays the date and time of the XSCF clock.

showdateinfo	Displays the dates and times of the XSCF and logical domains.
showdateoffset	Displays the difference between the system time and the time of each physical partition (PPAR).
showdomainconfig	Displays the configuration information of the logical domain of the specified physical partition (PPAR).
showdomainstatus	Displays the status of the current logical domain.
showdualpowerfeed	Displays the status of dual power feed mode.
showemailreport	Displays the settings data of the e-mail report.
showenvironment	Displays the intake-air temperature, temperature sensor information, voltage sensor information, and fan rotation information of the system.
showfru	Displays the contents of settings regarding the hardware devices.
showhardconf	Displays the information of the Field Replaceable Unit (FRU) mounted on the server.
showhostname	Displays the host names set in the master chassis and chassis whose XSCFs are standby.
showhsmode	Displays the setting of the high speed mode of the CPU.
showhttps	Displays the status of the HTTPS service set in the XSCF network.
showinterimpermit	Displays the status and information about CPU Activation Interim Permit.
showinterimpermitusage	Displays information about CPU Activations and CPU core resources.
showldap	Display the Lightweight Directory Access Protocol (LDAP) configuration for the Service Processor.
showldapssl	Show LDAP over SSL configuration and messages.
showlocator	Displays the status of the CHECK LED on the operation panel.
showloginlockout	Displays the time set in the lockout function of the user account.
showlogs	Displays the specified log.

showlookup	Display the configuration for authentication and privileges lookup.
showmonitorlog	Displays the contents of the monitoring message log in real time.
shownameserver	Displays the name server and the search path set in the XSCF network.
shownetwork	Displays the information of the network interface set in the XSCF.
shownotice	Displays copyright and license information for the XSCF Control Package (XCP).
showntp	Displays the NTP information set in the XSCF network.
showpacketfilters	Displays the IP packet filtering rule set in the XSCF network.
showpasswordpolicy	Displays the current password policy setting.
showpciboxdio	Displays each PCI slot setting of whether to enable the direct I/O function for a PCI card mounted in the PCI expansion unit for the SPARC M12-2/M12-2S/M10-4/M10-4S.
showpcl	Displays the physical partition (PPAR) configuration information (PCL) that is currently set.
showpowercapping	Displays the status of power capping.
showpowerschedule	Displays the schedule operation information.
showpowerupdelay	Displays the warm-up time and wait time for air conditioning of the system that is currently set.
showpparinfo	Display the resource information of the physical partition (PPAR).
showpparmode	Displays the operation mode of the physical partition (PPAR) that is currently set.
showpparparam	Displays the OpenBoot PROM environmental variable and the boot script of the control domain which will be set at the subsequent startup of the specified physical partition (PPAR).
showpparprogress	Shows the detailed status of the physical partition (PPAR) in the middle of power control sequence.

showpparstatus	Displays the status of the current physical partition (PPAR).
showremotepwrmgmt	Displays the setup of remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems and the power status of the node.
showremotestorage	Displays information on remote storage.
showresult	Displays the end status of the previously executed command.
showroute	Displays the routing information set in the XSCF network interface.
showservicetag	Displays whether the servicetag agents are currently enabled or disabled.
showsmtp	Displays the settings information of the Simple Mail Transfer Protocol (SMTP).
showsnmp	Displays the settings information and the current status of the SNMP agent.
showsnmpusm	Displays the current User-based Security Model (USM) information regarding the SNMP agent.
showsnmpvacm	Displays the current View-based Control Access (VACM) information regarding the SNMP agent.
showsscp	Displays the IP address assigned to the SP to SP communication protocol (SSCP).
showssh	Displays the contents of the Secure Shell (SSH) service set in the XSCF network.
showstatus	Displays the degraded Field Replaceable Unit (FRU).
showtelnet	Displays the status of the Telnet service set in the XSCF network.
showtimezone	Displays the currently set time zone of the XSCF and the daylight saving time information.
showuser	Displays the XSCF user account information.
showvbootcerts	Displays the information of X.509 public key certificates setup at each physical partition (PPAR), that are used for performing Verified Boot of Oracle Solaris.

showvbootconfig	Displays the Verified Boot policy of Oracle Solaris and the enable/disable configuration of the X.509 public key certificates that are used for performing Verified Boot.
snapshot	Collects and transfers the data regarding environment, logs, errors, and Field Replaceable Unit Identifier (FRUID).
switchscf	Switches the status of XSCF in between master and standby.
testsb	Performs an initial diagnosis on the specified physical system board (PSB).
traceroute	Displays the network route to the specified host.
unlockmaintenance	Release multi-activated lock created by addfru(8) and replacefru(8).
version	Displays the version number of the firmware.
viewaudit	Displays the audit record.
xscfstartupmode	Set up the startup mode of SPARC M12-1/M10-1.

Reference

User Commands

NAME

exit - Ends the XSCF shell.

SYNOPSIS

exit

DESCRIPTION

`exit` is a command to end and close the XSCF shell.

Privileges

No privileges are required to execute this command.

For details on user privileges, see `setprivileges`(8).

NAME

man - Displays the manual page of the XSCF shell command.

SYNOPSIS

man *command_name ...*

man -h

DESCRIPTION

man is a command to display the manual page of the specified XSCF shell command.

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

command_name	Specify the command to display the manual page. You can make multiple specifications by separating them with spaces. With "Intro" specified in *command_name*, the list of the XSCF shell commands is displayed.

EXTENDED DESCRIPTION

If the manual page is long, it is divided by each screen for display. In this case, you can make an operation like the following using keys.

Key	Description
[Enter]	Displays the next one line.
Space	Displays the next one page.
[b]	Returns by half-page.
[q]	Interrupts the display of the manual page.

To display a man page, set TERM=vt100 for the terminal software.

EXAMPLES

EXAMPLE 1 Display the manual page of addboard(8).

```
XSCF> man addboard
```

EXAMPLE 2 Display the list of the XSCF shell commands.

```
XSCF> man Intro
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

who - Displays list of user accounts logged in to XSCF.

SYNOPSIS

who

who -h

DESCRIPTION

who is a command to display list of user accounts logged in to XSCF.

The following information is displayed.

- XSCF user account name
- Terminal in use
- Idle time
- Login time
- Remote host name

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the list of user accounts logged in to XSCF.

```
XSCF> who
USER       TTY      IDLE      TIME            HOST
Sxf        pts/0    00:00     Jul 17 05:29:11 jjjj.gggg.fujitsu.com
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

Reference

System Administration Commands

NAME

addboard - Incorporates or assigns a physical system board (PSB) into a physical partition (PPAR).

SYNOPSIS

addboard [[-q] -{y|n}] [-f] [-v] [-c configure] [[-m *function=mode*]...] -p *ppar_id psb* [*psb*...]

addboard [[-q] -{y|n}] [-f] -c assign -p *ppar_id psb* [*psb*...]

addboard [[-q] -{y|n}] [-f] -c reserve -p *ppar_id psb* [*psb*...]

addboard -h

DESCRIPTION

addboard is a command to incorporate or to assign a physical system board (PSB) into a physical partition (PPAR) according to the PPAR configuration information (PCL).

A physical system board (PSB) means one building block (BB).

The addboard command is not available on SPARC M12-1/M12-2/M10-1/M10-4.

You can specify any of the following incorporation methods.

configure	Incorporates a PSB into the specified PPAR. The incorporated PSB can be assigned to a logical domain. If the PPAR is powered off, or if the Oracle Solaris of the control domain is not running, the PSB is not incorporated, and it causes an error.
assign	Assigns a PSB to the specified PPAR. The assigned PSB is reserved for the specified PPAR, so the PSB cannot be incorporated in or assigned to any other PPAR. After assigning the PSB, the PSB is incorporated into the PPAR when the system is restarted or addboard with -c configure is executed.
reserve	Reserves incorporation of a PSB into the specified PPAR. The operation is the same as when -c assign is executed.

Privileges

To execute this command, either of the following privileges is required.

platadm	Enables execution for all PPARs.
pparadm	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS The following options are supported.

`-c assign` Assigns a PSB to PPAR configuration. If you omit the `-c` option, `-c configure` is assumed specified.

`-c configure` Incorporates a PSB in PPAR configuration. If you omit the `-c` option, `-c configure` is assumed specified.

`-c reserve` Reserves incorporation of a PSB into the specified PPAR. The operation is the same as when `-c assign` is executed.

`-f` Incorporates a PSB in PPAR forcibly.

Caution – If a PSB is forcibly added to PPAR by specifying the `-f` option, all the added hardware resources may not run normally. For this reason, we recommend that users do not use the `-f` option during normal operation. If you specify the `-f` option, be sure to check the conditions of the added PSB and other devices.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-m` *function=mode* Set up the operation mode and its value. Several functions can be set up at the same time. If the `-m` is omitted, the default value will take effect. Specify the operation mode to *function*. Any of the following can be specified.

`bind`	Set up the automatic assignment of resources feature (enable / disable) for the resources that will be added due to the incorporation of a PSB. If resources were deleted with the `deleteboard`(8) before executing the `addboard` and the automatic assignment of resources feature was enabled, the resources on the system will revert back to the state before executing the `deleteboard`(8). However, if the logical domain configuration was changed before executing the `addboard`, resources will be assigned in accordance with the changed logical domain configuration.
`diag`	Set up the hardware diagnosis level at the time of incorporation of a PSB to a PPAR configuration.

When `bind` is specified to *function*, any of the following can be specified to *mode*. The default is `resource`.

`resource`	Enable the automatic assignment of resources feature.
`none`	Disable the automatic assignment of resources feature. The added resources will be designated as free resources on the specified PPAR.

When `diag` is specified to *function*, any of the following can be specified to *mode*. The default is `min`.

`off`	Do not execute hardware diagnosis.
`min`	Set up hardware diagnosis level to normal.

`-n` Automatically responds to prompt with "n" (no).

`-p` *ppar_id* Specifies PPAR-ID to which a PSB is incorporated or assigned. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

`-q` Prevents display of messages, including prompt, for standard output.

`-v` Show the detailed progress report of the processing of PSB incorporation. Ignored when executed along with the `-q`.

On the SPARC M12-2S, the command outputs a detailed progress report even if this option is omitted.

`-y` Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

psb Specifies the PSB number of the PSB to be incorporated or assigned. You can make multiple specifications by separating them with spaces. The specification format is below.

xx-y

xx Specifies the BB-ID which is an integer from 00 to 15.

y It is fixed to 0.

EXTENDED DESCRIPTION

- When you specify `-c configure`, a hardware diagnostic on the PSB is performed before the PSB is incorporated in PPAR. Therefore, it may take time to execute the command.
- When you use `addboard` to assign or incorporate a PSB, you have to set the PCL by using `setpcl`(8).
- If you execute a command while the PPAR is in power-on or power-off processing, the system enters in busy state. Execute the command again after the PPAR processing is completed.
- For details on PCL, see `setpcl`(8) and `showpcl`(8).
- Even if the PPAR is not running, you can execute `addboard`. However, if you specify `-c configure` while the PPAR is running to execute `addboard`, Logical Domains (LDoms) Manager needs to be running.
- If the PPAR DR feature is disabled, `addboard -c configure` cannot be executed when the PPAR is running. Please refer to `setpparmode`(8) and `showpparmode`(8) for details on the PPAR DR feature.
- If CPU Activation error occurs in a PPAR, `addboard -c configure` cannot be executed when the PPAR is running.
- When replacing a PSB, if `addboard` is executed without `-m` or if it is executed with `-m bind=resource`, the resources may not revert back to their assigned state before executing the `deleteboard`(8). If the amount of CPU, memory or I/O device resources differ after the replacement, the allocation status of the resources cannot be reverted back to the previous state. If the assignment of resources cannot be reverted back to the previous state, the resources will be rendered as empty resources. In such a case, use the `ldm` command of Oracle VM Server for SPARC to reassign these resources to the logical domain.

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Assign PSB 00-0, 01-0, 02-0, and 03-0 to PPAR-ID 0.

```
XSCF> addboard -y -c assign -p 0 00-0 01-0 02-0 03-0
PSB#00-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
PSB#01-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
PSB#02-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
PSB#03-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
```

EXAMPLE 2 Assign PSB 00-0, 01-0, 02-0, and 03-0 to PPAR-ID 2 forcibly.

```
XSCF> addboard -f -c assign -p 2 00-0 01-0 02-0 03-0
PSB#00-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
PSB#01-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
PSB#02-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
PSB#03-0 will be assigned into PPAR-ID 0. Continue?[y|n] :y
```

EXAMPLE 3 PSB 01-0 will be incorporated in PPAR-ID 0 on SPARC M10-4S.

```
XSCF> addboard -c configure -p 0 01-0
PSB#01-0 will be configured into PPAR-ID 0. Continue?[y|n] :y
Start connecting PSB to PPAR. [3600sec]
  0..... 30..... 60..... 90.....120.....150.....180.....210..end
Connected PSB to PPAR.
Start configuring PSB to Logical Domains (LDoms) Manager. [1800sec]
  0..... 30..... 60..... 90.....120end
Configured PSB to Logical Domains (LDoms) Manager.
Operation has completed
```

EXAMPLE 4 PSB 01-0, 03-0 will be incorporated in PPAR-ID 0 on SPARC M10-4S.

```
XSCF> addboard -c configure -p 0 01-0 03-0
PSB#01-0 will be configured into PPAR-ID 0. Continue?[y|n] :y
Start connecting PSB to PPAR. [3600sec]
  0..... 30..... 60..... 90.....120.....150.....180.....210..end
Connected PSB to PPAR.
Start configuring PSB to Logical Domains (LDoms) Manager. [1800sec]
  0..... 30..... 60..... 90.....120end
Configured PSB to Logical Domains (LDoms) Manager.
PSB#03-0 will be configured into PPAR-ID 0. Continue?[y|n] :y
Start connecting PSB to PPAR. [3600sec]
  0..... 30..... 60..... 90.....120.....150.....180.....210..end
Connected PSB to PPAR.
Start configuring PSB to Logical Domains (LDoms) Manager. [1800sec]
  0..... 30..... 60..... 90.....120end
Configured PSB to Logical Domains (LDoms) Manager.
Operation has completed
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

deleteboard(8), **diagxbu**(8), **setpcl**(8), **setpparmode**(8), **setupfru**(8), **showboards**(8), **showfru**(8), **showpcl**(8), **showpparmode**(8), **showpparstatus**(8), **testsb**(8)

NAME

addcodactivation - Adds the CPU Activation key to the system.

SYNOPSIS

addcodactivation [[-q] -{y|n}] *key_signature*

addcodactivation [[-q] -{y|n}] [-u *user*] [-p *proxy* [-t *proxy_type*]] -F *url*

addcodactivation [-V] [-{y|n}] [-u *user*] [-p *proxy* [-t *proxy_type*]] -F *url*

addcodactivation -h

DESCRIPTION

addcodactivation is a command to add the specified CPU Activation key to the SPARC M12/M10 systems.

Note – Before executing this command, you need to obtain the CPU Activation key. For obtaining the CPU Activation key, see the *Fujitsu SPARC M12 and Fujitsu M10/ SPARC M10 System Operation and Administration Guide*.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-F *url*
: Specifies URL that the CPU Activation key(s) are included. The following types of format are supported.

  http://*server*[:*port*]/*path*/*file*
  https://*server*[:*port*]/*path*/*file*
  ftp://*server*[:*port*]/*path*/*file*
  file:///media/usb_msd/*path*/*file*

-h
: Displays the usage. Specifying this option with another option or operand causes an error.

-n
: Automatically responds to prompt with "n" (no).

-p *proxy*
: Specifies the proxy server to use for transfer. If you omit -t *proxy_type*, the default proxy type is http. Specify *proxy* in *servername*:*port* format.

-q
: Prevents display of messages, including prompt, for standard output.

-t *proxy_type*
: Specifies the proxy type. Specify it with the -p option. You can specify any of http, socks4, and socks5. The default is http.

-u *user*
: Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry. You can specify this using up to 127 characters.

`-V`	Displays detailed network activities. This option is used to diagnose network and server problems. It cannot be used with the `-q`.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

key_signature	Specifies the CPU Activation key to be added to the XSCF. Enclose the CPU Activation key in double quotation marks (") for specification.

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Add the copied CPU Activation key in SPARC M10-1.

```
XSCF> addcodactivation "Product: SPARC M10-1
SequenceNumber: 116
Cpu noExpiration 2
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
 :
 :
1TSgrjnee9FyEYITT+ddJQ=="
Above Key will be added, Continue?[y|n]: y
```

EXAMPLE 2 Add the copied CPU Activation key in SPARC M12-2S.

```
XSCF> addcodactivation "Product: SPARC M12-2S
SequenceNumber: 116
Cpu noExpiration 1
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
 :
 :
1TSgrjnee9FyEYITT+ddJQ=="
Above Key will be added, Continue?[y|n]: y
```

EXAMPLE 3 Add CPU Activation keys in a lump from the CPU Activation key file, specified with the URL.

```
XSCF> addcodactivation -F file:///media/usb_msd/cod_key.txt
Above Key will be added, Continue?[y|n]: y
.......... done.
successfully added Activation Key  count : 10.
```

EXAMPLE 4 Add CPU Activation keys individually from the CPU Activation key file,

specified with the URL.

```
XSCF> addcodactivation -F file:///media/usb_msd/cod_key_M10-
1_116.txt
Above Key will be added, Continue?[y|n]: y
.......... done.
successfully added Activation Key  count : 1.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

deletecodactivation(8), **dumpcodactivation**(8), **restorecodactivation**(8), **setcod**(8), **showcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8), **showcodusage**(8)

NAME

addfru - Adds the Field Replaceable Unit (FRU) and a chassis.

SYNOPSIS

addfru

addfru `-h`

DESCRIPTION

`addfru` is a command to add the FRU and a chassis.

It enables settings required for expansions, such as selecting, confirming, or inserting the FRU or a chassis, interactively by using menu format.

The following FRU and chassis can be added by `addfru`.

- SPARC M10-1/M10-4
  - Power supply unit for the SPARC M10-1/M10-4 (BB/PSU)
- SPARC M10-4S
  - SPARC M10-4S (BB)
  - Power supply unit for the SPARC M10-4S (BB/PSU)
  - Power supply unit for the crossbar box (XB-Box/PSU)
- SPARC M12-1/M12-2
  - Power supply unit for the SPARC M12-1/M12-2 (BB/PSU)
- SPARC M12-2S
  - SPARC M12-2S (BB)
  - Power supply unit for the SPARC M12-2S (BB/PSU)
  - Power supply unit for the crossbar box (XB-Box/PSU)

Privileges

To execute this command, the `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

- According to the implementation status and the state of the chassis of the FRU which is to be added, the addition operation may not be executed. In such a case, when the target FRU or chassis is selected, an error message, stating that the operation cannot be executed, is output.

  In the following conditions, addition of FRUs is not possible.

  - Common to all FRUs and chassis

    The target chassis (if the target is a FRU, then the chassis on which the FRU is mounted) is in any of the following states.

- In the middle of firmware updating
- Not in the state of "SCF READY"
- Has already been recognized by the system

- PSU for the SPARC M12-2S/M10-4S and crossbar box

  Implemented by default if not applicable to all FRUs and chassis.

- SPARC M12-2S/M10-4S

  - IP address is not setup to the SSCP link of the target SPARC M10-4S using the `setsscp`(8)
  - If there is a chassis which has the same BB-ID as the target SPARC M10-4S, and was implemented in a system before (unless it was removed by the `initbb`(8))
  - The selected chassis cannot be connected due to system configuration

- In case of SPARC M12-2S/M10-4S, if the chassis information such as the serial number, in respect to the selected BB-ID, has already been registered in the system, an error message is output and adding with the `addfru` becomes impossible. In such a case, use the `replacefru`(8) to replace the parts.
- The `addfru` can only be executed on the master XSCF. If it is executed on the standby XSCF, an error is output.

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

initbb (8), **replacefru** (8), **setsscp** (8), **showhardconf** (8), **testsb** (8), **unlockmaintenance** (8)

NAME

addpowerschedule - Adds a schedule for powering on/off the automatic power control system (APCS).

SYNOPSIS

addpowerschedule {`-p` *ppar_id* |`-a`} `-m daily` {`on=` *ontime* |`off=` *offtime* |`on=` *ontime* `off=` *offtime*} `term=`*value*

addpowerschedule {`-p` *ppar_id* |`-a`} `-m weekly` {`on=` *ontime* |`off=` *offtime* |`on=` *ontime* `off=` *offtime*} `pattern=` *week* `term=` *value*

addpowerschedule {`-p` *ppar_id* |`-a`} `-m monthly` {`on=` *ontime* |`off=` *offtime* |`on=` *ontime* `off=` *offtime*} `pattern=` *value* `term=` *value*

addpowerschedule {`-p` *ppar_id* |`-a`} `-m special` {`on=` *ontime* |`off=` *offtime* |`on=` *ontime* `off=` *offtime*} `date=` *value*

addpowerschedule {`-p` *ppar_id* |`-a`} `-m holiday` `date=` *value*

addpowerschedule `-h`

DESCRIPTION

`addpowerschedule` is a command to set a schedule for powering on/off the automatic power control system (APCS).

Privileges

To execute this command, either of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Adds a power control schedule for all PPARs.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-m daily`	Adds a power control schedule to be repeated daily.
`-m weekly`	Adds a power control schedule to be repeated weekly.
`-m monthly`	Adds a power control schedule to be repeated monthly.
`-m special`	Adds a one-shot power control schedule.
`-m holiday`	Adds a pause of scheduled operation.
`-p` *ppar_id*	Specifies PPAR-ID for setting a schedule. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

OPERANDS The following operands are supported.

`on=`*ontime* Sets a time to power on. To specify *ontime*, use the *hhm*`0` format.

hh	Specifies hours (in 24 hour format).
m`0`	Specifies minutes (in 10 minute format).

`off=`*offtime* Sets a time to power off. To specify *offtime*, use the *hhm*`0` format.

hh	Specifies hours (in 24 hour format).
m`0`	Specifies minutes (in 10 minute format).

`term=`*value* Sets a period of conducting the scheduled operation. To specify `daily`, use *value* by using *MMDD-mmdd* format. To specify *value* for `weekly` and `monthly` schedule, use the *MM-mm* format.

MM	Specifies the starting month.
DD	Specifies the starting day.
mm	Specifies the ending month.
dd	Specifies the ending day.

`pattern=`*week* Sets the day of the week for conducting weekly scheduled operation. To specify *week*, use the following formats. To specify more than one day of the week, separate them by inserting a comma (,) between them.

`sun`	Specifies Sunday.
`mon`	Specifies Monday.
`tue`	Specifies Tuesday.
`wed`	Specifies Wednesday.
`thu`	Specifies Thursday.
`fri`	Specifies Friday.
`sat`	Specifies Saturday.

`patern=`*value* Specifies the date for conducting monthly scheduled operation. To specify *value*, use the *DD-dd* format.

DD	Specifies the starting day.
dd	Specifies the ending day.

`date=`*value* Specifies the date, month, and year for conducting or suspending a one-shot schedule or a pause of scheduled operation. To specify *value*, use the *YYMMDD* format.

YY	Specifies the last two digits of year (2000-2037).
MM	Specifies a month.
DD	Specifies a day.

EXTENDED DESCRIPTION

- When `setpowerschedule`(8) is added to enable the schedule of PPAR-ID, the scheduled operations are conducted. However, if the mode switch on the operation panel is set to Service, the operations are not conducted.
- By using `showpowerschedule`(8), the contents of the added schedule can be checked.
- To delete the added schedule, use `deletepowerschedule`(8).
- If non-existent *ppar_id* or time, or past date or invalid option is specified, it ends abnormally.
- Up to 4096 schedules can be specified in the entire system.
- If two or more schedules are set at the same time, they are conducted in order of the following priority.

1. Pause of schedule (`special`)
2. One-shot schedule (`holiday`)
3. Monthly schedule (`monthly`)
4. Weekly schedule (`weekly`)
5. Daily schedule (`daily`)

- If power-on and power-off schedule are set at the same time in the same order of priority, powering off is conducted.
- When you changed the configuration of the logical domain, execute the `ldm add-spconfig` command on the control domain, to store the latest configuration information in XSCF. If you do not store the information, the automatic power-off processing may fail to work properly.

EXAMPLES

EXAMPLE 1 Add a schedule of PPAR-ID 1 that operates from January 1 to December 31, from 9:00 to 21:30 daily.

```
XSCF> addpowerschedule -p 1 -m daily on=0900 off=2130 term=0101-
1231
XSCF>
```

EXAMPLE 2 Add a schedule of PPAR-ID 1 that operates from February to April, from 7:10 to 19:50 on every Monday, Tuesday, Wednesday, Thursday, and Friday.

```
XSCF> addpowerschedule -p 1 -m weekly on=0710 off=1950
pattern=mon,tue,wed,thu,fri term=02-04
XSCF>
```

EXAMPLE 3 Add a schedule of PPAR-ID 1 that operates from first to fifth of May to June, from 9:20 to 18:40 daily.

```
XSCF> addpowerschedule -p 1 -m monthly on=0920 off=1840 pattern=01-
05 term=05-06
XSCF>
```

EXAPLE 4 Add a schedule of PPAR-ID 1 that operates only on March 4, 2013 from 0:00 to 23:50.

```
XSCF> addpowerschedule -p 1 -m special on=0000 off=2350 date=130304
XSCF>
```

EXAMPLE 5 Cancel the schedule of PPAR-ID 1 set to May 4, 2013.

```
XSCF> addpowerschedule -p 1 -m holiday date=130504
XSCF>
```

EXAMPLE 6 Add a schedule of PPAR-ID 1 that is turned on at 7:10 on every Monday and turned off at 19:50 on every Friday from June to August.

```
XSCF> addpowerschedule -p 1 -m weekly on=0710 pattern=mon term=06-
08
XSCF> addpowerschedule -p 1 -m weekly off=1950 pattern=fri term=06-
08
XSCF>
```

EXAMPLE 7 Add a schedule of PPAR-ID 1 that operates from December 1 to March 1 of the next year, from 6:00 to 22:00 daily.

```
XSCF> addpowerschedule -p 1 -m daily on=0600 off=2200 term=1201-
0301
XSCF>
```

EXAMPLE 8 Add a schedule of PPAR-ID 1 that is turned on at 8:00 on 1st of every month from November to February of the next year and turned off at 20:00 on 29th of every month.

```
XSCF> addpowerschedule -p 1 -m monthly on=0800 pattern=01-01
term=11-02
XSCF> addpowerschedule -p 1 -m monthly off=2000 pattern=29-29
term=11-02
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

deletepowerschedule(8), **setpowerschedule**(8), **showpowerschedule**(8)

NAME

adduser - Creates an XSCF user account.

SYNOPSIS

adduser [`-u` *UID*] *user*

adduser `-h`

DESCRIPTION

`adduser` is a command to create a new XSCF user account.

An XSCF user account is used for configuring, manipulating, managing, and operating XSCF. No password is set to the newly created user account. Therefore, set a password by using `password`(8), or set the public key for users by using Secure Shell (SSH). Otherwise, you cannot log in. The created user account is locked but not disabled. The number of user accounts to be specified is up to 100 assuming that a user account contains 10 characters on average.

When Lightweight Directory Access Protocol (LDAP), Active Directory, or LDAP over SSL is set to be used for the user account data on XSCF, the user account name and the user identifier (if specified) must be the one that is not used for XSCF, LDAP, Active Directory, or LDAP over SSL.

When you create a user account, the current value of the password policy is saved in the file for the created user account. For details on password policy, see `setpasswordpolicy`(8).

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` — Displays the usage. Specifying this option with another option or operand causes an error.

`-u` *UID* — Creates a new user with the specified identifier (UID). For specifying *UID*, use an integer between 100 and 60000. If you omit the `-u` option, an integer greater than or equal to 100 is automatically assigned as a user identifier.

OPERANDS

The following operands are supported.

user — Specifies the XSCF user account name to be created. For specifying a user account name, use up to 31 characters in combination of lowercase alphabets, numbers, hyphens (-), and underscores (_). No uppercase characters are available. Be sure to use a lowercase alphabet for the first character. The examples of user account name available are jsmith, j_smith, and j_smith-0123.

EXAMPLES

EXAMPLE 1 Create a new user.

```
XSCF> adduser -u 359 jsmith
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

deleteuser(8), **disableuser**(8), **enableuser**(8), **password**(8), **setpasswordpolicy**(8), **showpasswordpolicy**(8), **showuser**(8)

NAME

addvbootcerts - Adds X.509 public key certificates used for performing Verified Boot of Oracle Solaris.

SYNOPSIS

addvbootcerts `-p` *ppar_id* [[`-q`] `-{y|n}`] *certname* [`-u` *username*] [`-X` *proxy* [`-t` *proxy_type*]] `-F` *url*

addvbootcerts `-p` *ppar_id* [`-V`] [`-{y|n}`] *certname* [`-u` *username*] [`-X` *proxy* [`-t` *proxy_type*]] `-F` *url*

addvbootcerts `-p` *ppar_id* [[`-q`] `-{y|n}`] *certname signature*

addvbootcerts `-h`

DESCRIPTION

The `addvbootcerts` command adds new X.509 public key certificates used for performing Verified Boot of Oracle Solaris, in respect to a physical partition (PPAR). By using the `addvbootcerts` command, certificates other than that of system's preinstalled certificates can be used when performing Verified Boot of Oracle Solaris.

The certificate will be registered with an unused management number in ascending order. At most, five certificates can be registered for each PPAR. The management numbers of already registered certificates can be comfirmed by the `showvbootcerts`(8).

The size of an X.509 public key certificate must be smaller than 4Kbytes. Error occurs in case the size of a certificate is bigger than 4Kbytes.

Privileges

To execute this command, either of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-F` *url*

Loads an X.509 public key certificate for Verified Boot. The *url* should be specified in any of the following formats.

`http://`*server*[:*port*]/*path*/*file*
`https://`*server*[:*port*]/*path*/*file*
`ftp://`*server*[:*port*]/*path*/*file*
`file:///media/usb_msd/`*path*/*file*

`-n`

Automatically responds to prompt with "n" (no).

`-p` *ppar_id*	Specifies the PPAR-ID of the PPAR to which the X.509 public key certificate is to be added.
`-q`	Prevents display of messages, including prompt, for standard output.
`-t` *proxy_type*	Specifies the proxy type. Specify it with the `-p` option. You can specify any of `http`, `socks4`, and `socks5`. The default is `http`.
`-u` *username*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry. You can specify this using up to 127 characters.
`-V`	Displays detailed network activities. This option is used to diagnose network and server problems. It cannot be used with the `-q` option.
`-X` *proxy*	Specifies the proxy server to use for transfer. If you omit `-t` *proxy_type*, the default proxy type is `http`. Specify *proxy* in *servername*:*port* format.
`-y`	Automatically responds to prompt with "y" (yes).
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

certname	Specifies the name of the certificate. It is not necessary for it being the same as the file name, but it must be unique within the PPAR. Moreover, it should consist of alphanumeric characters, hyphens or underscores only and no more than 32 characters. The first character should be an alphabetical character.
signature	Adds the copied X.509 public key certificate. The value should be surrounded by a pair of double quotations (" ").

EXAMPLES

EXAMPLE 1 Add the copied X.509 public key certificate as " CUSTOM_CERT_1" to PPAR-ID 0.

```
XSCF> addvbootcerts -p 0 CUSTOM_CERT_1 "-----BEGIN CERTIFICATE-----
MIIFEzCCA/ugAwIBAgIQB62zBpmCOdvdYEFEcb4/cTANBgkqhkiG9w0BAQUFADCB
njELMAkGA1UEBhMCVVMxGzAZBgNVBAoTEk9yYWNsZSBDb3Jwb3JhdGlvbjEfMB0G
A1UECxMWVmVyaVNpZ24gVHJ1c3QgTmV0d29yazE1MDMGA1UECxMsQ2xhc3MgMiBN
 :
GuygEAGV+A==
-----END CERTIFICATE-----"
The above elfsign X.509 key certificate will be added to PPAR-ID 0,
Continue?[y|n]:
```

EXAMPLE 2 Add the copied X.509 public key certificate as " CUSTOM_CERT_3" to PPAR-ID 2. Answer "y" to the confirmation message.

```
XSCF> addvbootcerts -p 2 CUSTOM_CERT_3 "-----BEGIN CERTIFICATE-----
MIIFEzCCA/ugAwIBAgIQB62zBpmCOdvdYEFEcb4/cTANBgkqhkiG9w0BAQUFADCB
njELMAkGA1UEBhMCVVMxGzAZBgNVBAoTEk9yYWNsZSBDb3Jwb3JhdGlvbjEfMB0G
A1UECxMWVmVyaVNpZ24gVHJ1c3QgTmV0d29yazE1MDMGA1UECxMsQ2xhc3MgMiBN
 :
GuygEAGV+A==
-----END CERTIFICATE-----"
The above elfsign X.509 key certificate will be added to PPAR-ID 2,
Continue?[y|n]:y
.... done.
successfully added this certificate to PPAR-ID 2 as index 3.
```

EXAMPLE 3 Add the X.509 public key certificate specified in the URL as "customcert3" to PPAR-ID 4. Answer "y" to the confirmation message.

```
XSCF> addvbootcerts -p 4 customcert3 -F
file:///media/usb_msd/vboot/3rd_perty_cert_xyz
The above elfsign X.509 key certificate will be added to PPAR-ID 4,
Continue?[y|n]:y
.... done.
successfully added this certificate to PPAR-ID 4 as index 3.
```

EXAMPLE 4 An error occurs when an attempt is made to add certificates inspite of the fact that the highest possible number of X.509 public key certificates have already been registered.

```
XSCF> addvbootcerts -p 6 CUSTOM_CERT_6 -F
file:///media/usb_msd/vboot/3rd_perty_cert_xyz
Exceeded the number of certificates that can be registered to PPAR-ID 6.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

deletevbootcerts(8), **setvbootconfig**(8), **showvbootcerts**(8), **showvbootconfig**(8)

NAME

applynetwork - Applies the contents of the XSCF network to XSCF.

SYNOPSIS

applynetwork [[-q] -{y|n}] [-M]

applynetwork -h

DESCRIPTION

applynetwork is a command to apply the configured contents of the XSCF network to XSCF.

Use the following three procedures to configure contents of the XSCF network.

1. Use the following command to configure a network.
   - Use sethostname(8) to set the XSCF host name and DNS domain name.
   - Use setnameserver(8) to set the name server and the search path.
   - Use setnetwork(8) to set the IP address and netmask of XSCF-LAN.
   - Use setroute(8) to set a routing of the XSCF network interface.
   - Use setsscp(8) to set the IP address of SSCP.
2. Execute applynetwork to apply the configured contents to XSCF.
3. Execute rebootxscf(8) to reboot all XSCF based on the applied contents.

Note – If you reboot XSCF without executing applynetwork, the configured contents of the network is not applied. Not only that but the configured contents are erased.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

- For applying the XSCF network, the IP address and netmask of XSCF-LAN must be configured. If they are configured correctly, the configuration of the XSCF network cannot be applied.
- On a SPARC M12-2S/M10-4S, if the XSCF-LAN in up state is configured as described below, it causes an error. Use `setnetwork`(8) to correct the settings.
  - The subnets of xbbox#80-lan#0, xbbox#81-lan#0, and takeover IP address lan#0 are all different.
  - The subnets of xbbox#80-lan#1, xbbox#81-lan#1, and takeover IP address lan#1 are all different.
  - Any of the subnets of xbbox#80-lan#0, xbbox#80-lan#1, and SSCP link is overlapped.
  - Any of the subnets of xbbox#81-lan#0, xbbox#81-lan#1, and SSCP link is overlapped.
  - Any of the subnets of xbbox#80-lan#0, xbbox#81-lan#1, and SSCP link is overlapped.
  - Any of the subnets of xbbox#81-lan#0, xbbox#80-lan#1, and SSCP link is overlapped.
  - The subnets of bb#00-lan#0, bb#01-lan#0, and takeover IP address lan#0 are all different.
  - The subnets of bb#00-lan#1, bb#01-lan#1, and takeover IP address lan#1 are all different.
  - Any of the subnets of bb#00-lan#0, bb#00-lan#1, and SSCP link is overlapped.
  - Any of the subnets of bb#01-lan#0, bb#01-lan#1, and SSCP link is overlapped.
  - Any of the subnets of bb#00-lan#0, bb#01-lan#1, and SSCP link is overlapped.
  - Any of the subnets of bb#01-lan#0, bb#00-lan#1, and SSCP link is overlapped.
  - The IP address of the slave XSCF network interface that is used with remote storage is overlapped.
- If the subnets of bb#00-lan#0 and bb#00-lan#1 which are in up state on SPARC M12-1/M12-2/M10-1/M10-4, it causes an error. Use `setnetwork`(8) to correct the settings.
- If the total number of characters of the DNS domain name specified with `sethostname`(8) and the search path specified with `setnameserver`(8) exceeds 256, it causes an error.
- If the IP address of the SSCP link is not set for all the SPARC M12/M10 systems chassis or crossbar boxes, it causes an error. Use `setsscp`(8) to correct the settings.
- If an IP address that is not included in any XSCF-LAN exists in the gateway address of the routing information, it causes an error. Use `setroute`(8) to correct the settings.

- If the IP address of the destination of the routing information and the subnet of the SSCP link are overlapped, it causes an error. Use `setsscp`(8) to correct the settings.
- If the IP address of the slave XSCF network interface that is used with remote storage overlaps with the IP address of SSCP link, it causes an error. Use `setsscp`(8) to correct the settings.
- If the IP address of the slave XSCF network interface that is used with remote storage overlaps with any subnet of the SSCP link that includes the slave XSCF, it causes an error. Use `setsscp`(8) to correct the settings.
- When the system is configured with multiple XSCFs, do not execute `applynetwork` during an XSCF failover.

EXAMPLES

EXAMPLE 1 Apply the following network settings after rebooting the XSCF in the SPARC M12-2S/M10-4S with the building block configuration (without crossbar box).

- Host name (bb#00): hostname-0
- Host name (bb#01): hostname-1
- DNS domain name: example.com
- Name server: 10.23.4.3
- Interface: Enables bb#00-lan#0 at a start.
- IP address (bb#00-lan#0): 10.24.144.214
- Netmask (bb#00-lan#0): 255.255.255.0
- Routing (default gateway): 10.24.144.1
- Interface: Enables bb#01-lan#0 at a start.
- IP address (bb#01-lan#0): 10.24.144.215
- Netmask (bb#01-lan#0): 255.255.255.0
- Routing (default gateway of bb#01-lan#0): 10.24.144.1
- IP address (SSCP): From 192.168.1.1 to 192.168.1.4, from 192.168.1.9 to 192.168.1.12, from 192.168.1.17 to 192.168.1.18
- Netmask (SSCP): 255.255.255.248, 255.255.255.248, and 255.255.255.252
- IP address of slave XSCF (bb#02-lan#0): 10.24.144.216
- Netmask of slave XSCF (bb#02-lan#0): 255.255.255.0
- Default gateway of slave XSCF (bb#02-lan#0): 10.24.144.1

```
XSCF> applynetwork
The following network settings will be applied:
  bb#00 hostname   :hostname-0
  bb#01 hostname   :hostname-1
  DNS domain name  :example.com
  nameserver       :10.23.4.3
```

```
interface        :bb#00-lan#0
status           :up
IP address       :10.24.144.214
netmask          :255.255.255.0
route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

interface        :bb#00-lan#1
status           :down
IP address       :
netmask          :
route            :

interface        :bb#01-lan#0
status           :up
IP address       :10.24.144.215
netmask          :255.255.255.0
route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

interface        :bb#01-lan#1
status           :down
IP address       :
netmask          :
route            :

interface        :lan#0
status           :down
IP address       :
netmask          :

interface        :lan#1
status           :down
IP address       :
netmask          :

SSCP network ID:0 netmask    :255.255.255.248

interface                    :bb#00-if#0
IP address                   :192.168.1.1

interface                    :bb#01-if#0
IP address                   :192.168.1.2

interface                    :bb#02-if#0
IP address                   :192.168.1.3

interface                    :bb#03-if#0
IP address                   :192.168.1.4

SSCP network ID:1 netmask    :255.255.255.248

interface                    :bb#00-if#1
IP address                   :192.168.1.10
```

```
    interface                    :bb#01-if#1
    IP address                   :192.168.1.9

    interface                    :bb#02-if#1
    IP address                   :192.168.1.11

    interface                    :bb#03-if#1
    IP address                   :192.168.1.12

    SSCP network ID:2 netmask    :255.255.255.252

    interface                    :bb#00-if#2
    IP address                   :192.168.1.17

    interface                    :bb#01-if#2
    IP address                   :192.168.1.18

  Remote Storage settings:

    interface        :bb#02-lan#0
    IP address       :10.24.144.216
    netmask          :255.255.255.0
    gateway          :10.24.144.1

    interface        :bb#02-lan#1
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#03-lan#0
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#03-lan#1
    IP address       :
    netmask          :
    gateway          :

  Continue? [y|n] :y
```

EXAMPLE 2 Apply the following network settings after rebooting the XSCF in the SPARC M12-2S/M10-4S with the building block configuration (with crossbar box).

- Host name (xbbox#80): hostname-0
- Host name (xbbox#81): hostname-1
- DNS domain name: example.com
- Name server: 10.23.4.3
- Interface: Enables xbbox#80-lan#0 at a start.

- IP address (xbbox#80-lan#0): 10.24.144.214
- Netmask (xbbox#80-lan#0): 255.255.255.0
- Routing (default gateway): 10.24.144.1
- Interface: Enables xbbox#81-lan#0 at a start.
- IP address (xbbox#81-lan#0): 10.24.144.215
- Netmask (xbbox#81-lan#0): 255.255.255.0
- Routing (default gateway of xbbox#81-lan#0): 10.24.144.1
- IP address (SSCP): From 192.168.1.1 to 192.168.1.17, from 192.168.2.1 to 192.168.2.17, from 192.168.3.1 to 192.168.3.4, from 192.168.4.1 to 192.168.4.4, and from 192.168.5.1 to 192.168.5.2
- Netmask (SSCP): 255.255.255.0, 255.255.255.0, 255.255.255.0, 255.255.255.0, and 255.255.255.0
- IP address of slave XSCF (bb#00-lan#0): 10.24.144.216
- Netmask of slave XSCF (bb#00-lan#0): 255.255.255.0
- Default gateway of slave XSCF (bb#00-lan#0): 10.24.144.1

```
XSCF> applynetwork
The following network settings will be applied:
  xbbox#80 hostname:hostname-0
  xbbox#81 hostname:hostname-1
  DNS domain name  :example.com
  nameserver       :10.23.4.3

  interface        :xbbox#80-lan#0
  status           :up
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

  interface        :xbbox#80-lan#1
  status           :down
  IP address       :
  netmask          :
  route            :

  interface        :xbbox#81-lan#0
  status           :up
  IP address       :10.24.144.215
  netmask          :255.255.255.0
  route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

  interface        :xbbox#81-lan#1
  status           :down
  IP address       :
  netmask          :
  route            :
```

```
interface        :lan#0
status           :down
IP address       :
netmask          :

interface        :lan#1
status           :down
IP address       :
netmask          :

SSCP network ID:0 netmask    :255.255.255.0

interface                    :xbbox#80-if#0
IP address                   :192.168.1.1

interface                    :bb#00-if#0
IP address                   :192.168.1.2

interface                    :bb#01-if#0
IP address                   :192.168.1.3

interface                    :bb#02-if#0
IP address                   :192.168.1.4

interface                    :bb#03-if#0
IP address                   :192.168.1.5

interface                    :bb#04-if#0
IP address                   :192.168.1.6

interface                    :bb#05-if#0
IP address                   :192.168.1.7

interface                    :bb#06-if#0
IP address                   :192.168.1.8

interface                    :bb#07-if#0
IP address                   :192.168.1.9

interface                    :bb#08-if#0
IP address                   :192.168.1.10

interface                    :bb#09-if#0
IP address                   :192.168.1.11

interface                    :bb#10-if#0
IP address                   :192.168.1.12

interface                    :bb#11-if#0
IP address                   :192.168.1.13

interface                    :bb#12-if#0
IP address                   :192.168.1.14
```

```
interface                   :bb#13-if#0
IP address                  :192.168.1.15

interface                   :bb#14-if#0
IP address                  :192.168.1.16

interface                   :bb#15-if#0
IP address                  :192.168.1.17

SSCP network ID:1 netmask   :255.255.255.0

interface                   :xbbox#81-if#1
IP address                  :192.168.2.1

interface                   :bb#00-if#1
IP address                  :192.168.2.2

interface                   :bb#01-if#1
IP address                  :192.168.2.3

interface                   :bb#02-if#1
IP address                  :192.168.2.4

interface                   :bb#03-if#1
IP address                  :192.168.2.5

interface                   :bb#04-if#1
IP address                  :192.168.2.6

interface                   :bb#05-if#1
IP address                  :192.168.2.7

interface                   :bb#06-if#1
IP address                  :192.168.2.8

interface                   :bb#07-if#1
IP address                  :192.168.2.9

interface                   :bb#08-if#1
IP address                  :192.168.2.10

interface                   :bb#09-if#1
IP address                  :192.168.2.11

interface                   :bb#10-if#1
IP address                  :192.168.2.12

interface                   :bb#11-if#1
IP address                  :192.168.2.13

interface                   :bb#12-if#1
IP address                  :192.168.2.14

interface                   :bb#13-if#1
```

```
    IP address                    :192.168.2.15

    interface                     :bb#14-if#1
    IP address                    :192.168.2.16

    interface                     :bb#15-if#1
    IP address                    :192.168.2.17

    SSCP network ID:2 netmask     :255.255.255.0

    interface                     :xbbox#80-if#2
    IP address                    :192.168.3.1

    interface                     :xbbox#81-if#2
    IP address                    :192.168.3.2

    interface                     :xbbox#82-if#2
    IP address                    :192.168.3.3

    interface                     :xbbox#83-if#2
    IP address                    :192.168.3.4

    SSCP network ID:3 netmask     :255.255.255.0

    interface                     :xbbox#80-if#3
    IP address                    :192.168.4.1

    interface                     :xbbox#81-if#3
    IP address                    :192.168.4.2

    interface                     :xbbox#82-if#3
    IP address                    :192.168.4.3

    interface                     :xbbox#83-if#3
    IP address                    :192.168.4.4

    SSCP network ID:4 netmask     :255.255.255.0

    interface                     :xbbox#80-if#4
    IP address                    :192.168.5.1

    interface                     :xbbox#81-if#4
    IP address                    :192.168.5.2

  Remote Storage settings:

    interface         :bb#00-lan#0
    IP address        :10.24.144.216
    netmask           :255.255.255.0
    gateway           :10.24.144.1

    interface         :bb#00-lan#1
    IP address        :
    netmask           :
```

```
gateway          :

interface        :bb#01-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#01-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#02-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#02-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#03-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#03-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#04-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#04-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#05-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#05-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#06-lan#0
IP address       :
```

```
netmask          :
gateway          :

interface        :bb#06-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#07-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#07-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#08-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#08-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#09-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#09-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#10-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#10-lan#1
IP address       :
netmask          :
gateway          :

interface        :bb#11-lan#0
IP address       :
netmask          :
gateway          :

interface        :bb#11-lan#1
```

```
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#12-lan#0
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#12-lan#1
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#13-lan#0
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#13-lan#1
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#14-lan#0
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#14-lan#1
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#15-lan#0
    IP address       :
    netmask          :
    gateway          :

    interface        :bb#15-lan#1
    IP address       :
    netmask          :
    gateway          :

  Continue? [y|n] :y
```

EXAMPLE 3 Apply the following network settings after rebooting the XSCF in the SPARC M12-1/M12-2/M10-1/M10-4.

- Host name (bb#00): hostname-0
- DNS domain name: example.com

- Name server: 10.23.4.3
- Interface: Enables bb#00-lan#0 at a start.
- IP address (bb#00-lan#0): 10.24.144.214
- Netmask (bb#00-lan#0): 255.255.255.0
- Routing (default gateway): 10.24.144.1

```
XSCF> applynetwork
The following network settings will be applied:
  bb#00 hostname   :hostname-0
  DNS domain name  :example.com
  nameserver       :10.23.4.3

  interface        :bb#00-lan#0
  status           :up
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

  interface        :bb#00-lan#1
  status           :down
  IP address       :
  netmask          :
  route            :

Continue? [y|n] :y
```

EXAMPLE 4 Apply the XSCF network settings without setting the bb#00-lan#0 and bb#00-lan#1 routings.

```
XSCF> applynetwork
The following network settings will be applied:
  bb#00 hostname   :hostname-0
  DNS domain name  :example.com
  nameserver       :10.23.4.3

  interface        :bb#00-lan#0
  status           :up
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            :

  interface        :bb#00-lan#1
  status           :up
  IP address       :10.24.131.215
  netmask          :255.255.255.0
  route            :

Continue? [y|n] :y
```

EXAMPLE 5 Apply the XSCF network settings while all the interfaces are in down state.

```
XSCF> applynetwork
The following network settings will be applied:
  bb#00 hostname   :hostname-0
  DNS domain name  :example.com
  nameserver       :10.23.4.3

  interface        :bb#00-lan#0
  status           :down
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            :

  interface        :bb#00-lan#1
  status           :down
  IP address       :10.24.131.215
  netmask          :255.255.255.0
  route            :

Continue? [y|n] :y
```

EXAMPLE 6 Apply the XSCF network settings in the SPARC M12-2S/M10-4S with the building block configuration (without crossbar box), while a master XSCF is normal, but a standby XSCF has a failure.

```
XSCF> applynetwork
The set state is as follows now.
  bb#00 hostname   :hostname-0
  bb#01 hostname   :
  DNS domain name  :example.com
  nameserver       :10.23.4.3

  interface        :bb#00-lan#0
  status           :up
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            :-n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

  interface        :bb#00-lan#1
  status           :down
  IP address       :10.24.131.215
  netmask          :255.255.255.0
  route            :

  interface        :bb#01-lan#0
  status           :down
  IP address       :
  netmask          :
  route            :

  interface        :bb#01-lan#1
  status           :down
```

```
  IP address       :
  netmask          :
  route            :

  interface        :lan#0
  status           :down
  IP address       :
  netmask          :

  interface        :lan#1
  status           :down
  IP address       :
  netmask          :

  SSCP network ID:0 netmask    :255.255.255.248

  interface                    :bb#00-if#0
  IP address                   :192.168.1.1

  interface                    :bb#01-if#0
  IP address                   :192.168.1.2

  interface                    :bb#02-if#0
  IP address                   :192.168.1.3

  interface                    :bb#03-if#0
  IP address                   :192.168.1.4

  SSCP network ID:1 netmask    :255.255.255.248

  interface                    :bb#00-if#1
  IP address                   :192.168.1.10

  interface                    :bb#01-if#1
  IP address                   :192.168.1.9

  interface                    :bb#02-if#1
  IP address                   :192.168.1.11

  interface                    :bb#03-if#1
  IP address                   :192.168.1.12

  SSCP network ID:2 netmask    :255.255.255.252

  interface                    :bb#00-if#2
  IP address                   :192.168.1.17

  interface                    :bb#01-if#2
  IP address                   :192.168.1.18

Remote Storage settings:

  interface        :bb#02-lan#0
  IP address       :
```

```
  netmask          :
  gateway          :

  interface        :bb#02-lan#1
  IP address       :
  netmask          :
  gateway          :

  interface        :bb#03-lan#0
  IP address       :
  netmask          :
  gateway          :

  interface        :bb#03-lan#1
  IP address       :
  netmask          :
  gateway          :

bb#01 could not apply the network settings.
Continue? [y|n] :
```

EXAMPLE 7 Apply the XSCF network settings in the SPARC M12-1/M12-2/M10-1/M10-4. The prompt is automatically given a "y" response.

```
XSCF> applynetwork -y
The following network settings will be applied:
  bb#00 hostname   :hostname-0
  DNS domain name  :example.com
  nameserver       :10.23.4.3

  interface        :bb#00-lan#0
  status           :up
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

  interface        :bb#00-lan#1
  status           :down
  IP address       :
  netmask          :
  route            :

Continue? [y|n] :y
Please reset the all XSCFs by rebootxscf to apply the network settings.
Please confirm that the settings have been applied by executing
showhostname, shownetwork, showroute, showsscp and shownameserver after
rebooting the all XSCFs.
```

EXAMPLE 8 After setting the DNS server and the search paths, apply the XSCF network settings.

- Name server: 10.23.4.3, 10.24.144.5, and 10.24.131.7

- Search path: example1.com, example2.com, example3.com, example4.com, and example5.com

```
XSCF> applynetwork
The following network settings will be applied:
  bb#00 hostname  :hostname-0
  DNS domain name  :example.com
  nameserver       :10.23.4.3
  nameserver       :10.24.144.5
  nameserver       :10.24.131.7
  search           :example1.com
  search           :example2.com
  search           :example3.com
  search           :example4.com
  search           :example5.com

  interface        :bb#00-lan#0
  status           :up
  IP address       :10.24.144.214
  netmask          :255.255.255.0
  route            : -n 0.0.0.0 -m 0.0.0.0 -g 10.24.144.1

  interface        :bb#00-lan#1
  status           :down
  IP address       :
  netmask          :
  route            :

Continue? [y|n] :y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

rebootxscf(8), **sethostname**(8), **setnameserver**(8), **setnetwork**(8), **setremotestorage**(8), **setroute**(8), **setsscp**(8)

NAME

clearremotepwrmgmt - Deletes the management information of the remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems.

SYNOPSIS

clearremotepwrmgmt [-a|-G *groupid*] [[-q] -{y|n}]

clearremotepwrmgmt -h

DESCRIPTION

clearremotepwrmgmt is a command to delete the management information of remote power management group on the host node that has been registered as a remote power management group.

Before incorporating a host node to the remote power management group or deleting it from the remote power management group, you need to execute this command on the target host node. You do not have to execute clearremotepwrmgmt on the I/O node because the management information is not stored on the I/O node.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Deletes all administrative information of remote power management groups which is configured. When the -a and -G options are omitted, it is regarded as the -a option is specified.
-G *groupid*	Specifies the remote power management group to delete the information. In groupid, specify only a single group ID using an integer from 1 to 32. When the -a and -G options are omitted, it is regarded as the -a option is specified.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute clearremotepwrmgmt, if the remote power management function is enabled, it causes an error. It is necessary to set it disabled by using setremotepwrmgmt -c disable. When no remote power management group exists, it ends normally.

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Delete the management information of the remote power management group on the host node.

```
XSCF> clearremotepwrmgmt
All remote power management group informations are cleared. Continue?
[y|n]: y
The command completed successfully.
XSCF>
```

EXAMPLE 2 Delete all administrative information of remote power management groups in the host node.

```
XSCF> clearremotepwrmgmt -a
All remote power management group informations are cleared.Continue?
[y|n]: y
The command completed successfully.
XSCF>
```

EXAMPLE 3 Delete the administrative information of remote power management group #1 in the host node.

```
XSCF> clearremotepwrmgmt -G 1
Group#01 remote power management group informations are cleared.Continue?
[y|n]: y
The command completed successfully.
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

getremotepwrmgmt(8), **setpacketfilters**(8), **setremotepwrmgmt**(8), **showremotepwrmgmt**(8)

NAME

clearstatus - Clear the fault information of field replaceable units (FRUs) that have been detected as faulty units.

SYNOPSIS

clearstatus *devicepath*

clearstatus `-h`

DESCRIPTION

`clearstatus` is a command to clear the fault information of specified FRUs that have been detected as faulty units.

The following fault information is cleared:

- Fault information which is stored in XSCF
- The fault flag stored in the FRUID-ROM of FRU

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following option is supported:

`-h` Displays usage statement. When used with other options or operands, an error occurs.

OPERANDS

The following operand is supported:

devicepath Specifies an FRU of which the faulty flag is cleared. FRUs shown below can be specified according to the system configuration.

- For SPARC M12-1/M10-1:

/MBU

/MBU/MEM#*x*

x: an integer between 00A and 03A, between 10A and 13A, between 00B and 03B, between 10B and 13B

/MBU/PCI#*x*/LINK

x: an integer between 0 and 2

/FAN#*x*

x: an integer between 0 and 6

/OPNL

/PSU#*x*

x: 0 or 1

/PSUBP

- For SPARC M10-4/M10-4S (without crossbar box):

/BB#*x*/CMUL
x: an integer between 0 and 15
/BB#*x*/CMUL/MEM#*y*
x: an integer between 0 and 15, *y*: an integer between 00A and 07A, between 10A and 17A, between 00B and 07B, between 10B and 17B
/BB#*x*/CMUU
x: an integer between 0 and 15
/BB#*x*/CMUU/MEM#*y*
x: an integer between 0 and 15, *y*: an integer between 00A and 07A, between 10A and 17A, between 00B and 07B, between 10B and 17B
/BB#*x*/XBU#*y*
x: an integer between 0 and 15, *y*: 0 or 1
/BB#*x*/PSUBP
x: an integer between 0 and 15
/BB#*x*/OPNL
x: an integer between 0 and 15
/BB#*x*/FANU#*y*
x: an integer between 0 and 15, *y*: an integer between 0 and 4
/BB#*x*/PSU#*y*
x: an integer between 0 and 15, *y*: 0 or 1
/BB#*x*/PCI#*y*/LINK
x: an integer between 0 and 15, *y*: an integer between 0 and 10

- For SPARC M12-2/M12-2S (without crossbar box):

/BB#*x*/CMUL
x: an integer between 0 and 15
/BB#*x*/CMUL/MEM#*y*
x: an integer between 0 and 15, *y*: an integer between 00A and 07A, between 00B and 07B, between 00C and 07C
/BB#*x*/CMUU
x: an integer between 0 and 15
/BB#*x*/CMUU/MEM#*y*
x: an integer between 0 and 15, *y*: an integer between 00A and 07A, between 00B and 07B, between 00C and 07C
/BB#*x*/XBU#*y*
x: an integer between 0 and 15, *y*: 0 or 1
/BB#*x*/XSCFU
x: an integer between 0 and 15
/BB#*x*/PSUBP
x: an integer between 0 and 15
/BB#*x*/OPNL
x: an integer between 0 and 15
/BB#*x*/FANU#*y*
x: an integer between 0 and 15, *y*: an integer between 0 and 7
/BB#*x*/PSU#*y*
x: an integer between 0 and 15, *y*: an integer between 0 and 3
/BB#*x*/PCI#*y*/LINK
x: an integer between 0 and 15, *y*: an integer between 0 and 10

- For SPARC M12-2S (with crossbar box)/M10-4S (with crossbar box):

/XBBOX#*x*/XBU#*y*
x: an integer between 80 and 83, *y*: an integer between 0 and 2
/XBBOX#*x*/XSCFU
x: an integer between 80 and 83
/XBBOX#*x*/XBBPU
x: an integer between 80 and 83

/XBBOX#*x*/XSCFIFU
x: an integer between 80 and 83
/XBBOX#*x*/OPNL
x: an integer between 80 and 83
/XBBOX#*x*/FANU#*y*
x: an integer between 80 and 83, *y*: an integer between 0 and 3
/XBBOX#*x*/PSU#*y*
x: an integer between 80 and 83, *y*: 0 or 1

- For PCI Expansion unit:

/MBU/PCI#*x*/PCIBOX#*y*/IOB
x: an integer between 0 and 2, *y*: last 4 digits of the serial number of the PCI Expansion unit

/MBU/PCI#x/PCIBOX#y/FANBP
x: an integer between 0 and 2, *y*: last 4 digits of the serial number of the PCI Expansion unit

/MBU/PCI#*x*/PCIBOX#*y*/FAN#*z*
x: an integer between 0 and 2, *y*: last 4 digits of the serial number of the PCI Expansion unit, *z*: an integer between 0 and 2

/MBU/PCI#*x*/PCIBOX#*y*/PSU#*z*
x: an integer between 0 and 2, *y*: last 4 digits of the serial number of the PCI Expansion unit, *z*: 0 or 1

/MBU/PCI#*x*/PCIBOX#*y*/LINKBD
x: an integer between 0 and 2, *y*: last 4 digits of the serial number of the PCI Expansion unit

/BB#*x*/PCI#*y*/PCIBOX#*z*/IOB
x: an integer between 0 and 15, *y*: an integer between 0 and 10, z: last 4 digits of the serial number of the PCI Expansion unit

/BB#*x*/PCI#*y*/PCIBOX#*z*/FANBP
x: an integer between 0 and 15, *y*: an integer between 0 and 10, z: last 4 digits of the serial number of the PCI Expansion unit

/BB#*x*/PCI#*y*/PCIBOX#*z*/FAN#*w*
x: an integer between 0 and 15, *y*: an integer between 0 and 10, z: last 4 digits of the serial number of the PCI Expansion unit, *w*: an integer between 0 and 2

/BB#*x*/PCI#*y*/PCIBOX#*z*/PSU#*w*
x: an integer between 0 and 15, *y*: an integer between 0 and 10, z: last 4 digits of the serial number of the PCI Expansion unit, *w*: 0 or 1

/BB#*x*/PCI#*y*/PCIBOX#*z*/LINKBD
x: an integer between 0 and 15, *y*: an integer between 0 and 10, z: last 4 digits of the serial number of the PCI Expansion unit

EXTENDED DESCRIPTION

- If you are to clear the link card of the PCI Expansion unit, confirm that the following conditions are both satisfied before executing the `clearstatus`.
  - The building block to which the target PCI Expansion unit is connected has been built into the physical partition (PPAR)
  - Power of that physical partition is on

The `clearstatus` only makes the reservation to clear, and the fault flag is not cleared. To clear the fault flag and build the FRU into system, it is necessary to power off the PPAR and then power on again.

- If you are to clear a target other than the link card of the PCI Expansion unit, confirm that the following conditions are both satisfied before executing the `clearstatus`.
  - The building block on which the target FRU is mounted has not been built into the physical partition (PPAR)
  - Power of that physical partition is off

  The `clearstatus` only clears the fault flag and it is not to say that after the clearance, the FRU is built into the system. To build the FRU into the system, it is necessary to use the `replacefru`(8), turn off the system input power and then turned on again, or start up PPAR.
- If you are to clear the CPU memory unit (CMUU or CMUL), the flag of the subordinate memory (DIMM) is also cleared.
- Execute the `clearstatus` after disabled the write inhibit to FRUID-ROM. If the write inhibit to FRUID-ROM is enabled, clear of the fault information of the FRU is not performed.
- The `Deconfigured` status cannot be cleared by this command. The `Deconfigured` status will be cleared automatically after the abnormality, the root cause of the `Deconfigured` status, is resolved.

EXAMPLES

EXAMPLE 1 Clears the fault flag of /BB#00/CMUL.

```
XSCF> clearstatus /BB#00/CMUL
```

EXAMPLE 2 Clears the fault flag of /MBU/PCI#0/PCIBOX#A3B5/IOB.

```
XSCF> clearstatus /MBU/PCI#0/PCIBOX#A3B5/IOB
```

EXIT STATUS

The following exit values are returned:

`0`	Successful completion.
`>0`	An error occurred.

NAME

console - Connects to the control domain console.

SYNOPSIS

console [[-q] -{y|n}] -p *ppar_id* [-f | -r] [-s *escapeChar*]

console -h

DESCRIPTION

`console` is a command to connect from the XSCF shell to the control domain console on the specified physical partition (PPAR).

There are two types of control domain consoles, RW console that is available for inputs and outputs and RO console that is available only for reference. To one PPAR, only one RW console can be connected, but more than one RO console can be connected. If one RW console has been already connected, attempting to connect to another RW console causes an error. Even in this case, if the user has `platadm` privilege or `pparadm` privilege for the target PPAR, it can be connected to the RW console forcibly. In this case, the RW console that is currently connected will be disconnected.

To end the control domain console and return to the XSCF shell, press the [Enter] key, and then enter "#" and "." (period).

Note – If you return to the XSCF shell from the domain console, or if you terminate the XSCF shell, both without logging out of the domain, you will be automatically logged out from the domain. At the same time, a termination signal might be sent to any program that is running in the background on the domain console.

Note – Suppose the OpenBoot PROM environmental variables input-device and output-device are set to "*keyboard*" and "*screen*," respectively, and you are using a control domain console through a USB keyboard and a graphics card. In this situation, do not use this command to connect the control domain console to an RW console. Specify `-r` to connect with an RO console. If this control domain console is inadvertently connected as an RW console, the console will no longer appear. To make the console appear again, terminate this command and restart the OS.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-f`	Forcibly connects to an RW console. The RW console that is currently connected will be disconnected. This can be specified only by a user who has `platadm` privilege or `pparadm` privilege for the target PPAR.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies PPAR-ID of the PPAR to be connected. For *ppar_id*, only one integer from 0 to 15 can be specified depending on the system configuration.
`-q`	Prevents display of messages, including prompt, for standard output.
`-r`	Connects to an RO console.
`-s` *escapeChar*	Specifies an escape symbol. The default is "#." As *escapeChar*, any of the following characters can be specified. Use the double quotation marks (") to enclose the character. "#", "@", "^", "&", "?", "*", "=", ".", "|" The specified escape symbol is enabled only in the session in which `console` is executed.
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- In the domain console, "#" used for the first letter in the line is recognized as an escape symbol. The escape symbol is specified for having the console perform a special processing. The examples of combination available for specifying with "#" are as shown below.

"#" + "?"	Outputs the status message.
"#" + "."(period)	Disconnects the control domain console.

- To input "#" for the console at the beginning of the line, press the [#] key twice.
- To display the information about the control domain console that is currently connected to the PPAR, use `showconsolepath`(8).

EXAMPLES

Example 1 Connect to the RW console of PPAR-ID 0.

```
XSCF> console -p 0

Console contents may be logged.
Connect to PPAR-ID 0?[y|n] :y
:
<<Contents of domain console input/output are displayed.>>
:
<<Pressing the [#] + [?] key combination outputs a status message.>>
console: read write mode.
:
<<Pressing the [#] + [.] key combination exits from the control domain console.>>
exit from console.
XSCF>
```

Example 2 Connect to the RW console of PPAR-ID 1 forcibly. At this time, specify "#" for escape symbol.

```
XSCF> console -p 1 -f -s "#"

Console contents may be logged.
Connect to PPAR-ID 1?[y|n] :y
:
<<Contents of domain console input/output are displayed.>>
:
<<Pressing the [#] + [?] key combination outputs a status message.>>
console: read write mode.
:
<<Pressing the [#] + [.] key combination exits from the control domain console.>>
exit from console.
XSCF>
```

Example 3 Connect to the RO console of PPAR-ID 2.

```
XSCF> console -p 2 -r

Console contents may be logged.
Connect to PPAR-ID 2? [y|n]: y
:
<<Contents of domain console input/output are displayed.>>
:
<<Pressing the [#] + [?] key combination outputs a status message.>>
console: read only mode.
:
<<Pressing the [#] + [.] key combination exits from the control domain console.>>
exit from console.
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

sendbreak(8), **showconsolepath**(8)

NAME

deleteboard - Releases the physical system board (PSB) from the physical partition (PPAR) configuration.

SYNOPSIS

deleteboard [[-q] -{y|n}] [-f] [-v] [-c disconnect] [[-m *function=mode*]...] *psb* [*psb*...]

deleteboard [[-q] -{y|n}] [-f] [-v] -c unassign [[-m *function=mode*]...] *psb* [*psb*...]

deleteboard [[-q] -{y|n}] [-f] -c reserve *psb* [*psb*...]

deleteboard -h

DESCRIPTION

deleteboard is a command to release a PSB from the PPAR configuration, in which the PSB is currently incorporated.

A physical system board (PSB) means one building block (BB).

deleteboard cannot be used on a SPARC M12-1/M12-2/M10-1/M10-4.

You can specify any of the following releasing methods depending on the conditions after releasing the PSB.

disconnect	Releases the PSB from the PPAR configuration and sets it to assigned state. Because the PSB remains being assigned to the PPAR configuration, you can incorporate it into the PPAR again by restarting the PPAR or executing addboard(8).
unassign	Releases the PSB completely from the PPAR configuration and sets it to system board pool state. The PSB in system board pool state can be incorporated or assigned to other PPAR configuration.
reserve	Does not release the PSB immediately from the PPAR configuration but just reserves it for releasing. After it is reserved, when the specified PPAR is stopped, the PSB is released from the PPAR configuration and set in system board pool state.

Privileges

To execute this command, any of the following privileges is required.

platadm	Enables execution for all PPARs.
pparadm	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS The following options are supported.

`-c disconnect` Releases the PSB from the PPAR configuration and sets it to assigned state. If you omit the `-c` option, `-c disconnect` is assumed specified.

`-c reserve` Reserves the releasing of PSB. If you omit the `-c` option, `-c disconnect` is assumed specified.

`-c unassign` Releases the PSB completely from the PPAR configuration and sets it to system board pool state. If you omit the `-c` option, `-c disconnect` is assumed specified.

`-f` Releases the specified PSB forcibly.

Caution – Releasing a PSB from PPAR forcibly by using the `-f` option may lead to serious problems on a process to which the CPU bound or on a process that is accessing to the device. For this reason, we recommend that users do not use the `-f` option during normal operation. If you specify the `-f` option, be sure to check the conditions of PPAR and business processes.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-m` *function=mode* Set up the operation mode and its value. Specify the operation mode to *function*. Any of the following can be specified.

`unbind`

Set up the operation mode when the resources are insufficient at the destination to which a logical domain that uses the resources of the PSB that is to be detached, is moved.

If resources are insufficient at the destination, execute any of the following:

- Sufficient resources must be secured at the destination by deleting the resources from the logical domain whose resources are to be moved, or from any other logical domains inside the PPAR.
- Sufficient resources must be secured at the destination by shutting down any logical domain inside the PPAR.

When `unbind` is specified to *function*, any of the following can be specified to *mode*. The default is `none`.

`none`	Do not secure resources at the destination. The `deleteboard` will produce an error if resources are insufficient. This option cannot be specified while the PPAR is running in factory-default state. If an error is produced, it is necessary to use the virtual DR feature of Oracle VM Server for SPARC to remove CPU cores or memory from logical domains.
`resource`	Secure resources at the destination by deleting resources from the logical domain whose resources are to be moved, or any other logical domains inside the PPAR. None of the logical domains is shut down to secure resources at the destination.
`shutdown`	Secure resources at the destination by deleting resources from the logical domain whose resources are to be moved, or from any other logical domains inside the PPAR. If resources were not secured, any of the logical domains inside the PPAR will shut down to secure resources at the destination.

`-n` Automatically responds to prompt with "n" (no).

`-q` Prevents display of messages, including prompt, for standard output.

`-v` Show the detailed progress report of the processing of PSB detachment. Ignored when executed along with the `-q`.

On the SPARC M12-2S, the command outputs a detailed progress report even if this option is omitted.

`-y` Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

psb Specifies the PSB number of the PSB to be released. You can make multiple specifications by separating them with spaces. The specification format is below.

xx-y

xx Specifies the BB-ID which is an integer from 00 to 15.

y It is fixed to 0.

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- If you specify `-c disconnect` while the PPAR is stopped or if the PSB has already been released from the PPAR configuration, no processing is performed. Also while the PPAR is in starting process or in stopping process, it causes an error.
- If you specify `-c unassign` even while the PPAR is stopped or the PSB has already been released from the PPAR configuration, the PSB is switched from the assigned state to the system board pool state. If the PSB has already been in the system board pool state, no processing is performed. While the PPAR is in starting process or in stopping process, it causes an error.
- If you specify `-c reserve` while the PPAR is stopped or the PSB has already been released from the PPAR configuration, the PSB is switched immediately from the assigned state to the system board pool state. If the PSB has already been in the system board pool state, no processing is performed.
- When a PSB is released, the hardware resources on the PSB are released from the Oracle Solaris. Therefore, it may take time to execute the command.
- The PSB assigned state is the state that the PSB is reserved for incorporating to the specified PPAR. By restarting the PPAR or executing `addboard`(8), the PSB is incorporated. You cannot incorporate or assign the PSB that has already been assigned to any other PPAR.

- The system board pool is the state that the PSB does not belong to any PPAR. Because the PSB in system board pool state does not belong to any PPAR, you can assign or incorporate it freely as long as it is defined in PCL.
- Even if the PPAR is not running, you can execute this command. However, to execute this command with specifying `-c unassign` or `-c disconnect` while the PPAR is running, the Logical Domains (LDoms) Manager needs to be running.
- When the PPAR is running in the factory-default state, an error is produced if `-m unbind=none` is specified. When the PPAR is running in the factory-default state, specify either `-m unbind=resource` or `-m unbind=shutdown`.
- If the PPAR DR feature is disabled, `deleteboard -c unassign` or `deleteboard -c disconnect` cannot be executed when the PPAR is running. Please refer to `setpparmode`(8) and `showpparmode`(8) for details on the PPAR DR feature.
- If CPU Activation error occurs in a PPAR, `deleteboard -c unassign` or `deleteboard -c disconnect` cannot be executed when the PPAR is running.

EXAMPLES

EXAMPLE 1 Put PSB00-0, 01-0, 02-0, 03-0 in the system board pool (execute the following command when the PPAR is powered off).

```
XSCF> deleteboard -c unassign 00-0 01-0 02-0 03-0
PSB#00-0 will be unassigned from PPAR immediately. Continue?[y|n] :y
PSB#01-0 will be unassigned from PPAR immediately. Continue?[y|n] :y
PSB#02-0 will be unassigned from PPAR immediately. Continue?[y|n] :y
PSB#03-0 will be unassigned from PPAR immediately. Continue?[y|n] :y
```

EXAMPLE 2 Reserve the PSBs 00-0, 01-0, 02-0, and 03-0 for releasing.

```
XSCF> deleteboard -c reserve 00-0 01-0 02-0 03-0
PSB#00-0 will be unassigned from PPAR after the PPAR restarts.
Continue?[y|n] :y
PSB#00-0 will be unassigned from PPAR after the PPAR restarts.
Continue?[y|n] :y
PSB#00-0 will be unassigned from PPAR after the PPAR restarts.
Continue?[y|n] :y
PSB#00-0 will be unassigned from PPAR after the PPAR restarts.
Continue?[y|n] :y
```

EXAMPLE 3 Put PSB01-0 in the system board pool on SPARC M10-4S (execute the following command when the PPAR is powered on).

```
XSCF> deleteboard -c unassign 01-0
PSB#01-0 will be unassigned from PPAR immediately. Continue?[y|n] :y
Start unconfigure preparation of PSB. [1200sec]
  0..... 30..... 60..... 90.....120end
Unconfigure preparation of PSB has completed.
Start unconfiguring PSB from PPAR. [7200sec]
  0..... 30..... 60..... 90.....120end
Unconfigured PSB from PPAR.
```

```
PSB power off sequence started. [1200sec]
  0..... 30..... 60..... 90.....120end
Operation has completed
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addboard(8), **replacefru**(8), **setpcl**(8), **setupfru**(8), **showboards**(8), **showpcl**(8), **showfru**(8), **showpparstatus**(8)

NAME

deletecodactivation - Deletes the CPU Activation key from the system.

SYNOPSIS

deletecodactivation [-f] [[-q] -{y|n}] -i *key-index*

deletecodactivation -h

DESCRIPTION

deletecodactivation is a command to delete the specified CPU Activation key from the SPARC M12/M10 systems.

Note – For details on the CPU Activation key, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

The system checks the number of CPU Activations and the number of CPU core resource that is allocated to a physical partition (PPAR). If deleting a CPU Activation key results in the number of CPU Activations being lower than the assigned number of CPU core resource, the CPU Activation key is not deleted from the system. To delete the CPU Activation key in this case, you need to reduce the assigned number of CPU core resource. Use setcod(8) to change the assigned number of CPU Activations.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-f	Deletes the specified CPU Activation key forcibly from the system.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-i *key-index*	Specifies the administration number of the CPU Activation key to be deleted from the system. Use showcodactivation(8) to check the administration number.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Delete the CPU Activation key with the administration number 10.

```
XSCF> deletecodactivation -i 10
Above Key will be deleted, Continue?[y|n]:y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

deletecodactivation(8), **setcod**(8), **showcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8), **showcodusage**(8)

NAME

deletepowerschedule - Deletes a schedule for powering on/off the automatic power control system (APCS).

SYNOPSIS

deletepowerschedule [`[-q] -{y|n}]` `{-r` *id* `|-p` *ppar_id* `|-a}`

deletepowerschedule `-h`

DESCRIPTION

`deletepowerschedule` is a command to delete a schedule for powering on/off the APCS.

Privileges

To execute this command, either of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Deletes all the schedule data.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies PPAR-ID for deleting a schedule. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*. All the schedules which are set to the specified PPAR-ID are deleted.
`-q`	Prevents display of messages, including prompt, for standard output.
`-r` *id*	Specifies the schedule data to be deleted. You can check *id* by using `showpowerschedule`(8).
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- By using `showpowerschedule`(8), you can check the contents of the currently set schedule.
- Use `addpowerschedule`(8) to set a schedule.
- Specifying non-existent *ppar_id* or *id*, or invalid option causes an error.
- The schedule data which has been set by using `addpowerschedule -a` to cover all PPAR will not be deleted by `deletepowerschedule -p` *ppar_id*.

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Delete all the schedules set to PPAR-ID 1.

```
XSCF> deletepowerschedule -p 1
PPAR-ID 1 Power schedule will be deleted, Continue?[y|n]:y
XSCF>
```

EXAMPLE 2 Delete the schedule set to the schedule ID 3.

```
XSCF> deletepowerschedule -r 3
ID 3 Power schedule will be deleted, Continue?[y|n]:y
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addpowerschedule(8), **setpowerschedule**(8), **showpowerschedule**(8)

NAME

deleteuser - Deletes an XSCF user account.

SYNOPSIS

deleteuser *user*

deleteuser -h

DESCRIPTION

deleteuser is a command to delete an XSCF user account.

Executing deleteuser deletes the user account and all the data associated with the user account, such as a password and a public key for Secure Shell (SSH).

When you delete a user account, the XSCF shell and the XSCF Web session which are being executed on the deleted user account end at the same time. Because the user account is deleted from the system, you cannot use the user account for login. You cannot delete the user account that is currently used for login.

Privileges

To execute this command, useradm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

user — Specifies the XSCF user account to be deleted.

EXAMPLES

EXAMPLE 1 Delete an XSCF user account.

```
XSCF> deleteuser jsmith
```

EXIT STATUS

The following exit values are returned.

0 — Indicates normal end.

>0 — Indicates error occurrence.

SEE ALSO

adduser(8), **disableuser**(8), **enableuser**(8), **showuser**(8)

NAME

deletevbootcerts - Deletes X.509 public key certificates used for performing Verified Boot of Oracle Solaris.

SYNOPSIS

deletevbootcerts `-p` *ppar_id* [`-f`] [[`-q`] `-{y|n}`] `-i` *index*

deletevbootcerts `-h`

DESCRIPTION

The `deletevbootcerts` command deletes X.509 public key certificates registered to physical partitions (PPAR) that are used for performing Verified Boot of Oracle Solaris.

The `deletevbootcerts` command can only delete the certificates that are added by users using the `addvbootcerts`(8), but not the certificates pre-installed in the system. Moreover, the certificates that are to be deleted, must be configured beforehand so that they are not used by Verified Boot. Configuration information can be confirmed by the `showvbootconfig`(8).

Privileges

To execute this command, either of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-f`	Forcibly deletes the specified X.509 public key certificates from a PPAR.
`-i` *index*	Specifies the management number of the X.509 public key certificate that is to be deleted. Management numbers from 1 through 5 can be allotted. Management numbers can be confirmed by the `showvbootcerts`(8).
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies the PPAR-ID of the PPAR whose X.509 public key certificates are to be deleted.
`-q`	Prevents display of messages, including prompt, for standard output.
`-y`	Automatically responds to prompt with "y" (yes).
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Delete the X.509 public key certificate that is registered with management

number 1 to PPAR-ID 0.

```
XSCF> deletevbootcerts -p 0 -i 1
Index 1, CUSTOM_CERT_1 will be deleted from PPAR-ID 0,
Continue?[y|n]:y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addvbootcerts(8), **setvbootconfig**(8), **showvbootcerts**(8), **showvbootconfig**(8)

NAME

diagxbu - Diagnose crossbar cable and crossbar unit (XBU).

SYNOPSIS

diagxbu [[-q] -{y|n}] -b *bb_id* -t *target_bb* [-t *target_bb*...]

diagxbu [[-q] -{y|n}] -b *bb_id* -p *ppar_id*

diagxbu -h

DESCRIPTION

diagxbu is a command to to diagnose a crossbar unit or cables which are connected to a crossbar unit, that is mounted on a SPARC M12-2S/M10-4S chassis or crossbar box.

The crossbar unit is mounted on SPARC M12-2S/M10-4S or a crossbar box, connected with a crossbar cable. The diagxbu conducts diagnosis by checking whether the connections between SPARC M12-2S/M10-4S chassis, connected by crossbar cables, are being properly established. To execute diagxbu, specifying SPARC M12-2S/M10-4S to be diagnosed, and SPARC M12-2S/M10-4S to be communicated are required.

SPARC M12-2S/M10-4S to be diagnosed can be specified with -b *bb_id*. To start the diagnosis, the physical system board (PSB) on SPARC M12-2S/M10-4S must be in system board pool, or powered off.

Any of the following SPARC M12-2S/M10-4S should be specified, according to the status of PSB on SPARC M12-2S/M10-4S, as the communication target.

- When a PSB is in the system board pool, or its power is off, specify SPARC M12-2S/M10-4S by -t *target_bb*.
- Several SPARC M12-2S/M10-4S chassis can be specified as the target of -t target_bb. In such a case, PSBs on SPARC M12-2S/M10-4S must not be incorporated in PPARs, or such PPARs should be in a powered off state.
- When a PSB is running on a physical partition (PPAR), specify PPAR by -p *ppar_id*. Only one -p *ppar_id* can be specified. At this time, the PPAR must be in a powered on state.

This command is not supported on SPARC M12-1/M12-2/M10-1/M10-4.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-b` *bb_id*	Specifies BB-ID of a SPARC M12-2S/M10-4S to diagnose. You can specify any of the following values for *bb_id*. For SPARC M12-2S/M10-4S (without crossbar box): an integer from 0 to 3 For SPARC M12-2S/M10-4S (with crossbar box): an integer from 0 to 15 It can be used along with `-t` or `-p`.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies the PPAR-ID of the PPAR on which the destination SPARC M12-2S/M10-4S is running. *ppar_id* can be specified with an integer 0-15 depending on the system configuration.
`-q`	Prevents display of messages, including prompt, for standard output.
`-t` *target_bb*	Specifies BB-ID of the target SPARC M12-2S/M10-4S. You can specify any of the following values for *bb_id*. For SPARC M12-2S/M10-4S (without crossbar box): an integer from 0 to 3 For SPARC M12-2S/M10-4S (with crossbar box): an integer from 0 to 15
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- An error occurs when a PSB on SPARC M12-2S/M10-4S specified with `-b` *bb_id* or `-t` *target_bb* is in one of the following statuses.
  - Being included in a PPAR and this PPAR is running.
  - Being included in a PPAR and this PPAR is at OpenBoot PROM of the booting process.
  - Being included in a PPAR and this PPAR is being powered on, powered off, or in the resetting process.
  - `addboard`(8) and `deleteboard`(8) are in execution for PSB.
- An error occurs when a PPAR specified with `-p` *ppar_id* is in one of the following states.

- No PPAR exists.
- PPAR is not running.

- An error occurs when `testsb`(8) or `diagxbu`(8) is being performed.
- Diagnosis is terminated when [Ctrl]+[C] has been entered while executing diagnosis of a crossbar cable or a crossbar unit.
- Diagnosis of the crossbar unit cannot be executed on a system which consists only one SPARC M12-2S/M10-4S chassis.
- Diagnosis target and connection target SPARC M12-2S/M10-4S chassis and PPAR is selected in the following ways:
  - Diagnosing crossbar boxes

    After replacing or adding a crossbar box, use the following procedure to diagnose whether connections using crossbar boxes are properly established.

    1. Execute the `showboards -a` command and check that power is turned off (the "Pwr" column shows "n" and the "Test" column does not show "Testing") and the "Fault" column shows "Normal" in all the PSBs.

    2. Among the PSBs in 1., select the SPARC M12-2S/M10-4S chassis that is to be diagnosed and specify all the other PSBs as the target of connection to execute the `diagxbu`.

    To conduct diagnosis with the above procedure, at least two PSBs , whose power has been turned off and the "Fault" column in the output of the `showboards -a` command shows "Normal", is necessary. If there are no more than one such PSBs or if there are no PPARs which should be powered off before replacing crossbar boxes, conduct diagnosis by specifying a running PPAR as follows. In such a case, the target SPARC M12-2S/M10-4S chassis and PPAR is to be selected in the following way.

    [In case the diagnosis target crossbar box is XBBOX#80 or XBBOX#81]

    There must be at least two BB-IDs with the range of 0 to 11 among the BB-IDs included in PPAR (specified by the `-p`) and the BB-IDs which are specified by the `-b`.

    [In case the diagnosis target crossbar box is XBBOX#82 or XBBOX#83]

    There must be at least one BB-ID within the range of 0 to 11 among the BB-IDs included in PPAR (specified by the `-p`) and at least one BB-ID within the range of 12 to 15 among the BB-IDs which are specified by the `-b`.

    However, it is not possible to conduct diagnosis on crossbar boxes if there is no powered off PSBs or if the system is comprised with only one SPARC M12-2S/M10-4S chassis.

  - Diagnosing SPARC M12-2S/M10-4S chassis

    After replacing or adding a SPARC M12-2S/M10-4S chassis, execute any of the following procedures to diagnose whether connections using SPARC M12-2S/M10-4S chassis is properly established.

- If there is a plan to add in a configured PPAR, execute `diagxbu` by specifying that PPAR-ID with the `-p` and the target BB-ID with the `-b`.

- In case of a PPAR, which has been planned to be added and the configuration has been determined but the PPAR has not yet constructed , execute the `diagxbu` with the `-b`, whose parameter is the BB-ID of the constituent SPARC M12-2S/M10-4S chassis that is to be diagnosed; all the other SPARC M12-2S/M10-4S chassis is to be specified with the `-t`.

- In case of a PPAR, which has been planned to be added, check the status of all the PSBs with the `showboards -a` and if any PSB is in a powered off state (the "Pwr" column shows "n" and the "Test" column does not show "Testing") and the "Fault" column shows "Normal", use any of their BB-ID with the `-t` , but if there are no such PSBs, use any of the PPAR-IDs with the `-p` when executing the `diagxbu`.

EXAMPLES

EXAMPLE 1 Diagnosing the crossbar cable that connects BB-ID 0 and BB-ID 1, and the crossbar unit. (In this case diagnosis completed successfully.)

```
XSCF> diagxbu -b 0 -t 1
XBU diagnosis is about to start, Continue?[y|n] :y
Power on sequence started. [7200sec]
  0..... 30..... 60..... 90.....120end
XBU diagnosis started. [7200sec]
  0..... 30..... 60..... 90.....120end
Power off sequence started. [1200sec]
  0..... 30..... 60..... 90.....120end
completed.

*Note*
Please confirm the error of XBU by "showlogs error".
In addition, please confirm the degraded of XBU by "showstatus".
```

EXAMPLE 2 Diagnosing the crossbar cable and the crossbar unit that connects PPAR-ID 0 and BB-ID 1. (In this case diagnosis completed successfully.)

```
XSCF> diagxbu -b 1 -p 0
XBU diagnosis is about to start, Continue?[y|n] :y
Power on sequence started. [7200sec]
  0..... 30..... 60..... 90.....120end
XBU diagnosis started. [7200sec]
  0..... 30..... 60..... 90.....120end
completed.
Power off sequence started. [1200sec]
  0..... 30..... 60..... 90.....120end
completed.

*Note*
Please confirm the error of XBU by "showlogs error".
In addition, please confirm the degraded of XBU by "showstatus".
```

EXAMPLE 3 Diagnosing the crossbar cable that connects PPAR-ID 0 and BB-ID 1, or crossbar unit. (The case where an error has been detected in the diagnosis.)

```
XSCF> diagxbu -b 1 -p 0
XBU diagnosis is about to start, Continue?[y|n] :y
Power on sequence started. [7200sec]
  0..... 30..... 60..... 90.....120end
 .
 .
completed.
Power off sequence started. [1200sec]
  0..... 30..... 60..... 90.....120end
completed.
A Hardware error occurred by XBU diagnosis.

*Note*
Please confirm the error of XBU by "showlogs error".
In addition, please confirm the degraded of XBU by "showstatus".
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showlogs(8), **showstatus**(8), **testsb**(8)

NAME

disableuser - Disables an XSCF user account.

SYNOPSIS

disableuser *user*

disableuser -h

DESCRIPTION

disableuser is a command to disable an XSCF user account.

This does not affect the session that you currently log in. The disabled user account cannot be used for the next and later login. This setting is applied not only to the Secure Shell (SSH) but also to the console connected in serial or in Telnet connection. A login to XSCF Web is also disabled.

All the data associated to the disabled user account such as a password or SSH key are stored in XSCF. Using enableuser(8) enables the disabled user again.

Privileges

To execute this command, useradm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

user — Specifies the XSCF user account to be disabled.

EXAMPLES

EXAMPLE 1 Disable an XSCF user account.

```
XSCF> disableuser jsmith
```

EXIT STATUS

The following exit values are returned.

0 — Indicates normal end.

>0 — Indicates error occurrence.

SEE ALSO

adduser(8), **deleteuser**(8), **enableuser**(8), **showuser**(8)

NAME

dumpcodactivation - Saves the CPU Activation key in a file.

SYNOPSIS

dumpcodactivation [-v] [-V] [[-q] -{y|n}] [-e [-P *password*]] [-u *user*] [-p *proxy* [-t *proxy_type*]] *url*

dumpcodactivation -h

DESCRIPTION

dumpcodactivation is a command to save the CPU Activation key, which is set for XSCF, to the specified file.

The CPU Activation key which is saved to the file can be restored to XSCF, by using the restorecodactivation(8).

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-e	Encrypts a file. You can specify a password using -P *password*. If you omit -P *password*, it displays a prompt for password entry. When you encrypt and save the CPU Activation key, you need a password for restoring it. If you lose the password, the CPU Activation key cannot be restored.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-P *password*	Sets a password for encryption. Specify it with the -e option. If you omit the -P option, a prompt for setting a password appears. You can specify this using up to 128 characters.
-p *proxy*	Specifies the proxy server to use for transfer. If you omit -t *proxy_type*, the default proxy type is http. Specify *proxy* in *servername*:*port* format.
-q	Prevents display of messages, including prompt, for standard output.
-t *proxy_type*	Specifies the proxy type. Specify it with the -p option. You can specify any of http, socks4, and socks5. The default is http.
-u *user*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry. You can specify this using up to 127 characters.

`-v`	Displays detailed information. This option is used to diagnose server problems.
`-V`	Displays detailed network activities. This option is used to diagnose network and server problems.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported..

url — Specifies URL to be the destination of saving the CPU Activation key. The following types of format are supported.

`http://`*server*[:*port*]/*path*/*file*
`https://`*server*[:*port*]/*path*/*file*
`ftp://`*server*[:*port*]/*path*/*file*
`file:///media/usb_msd/`*path*/*file*

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

CPU Activation key can only restore the data that was saved from a system with the same system serial number.

EXAMPLES

EXAMPLE 1 Save the CPU Activation key on the USB device.

```
XSCF> dumpcodactivation -v -V file:///media/usb_msd/cpukey.cfg
reading database ... ....................................*done
creating temporary file ... done
starting file transfer ...transfer from '/ssd/dumpcodactivation.mAuleL' to
'file:///media/usb_msd/cpukey.cfg'
* Closing connection #0
done
removing temporary file ... done
operation completed
XSCF>
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

dumpconfig(8), **restorecodactivation**(8)

NAME

dumpconfig - Saves the XSCF configuration information in a file.

SYNOPSIS

dumpconfig [-v] [-V] [[-q] -{y|n}] [-e [-P *password*]] [-c *comment*] [-u *user*] [-p *proxy* [-t *proxy_type*]] *url*

dumpconfig -h

DESCRIPTION

dumpconfig is a command to save the XSCF configuration information in the specified file.

The following are regarded as the XSCF configuration information.

- System specific information

  System specific information of each system includes the following information on the place of installation or network information etc.

  - NTP: NTP configuration
  - Altitude configuration
  - Power capping: power capping configuration
  - Power supply scheduling: power supply scheduling configuration, enable/disable scheduling, power recovery mode
  - Remote Power Management (RCIL): Remote Power Management configuration, Remote Power Management group configuration
  - XSCF network: take-over IP address, SSCP, host name, domain name, routing, DNS configuration, IP packet filtering rules
  - SSH/Telnet service: SSH service configuration, Telnet service configuration, hot public key, user public key, timeout value
  - HTTPS service: HTTPS service configuration, certification authority, web server private key, web server certificate
  - Remote maintenance service configuration information: REMCS configuration
  - CPU activation information: CPU activation key, CPU core resource information
  - Logical domain configuration information: logical domain configuration, startup reservation information
  - OpenBoot PROM environment variable configuration information: Oracle Solaris/OpenBoot PROM configuration
  - Verified Boot: Information of X.509 public key certificates used for performing Verified Boot of Oracle Solaris
  - Remote storage: Connection settings to remote storage

- System common information

  System common information includes the following information that are used among systems.

- User administration: user account, password policy, password, user privilege, lockout feature
- Audit: audit configuration
- Time: time zone, daylight saving time
- Warm-up operation time: warm-up operation time configuration
- Dual power feed: dual power feed configuration
- Air conditioning wait time: wait time before the system startup configuration
- Direct I/O function: enable/disable direct I/O function to PCI card mounted on a PCI expansion unit
- SSH/Telnet service: timeout value
- LDAP service: LDAP client, enable/disable LDAP
- Active Directory service: Active Directory client
- LDAP over SSL service: LDAP over SSL client
- Mail notification: SMTP configuration, mail notification function
- SNMP: SNMP agent, trap host, v3 trap host, User-based Security Model (USM) management information, View-based Access Control Model (VACM) management information
- System Board configuration: memory mirroring
- Remote maintenance service configuration information: ASR feature (enable/disable service tag)
- Physical partition configuration information: allocation status of physical partitions in PSB, configuration policy, I/O nullification option
- Physical partition mode configuration
- OpenBoot PROM environment variable configuration information: XSCF configuration
- High speed mode of the CPU of SPARC M12-2S

Using `restoreconfig`(8) enables restoration of the saved configuration information to XSCF. Please refer to `restoreconfig`(8) for details on the XSCF configuration information that will be restored.

The XSCF configuration information file is a file in which the XSCF configuration information is saved in the base64 encoded text format. Users can specify any name for this file. This file is encrypted by specifying the `-e` option.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS The following options are supported.

`-c` *comment*
: Sets a comment in the file. If there are several piece of the saved XSCF configuration information, this can be used for categorizing the files. The comment will not be loaded into the XSCF at restoration.

  Specify *comment* using up to 132 characters. You can use alphanumeric characters, double quotation marks ("), and spaces. Alphabets are case-sensitive. To use spaces, enclose the entire comment in double quotation marks. No special characters are available.

  An example of a comment is shown below.
  `-c "This is a valid comment"`

  Because spaces are used in the comment without enclosed in double quotation marks, the following example is incorrect.
  `-c This is an invalid comment`

  Because it includes unavailable special characters, the following example is incorrect.
  `-c "This! is @invalid"`

`-e`
: Encrypts a file. You can specify a password using `-P` *password*. If you omit - `P` *password*, it displays a prompt for password entry. When you encrypt and save the XSCF configuration information, you need a password for restoring it. If you lose the password, the XSCF configuration information cannot be restored.

`-h`
: Displays the usage. Specifying this option with another option or operand causes an error.

`-n`
: Automatically responds to prompt with "n" (no).

`-P` *password*
: Sets a password for encryption. Specify it with the `-e` option. If you omit the `-P` option, a prompt for setting a password appears. You can specify this using up to 128 characters.

`-p` *proxy*
: Specifies the proxy server to use for transfer. If you omit `-t` *proxy_type*, the default proxy type is http. Specify *proxy* in *servername*:*port* format.

`-q`
: Prevents display of messages, including prompt, for standard output.

`-t` *proxy_type*
: Specifies the proxy type. Specify it with the `-p` option. You can specify any of http, socks4, and socks5. The default is http.

`-u` *user*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry. You can specify this using up to 127 characters.
`-v`	Displays detailed information. This option is used to diagnose server problems.
`-V`	Displays detailed network activities. This option is used to diagnose network and server problems.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported..

url	Specifies URL to be the destination of saving the XSCF configuration information. The following types of format are supported. `http://`*server*[:*port*]/*path*/*file* `https://`*server*[:*port*]/*path*/*file* `ftp://`*server*[:*port*]/*path*/*file* `file:///media/usb_msd/`*path*/*file*

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

Note – If XSCF configuration information which was saved by `dumpconfig`, is restored by `restoreconfig`(8) on the same chassis or on a different chassis, confirm that the XSCF configuration information has been properly restored.

EXAMPLES

EXAMPLE 1 Save the XSCF configuration information on the USB device.

```
XSCF> dumpconfig -v -V file:///media/usb_msd/system.cfg
file '/media/usb_msd/system.cfg ' already exists
Do you want to overwrite this file? [y|n]: y
reading database ... .....................................*done
creating temporary file ... done
starting file transfer ...transfer from '/ssd/dumpconfig.mAuleL' to
'file:///media/usb_msd/system.cfg '
* Closing connection #0
done
removing temporary file ... done
operation completed
XSCF>
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

dumpcodactivation`(8)`, **restoreconfig**`(8)`

NAME

enableuser - Enables an XSCF user account.

SYNOPSIS

enableuser *user*

enableuser -h

DESCRIPTION

`enableuser` is a command to enable the disabled XSCF user account.

The enabled user account becomes available for login to the console by using Secure Shell (SSH). Using `enableuser` enables the account that is disabled by using `disableuser`(8).

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

user Specifies the XSCF user account to be enabled.

EXAMPLES

EXAMPLE 1 Enable a user account.

```
XSCF> enableuser jsmith
```

EXIT STATUS

The following exit values are returned.

`0` Indicates normal end.

`>0` Indicates error occurrence.

SEE ALSO

adduser(8), **deleteuser**(8), **disableuser**(8), **showuser**(8)

NAME

flashupdate - Updates the firmware.

SYNOPSIS

flashupdate -c check -m {xcp |xscf} -s *version*

flashupdate **[** [-q] -{y|n}**]** -c update -m {xcp |xscf} [-f] -s *version*

flashupdate -c sync

flashupdate -h

DESCRIPTION

flashupdate is a command to update the firmware.

This command updates the following firmware. By specifying -c check, you can check the availability of update in advance.

- Updating the entire XSCF Control Package (XCP) (XSCF firmware, Hypervisor firmware, OpenBoot PROM firmware, and Power-On Self-Test (POST) firmware)
- Updating XSCF firmware only

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c check	Checks whether or not the specified firmware can be updated.
-c update	Updates the specified firmware. When the system is in the multi-XSCF configuration, all XSCFs are updated at the same time.
-c sync	When the system is in multi-XSCF configuration, this option matches the version of each XSCF firmware. It is used when the FRU including XSCF is replaced.
-f	To update the firmware to the specified version, it is overwritten even if the same version has already been written.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-m xcp	Targets the entire XCP. Specify this option to check, register, and update the firmware.
-m xscf	Targets the XSCF firmware. Specify this option to check or update the firmware.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.

`-s` *version*	Specifies the firmware version for checking, registering, or updating the firmware. *version* specifies the major version and minor version in decimal. This can be specified using the following format. *xxyy* *xx* Major version *yy* Minor version
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- When XCP or XSCF firmware is updated, the XSCF is rebooted. Therefore, while the XSCF is in LAN connection, it is once disconnected.
- If there is any faulty Field Replaceable Unit (FRU), the firmware cannot be updated. Correct the fault of FRU before updating it.
- From XCP 2050 onwards, when firmware update is completed, the master XSCF and XSCF in the standby status is automatically switched.
- Do not execute the `switchscf`(8) when running the `flashupdate`.
- The `-m xscf` option is used when updating only the XSCF firmware.

EXAMPLES

EXAMPLE 1 Confirm whether or not the firmware can be updated to Version 0101.

```
XSCF> flashupdate -c check -m xcp -s 0101
```

EXAMPLE 2 Update the firmware from Version 0101 to Version 0102.

```
XSCF> flashupdate -c update -m xcp -s 0102
The XSCF will be reset. Continue? [y|n] :y
XCP update is started. [2400sec]
 0..... 30..... 60..... 90.....120.....150.....180.....210.....240.....-
270.....300.....330.....360.....390.....420.....450.....480.....510.....|
540.....570.....600
```

EXAMPLE 3 Update the XSCF firmware from Version 0101 to Version 0102.

```
XSCF> flashupdate -c update -m xscf -s 0102
The XSCF will be reset. Continue? [y|n] :y
XCP update is started. [2400sec]
 0..... 30..... 60..... 90.....120.....150.....180.....210.....240.....-
270.....300.....330.....360.....390.....420.....450.....480.....510.....|
540.....570.....600
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

version `(8)`

NAME

getflashimage - Downloads a firmware image file.

SYNOPSIS

getflashimage [-v] **[** [-q] -{y|n}**]** [-u *user*] [-p *proxy* [-t *proxy_type*]] *url*

getflashimage -l

getflashimage [[-q] -{y|n}**]** [-d]

getflashimage -h

DESCRIPTION

getflashimage is a command to download an XCP firmware image file used with flashupdate(8) or to download a PCI expansion unit firmware image file used with the ioxadm(8).

If there are two or more older versions of the same type of firmware image files on the XSCF unit, the oldest version of the firmware image file will be removed after a new version of the firmware image file is downloaded. After the firmware image file is downloaded successfully, the correctness of the file is verified, and the MD5 checksum value is displayed.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported..

-d	Deletes all the older versions of the XCP image file on the service processor.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-l	Displays the list of the XCP image files on the service processor.
-n	Automatically responds to prompt with "n" (no).
-p *proxy*	Specifies the proxy server to use for transfer. If you omit -t *proxy_type*, the default proxy type is http.Specify *proxy*in *servername*:*port* format.
-q	Prevents display of messages, including prompt, for standard output.
-t *proxy_type*	Specifies the proxy type. Specify it with the -p option. You can specify any of http, socks4, and socks5. The default is http.

`-u` *user*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry.
`-v`	Displays detailed information. This option is used to diagnose network and server problems.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported..

url

Specify URL for downloading the firmware image. The following types of format are supported.

`http://`*server*[:*port*]`/`*path*`/`*file*
`https://`*server*[:*port*]`/`*path*`/`*file*
`ftp://`*server*[:*port*]`/`*path*`/`*file*
`file:///media/usb_msd/`*path*`/`*file*

file is replaced with any of the following values.

`BBXCP`*vvvv*`.tar.gz`
`PCIBOX`*vvvv*`.tar.gz`

Also, *vvvv* is replaced with the version number consisting of four characters.

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Download an XCP firmware image file from the HTTP server.

```
XSCF> getflashimage http://imageserver/images/BBXCP2070.tar.gz
  0MB received
  1MB received
  2MB received
...
  88MB received
  89MB received
  90MB received
Download successful: 92977 Kbytes in 52 secs (1770.387 Kbytes/sec)
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a0
```

EXAMPLE 2 Download an XCP firmware image file from the FTP server.

```
XSCF> getflashimage ftp://imageserver/images/BBXCP2070.tar.gz
  0MB received
  1MB received
```

```
    2MB received
...
    88MB received
    89MB received
    90MB received
Download successful: 92977 Kbytes in 52 secs (1770.387 Kbytes/sec)
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a1
```

EXAMPLE 3 Download an XCP firmware image file by using the HTTP proxy server with port number 8080.

```
XSCF> getflashimage -p proxyserver:8080 http://imageserver/images/
BBXCP2070.tar.gz
    0MB received
    1MB received
    2MB received
...
    88MB received
    89MB received
    90MB received
Download successful: 92977 Kbytes in 52 secs (1770.387 Kbytes/sec)
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a2
```

EXAMPLE 4 Download an XCP firmware image file by using the user name and its password.

```
XSCF> getflashimage -u jsmith http://imageserver/images/
BBXCP2070.tar.gz
Password: [not echoed]
    0MB received
    1MB received
    2MB received
...
    88MB received
    89MB received
    90MB received
Download successful: 92977 Kbytes in 52 secs (1770.387 Kbytes/sec)
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a3
```

EXAMPLE 5 Download an XCP firmware image file from the USB memory stick.

```
XSCF> getflashimage file:///media/usb_msd/images/BBXCP2070.tar.gz
    0MB received
    1MB received
    2MB received
...
    88MB received
    89MB received
    90MB received
```

```
Download successful: 92977 Kbytes in 52 secs (1770.387 Kbytes/sec)
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a3
```

EXAMPLE 6 Download an XCP firmware image file from the FTP server with the -v option.

```
XSCF> getflashimage -v ftp://imageserver/images/BBXCP2070.tar.gz
Free space: 423MB
transfer from 'ftp://imageserver/images/BBXCP2070.tar.gz' to '/data/firm/
xcp//BBXCP2070.tar.gz'
  0MB received
  1MB received
  2MB received
...
  89MB received
  90MB received
* Closing connection #0
Download successful: 92977 Kbytes in 52 secs (1781.409 Kbytes/sec)
Checking file...
MD5: d5c6e721644cf6524107f79c6b9ebb10
```

EXAMPLE 7 If there is an XCP firmware image file of older version on the XSCF unit, download the image file from the FTP server.

```
XSCF> getflashimage ftp://imageserver/images/BBXCP2070.tar.gz
Existing versions:
        Version                 Size  Date
        BBXCP2052.tar.gz    95209343  Tue Mar 04 10:41:01 UTC 2014
  0MB received
  1MB received
...
  89MB received
  90MB received
Download successful: 92980 Kbytes in 62 secs (1505.969 Kbytes/sec)
Checking file...
MD5: 5cba43c3a76f719b6e59edff47dcc6d0
```

EXAMPLE 8 If there are two XCP firmware image files of older versions on the XSCF unit, download the image file from the FTP server. The oldest image file will be removed.

```
XSCF> getflashimage ftp://imageserver/images/BBXCP2092.tar.gz
Existing versions:
        Version                 Size  Date
        BBXCP2052.tar.gz    95209343  Tue Mar 04 10:41:01 UTC 2014
        BBXCP2070.tar.gz    95167872  Mon Mar 17 10:25:21 UTC 2014
Warning: About to delete existing old versions.
Continue? [y|n]: y
  0MB received
  1MB received
...
```

```
  89MB received
  90MB received
Download successful: 92980 Kbytes in 62 secs (1505.969 Kbytes/sec)
Checking file...
MD5: 5cba43c3a76f719b6e59edff47dcc6d0
```

EXAMPLE 9 If there is an older version of a PCI expansion unit firmware image file on the XSCF unit, download the image file from the FTP server.

```
XSCF> getflashimage ftp://imageserver/images/PCIBOX1209.tar.gz
Existing versions:
        Version                 Size  Date
        PCIBOX1208.tar.gz     143080  Thu Jul 21 11:14:17 JST 2016
  0MB received
Download successful: 137 Kbytes in 0 secs (3063.844 Kbytes/sec)
Checking file...
MD5: adcc61b2a650b432ecca84a7d81a25c5
```

EXAMPLE 10 If there are two or more older versions of PCI expansion unit firmware image files on the XSCF unit, download the image file from the FTP server. The oldest image file will be removed.

```
XSCF> getflashimage ftp://imageserver/images/PCIBOX1210.tar.gz
Existing versions:
        Version                 Size  Date
        PCIBOX1208.tar.gz     140749  Thu Jul 21 11:15:02 JST 2016
        PCIBOX1209.tar.gz     143080  Thu Jul 21 11:14:17 JST 2016
Warning: About to delete existing old versions.
Continue? [y|n]: y
  0MB received
Download successful: 137 Kbytes in 0 secs (4988.642 Kbytes/sec)
Checking file...
MD5: 5ccf246ffcbbb17ee6c0d996924bcd2a
```

EXAMPLE 11 Remove all firmware image files on the XSCF unit regardless of the type.

```
XSCF> getflashimage -d
XSCF>
```

EXAMPLE 12 Display a list of all firmware image files on the XSCF unit.

```
XSCF> getflashimage -l
Existing versions:
        Version                 Size  Date
        BBXCP2070.tar.gz    95209343  Tue Mar 04 10:41:01 UTC 2014
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

flashupdate(8), **ioxadm**(8)

NAME

getremotepwrmgmt - Obtains the setup file of the remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems.

SYNOPSIS

getremotepwrmgmt {-G *groupid*} [-v] [-u *user*] [-X *proxy* [-t *proxy_type*]] [-y|-n] *configuration_file*

getremotepwrmgmt -h

DESCRIPTION

getremotepwrmgmt is a command to obtain the settings information of remote power management group and to save it as a management information file in CSV format.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-G *groupid*	Specifies one group ID of the remote power management group. You can specify a value from 1 to 32.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-t *proxy_type*	Specifies the proxy type. Specify it with the -X option. You can specify any of http, socks4, and socks5. The default is http.
-u *user*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry.
-v	Displays detailed information. This option is used to diagnose network and server problems.
-X *proxy*	Specifies the proxy server to use for obtaining information. If you omit -t *proxy_type*, the default proxy type is http.Specify *proxy* in *servername*:*port* format.
-y	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

configuration_file Specifies URL to be the destination of saving the management information file.

The following types of format are supported.

`http://`*server*[:*port*]/*path*/*file*
`https://`*server*[:*port*]/*path*/*file*
`ftp://`*server*[:*port*]/*path*/*file*
`file:///media/usb_msd/`*path*/*file*

EXTENDED DESCRIPTION

- If non-existing group ID is specified for the `-G` option, an error occurs.
- You can use the management information file of the remote power management group obtained with `getremotepwrmgmt` as it is for when you execute `setremotepwrmgmt -c config`.
- Set the format of the management information file to CSV. For details on the format of the management information file, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.
- It is necessary to create the management information file for each group. If one management information file has multiple group IDs, it causes an error.
- If the password to access the distribution destination of the information is not set in the management information file and the default user is not specified, it is required to enter the password when distributing the information of the remote power management group.
- Use the following procedure for updating the settings of the existing remote power management group.

1. Execute `getremotepwrmgmt` to obtain the settings information of the remote power management group to be updated as management information file.
2. Edit the file obtained in Step 1.
3. Execute `setremotepwrmgmt -c disable` to disable the remote power management function of the remote power management group to be updated.
4. Specify the management information file that was edited in Step 2, and execute `setremotepwrmgmt -c config` to update the settings of the remote power management group.
5. Execute `setremotepwrmgmt -c enable` to enable the remote power management function of the updated remote power management group.

EXAMPLES

EXAMPLE 1 On the FTP site, obtain the management information file of the remote power

management group 1.

```
XSCF> getremotepwrmgmt -G 1 -X proxyserver:8080 -u jsmith ftp://
dataserver/data/rpm_group.1.conf
Group#01 remote power management group information is got.Continue? [y|n]:
y
transfer from '/tmp/rpm_group.1.conf' to 'ftp://dataserver/data/
rpm_group.1.conf'
Password:
* About to connect() to proxyserver port 8080
* Trying proxyserver... * connected
* Connected to proxyserver (xxx.xxx.xxx.xxx) port 8080
* Proxy auth using (nil) with user ''
* Server auth using Basic with user 'jsmith'
> PUT ftp://dataserver/data/rpm_group.1.conf HTTP/1.1
Authorization: Basic bHdhbmc6bHdhbmc=
User-Agent: dumpconfig
Host: dataserver:21
Pragma: no-cache
Accept: */*
Content-Length: 24720
Expect: 100-continue
< HTTP/1.1 100 Continue
< HTTP/1.1 200 OK
< Server: Sun-Java-System-Web-Proxy-Server/4.0
< Date: Mon, 04 Aug 2012 16:46:11 GMT
< Transfer-encoding: chunked
* Connection #0 to host proxyserver left intact
* Closing connection #0
The command completed successfully.
XSCF>
```

EXAMPLE 2 On the http site, obtain the management information file of the remote power management group 1.

```
XSCF> getremotepwrmgmt -G 1 -X proxyserver:8080 -u jsmith http://
dataserver/data/rpm_group.1.conf
Group#01 remote power management group information is got.Continue? [y|n]:
y
The command completed successfully.
XSCF>
```

EXAMPLE 3 On the USB device, obtain the management information file of the remote power management group 1.

```
XSCF> getremotepwrmgmt -G 1 file:///media/usb_msd/rpm_group.1.conf
Group#01 remote power management group information is got.Continue? [y|n]:
y
Making sure mount point is clear
Trying to mount USB device /dev/sda1 as /media/usb_msd
Mounted USB device
file '/media/usb_msd/rpm_group.1.conf' already exists
Do you want to overwrite this file? [y|n]: y
```

```
removing file 'file:///media/usb_msd/rpm_group.1.conf' ... done
reading database ... ..............*done
creating temporary file ... done
starting file transfer ...transfer from '/tmp/rpm_group.1.conf.HE1RZa' to
'file:///media/usb_msd/rpm_group.1.conf'
done
removing temporary file ... done
Unmounted USB device
The command completed successfully.
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

clearremotepwrmgmt(8) , **setremotepwrmgmt**(8), **showremotepwrmgmt**(8)

NAME

initbb - detach the SPARC M12-2S/M10-4S and the crossbar box from the system and initialize it to the factory default

SYNOPSIS

initbb [[-q] -{y|n}] [-f] -b *bb_id*

initbb -h

DESCRIPTION

initbb detaches the SPARC M12-2S/M10-4S and the crossbar box from the system configuration and initializes it to the factory default.

After you executed the initbb, the SPARC M12-2S/M10-4S and the crossbar box will be halted.

initbb cannot be used on a SPARC M12-1/M12-2/M10-1/M10-4.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-b *bb_id*	Specifies the SPARC M12-2S/M10-4S or the crossbar box to initialize. In *bb_id*, you can specify an integer from 0 to 15 in case of SPARC M12-2S/M10-4S, and from 80 to 83 in case of crossbar box.
-f	Forcibly detach the SPARC M12-2S/M10-4S or the crossbar box even though a system is abnormal condition.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- Execute the initbb in the master XSCF. Whether it is the master XSCF or not can be confirmed by using the showbbstatus(8).
- The initbb cannot initialize the master XSCF.
- After you executed the initbb, the SPARC M12-2S/M10-4S and the crossbar box will be detached from the system and be halted. To build it into the system again, power off and on the system or add on the target SPARC M12-2S/M10-4S and the crossbar box.
- By making the serial connection to XSCF on target SPARC M12-2S/M10-4S or the crossbar box, the status and the completion of initialization can be confirmed.

- To initialize the crossbar box, execute the command while the system power is off.
- To initialize the crossbar box, execute the command after the system turned off. If the system is not turned off, it results in an error.

  System turn-off condition means that all PPAR are turned off. If those are up and running, execution of poweroff -a will turn off all PPAR, and then system power will be disconnected. Execute the showhardconf(8) command and see the display of "System_Power:" ("On" or "Off"), to confirm the condition of system power.
- To initialize the SPARC M10-4S, execute the command while the physical system board on the SPARC M12-2S/M10-4S is in the system board pooling status, or while it is detached from the PPAR configuration. If the physical system board is not in the system board pooling status, it turns to the system board pooling status. If the physical system board is built into the PPAR configuration and the PPAR is in operation, it results in an error.
- To initialize the SPARC M12-2S/M10-4S, the PPAR which has the same ID as the target SPARC M12-2S/M10-4S needs to be powered off.
- After initialized the SPARC M12-2S/M10-4S, the PPAR which has the same ID as the target SPARC M12-2S/M10-4S becomes unable to power on. This can be resolved by either of the following methods.
  - Add on the initialized SPARC M12-2S/M10-4S and build it into the system again
  - Change the PPAR configuration to use another PPAR-ID
- When the serial number of the target SPARC M12-2S/M10-4S or the crossbar box has been used as the serial number of the system, it results in an error.
- If "n" is entered for the prompt at the command execution, it ends without initializing the SPARC M12-2S/M10-4S.
- When you specified the `-f` option, the SPARC M12-2S/M10-4S or the crossbar box is detached from the system configuration even though it is in the abnormal status. However, if the target SPARC M12-2S/M10-4S or the crossbar box is not normal, there is no guarantee that it will be initialized properly.
- After the command was executed, a CPU Activation key, which had been registered to the system is deleted. To retain a CPU Activation key, you must save this CPU Activation key by executing the `dumpcodactivation`(8) beforehand. Be sure to execute `initbb` before executing the `restorecodactivation`(8) for the restoration of the saved CPU Activation key.

  In a case where `initbb` was executed before saving the CPU Activation key, you must register a CPU Activation key again.
- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Initializes BB#01 to the factory default. After executed the command, BB#01 stops.

```
XSCF> initbb -b 1
You are about to initialize BB/XB-Box.
NOTE the following.
 1. BB/XB-Box is excluded from the system and halted.
 2. PPAR-ID of the same value as BB-ID becomes invalid.

Continue? [y|n] :y
```

EXAMPLE 2 Initialize XBBOX#81. The prompt is automatically given a "y" response. After executed the command, XBBOX#81 stops.

```
XSCF> initbb -y -b 81
You are about to initialize BB/XB-Box.
NOTE the following.
 1. BB/XB-Box is excluded from the system and halted.
 2. PPAR-ID of the same value as BB-ID becomes invalid.

Continue? [y|n] :y
```

EXAMPLE 3 Initializes BB#01. The prompt is hidden and automatically given a "y" response.

```
XSCF> initbb -q -y -b 1
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showbbstatus(8)

NAME

ioxadm - Manages the cards connected to the PCI Expansion unit, link card, and host server.

SYNOPSIS

ioxadm [-f] [-A] [-v] [-M] env [-e] [-l] [-t] [target [sensor]]

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `list` [*target*]

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `locator` [`on`|`off`] [*target*]

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `poweroff` *target*

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `poweron` *target*

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `reset` *target*

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `setled` [`on`|`off`|`blink`] *target led_type*

ioxadm `serial` *target serial_num*

ioxadm `-c check` *target* `-s` *version*

ioxadm [`-f`] [`-A`] [`-v`] [`-M`] `-c update` *target* `-s` *version*

ioxadm [`-f`] [`-A`] [`-M`] `versionlist` [*target*]

ioxadm `-h`

DESCRIPTION

`ioxadm` is a command to manage the cards connected to the PCI Expansion unit, link card, and host server.

To use `ioxadm`, it is necessary to specify the operand and the option required for the operand. What can be specified for the target device is a card mounted in the PCI slot built in the host server, PCI Expansion unit, or Field Replaceable Unit (FRU) in the PCI Expansion unit. The cards in the host server are identified by character strings indicating the paths from the host server to the cards.

For details, see the section of *target* of the option.

Privileges

To execute this command, any of the following privileges is required.

Privileges	Operands or options
`platop`	`env`, `list`, `versionlist` operands
`platadm`	`env`, `list`, `versionlist`, `locator`, `poweroff`, `poweron` operands, and `-c` option
`fieldeng`	All operands

For details on user privileges, see `setprivileges`(8).

OPTIONS The following options are supported.

`-A` Hides the headers of outputs and displays only the analyzable outputs. Each field is separated with a single tab.

`-c check` Checks whether the firmware can be applied. Checks the firmware of the version and *target* specified by the operand. Only a PCI expansion unit can be specified in *target*.

`-c update` Updates the firmware of the version and *target* specified by the operand. Only a PCI expansion unit can be specified in *target*.

Specifying a PCI expansion unit updates the firmware on the PCI expansion unit and link card.

Note – During the update specified in this option, after "Firmware update is started." appears, nothing else is displayed for about 30 minutes until "Firmware update has been completed." appears.

`-f` Executes the command forcibly ignoring the warning.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-M` Displays text one screen at a time.

`-s` *version* Specifies the version of the firmware. Specifies when checking, registering, or updating the firmware. Specifies the major version and minor version in *version* continuously.

The version of firmware is specified by four figures such as "*xxyy*." The numbers have the following meanings.

xx	Major release number
yy	Minor release number

`-v` Displays detailed information. For details, see each operand.

target

Specifies the target device. You can specify any of the cards mounted in the PCI slot built in the host server, PCI Expansion unit or the FRU in the PCI Expansion unit.

The cards mounted in the slots of the host server are identified by *host_path*.

host_path depends on the platform and indicates the path to the slot of the host server in which the card is mounted. *host_path* is indicated in the following format.

```
BB#0-PCI#0, PCI-E   slot0
```

PCI Expansion unit (*box_id*) is identified by the serial number.

To refer to the serial number, use "`PCIBOX#`*nnnn*." "*nnnn*" is the last four digits of the serial number of PCI Expansion unit.

Depending on the specified contents, only one of the components of PCI Expansion unit may be affected. For example, the I/O Board and power supply unit can be turned on and off independently.

The FRU (*fru*) in PCI Expansion unit is identified as follows.

`PCIBOX#`*nnnn*`/IOB` – I/O Board

`PCIBOX#`*nnnn*`/FANBP` – Fan backplane

`PCIBOX#`*nnnn*`/PSU#0` – Power supply unit in the rear lower bay

`PCIBOX#`*nnnn*`/PSU#1` – Power supply unit in the rear upper bay

`PCIBOX#`*nnnn*`/FAN#0` – Fan unit in the front left bay

`PCIBOX#`*nnnn*`/FAN#1` – Fan unit in the front central bay

`PCIBOX#`*nnnn*`/FAN#2` – Fan unit in the front right bay

OPERANDS The following operands are supported.

`env` [-e] [-l] [-t] [*target* [*sensor*]]

Displays the summary of the environment status of the PCI Expansion unit or link card.

`-e` Displays the status regarding electricity (measurement values of the current and voltage, rotation speed of the fan, and settings of the switches).

`-l` Displays the status of LED.

`-t` Displays the measurement value of the temperature sensor.

target See the section of *target* of the option. For the contents unique to the `env` operand, see the following.

sensors Specifies the sensor whose data is to be displayed. If not specified, the information on all sensors is displayed. It is specified with *target*.

If the FRU in the PCI Expansion unit or card in the slot of the host server is specified as *target*, `env` just displays the environment information on the FRU.

If none of the options, `-e`, `-l` or `-t` is specified, the information on all sensors are displayed. If no sensor is specified, the information on all sensors is displayed. If *target* is not specified, the information on all PCI Expansion units is displayed.

If *box_id* is specified as *target*, `env` displays the list of the sensor measurement values for all FRUs and link cards mounted in the specified PCI Expansion unit.

The options of `env` can be used in any combinations.

The following information is also applied to `env` and the displayed result.

- The result is displayed in a table format. Each FRU sensor is displayed in the first column. What is entered in the second column is the sensor name. It is displayed as `T_AMBIENT` in the case of the ambient temperature and `V_12V_0V` in the case of the measurement value of the voltage of the 12V rail. The third, fourth, and fifth columns shows the sensor measurement value (`Value`), sensor resolution (`Res`), and unit(`Units`), respectively. See Example 1.
- Each FRU has various sensors. To specify multiple values in *sensor*, specify them separating the values with spaces. The values which can be specified in *sensor* are shown in the `Sensor` column of Example 1. `Units` displays the degrees C, voltage, ampere, SWITCH, and RPM.
- The name of *sensor* depends on FRU and varies according to the type of FRU. It may vary among each FRU in some cases.
- If the `-v` option is specified, the detailed information is output. In addition to the normal output, the maximum value and minimum value (`Max`, `Min`) supported by the sensor as well as the upper and lower warning thresholds (`Min Alarm`, `Max Alarm`) are included in the outputs.
- The LED indicator does not support these fields.
- The filed including "-" indicates that the setting is not supported. For example, there is no warning threshold regarding the lower limit of the temperature.

led_type

Specifies the FRU LED which can be controlled by XSCF. It is specified with the `setled` operand. The following table shows the statuses of the LEDs which can be controlled by the values of the `setled` operand: `off`, `on`, and `blink`. `Y` (yes) shows the controllable LEDs. `N` (no) shows the uncontrollable LEDs.

LED	Name	off	on	blink
LOCATE	Locate	Y	N	Y

* All LED statuses can be set for the `OVERTEMP` LED and the `ACTIVE` LED of the chassis. However, the LED status after change may not be displayed because the status of the LED is frequently updated by hardware.

Note – Other LEDs are not controlled by software. The list of the LEDs included in the system can be displayed by using the `env -l` operand.

`list` [*target*]

Displays the list of the PCI Expansion unit managed by the system.

If `list` is executed without specifying *target*, the list of the PCI Expansion unit is displayed. (One PCI Expansion unit is displayed in each line.) Each line includes the identifier unique to PCI Expansion unit and the name unique to the host of the link card. See Example 3.

If the command is executed by specifying the argument of PCI Expansion unit or the path of the link card, a single line including the specified FRU is displayed. If *host path* is specified, only the information of the link card is displayed. If the detailed option [`-v`] is set, the detailed information of FRU is included in the output. See Example 4 and 5.

`locator` [`on` | `off`] [*target*]

Sets or inquires the status of the chassis (locator) LED.

If `locator` is executed without specifying an option, the current status of the LED regarding the specified FRU is output.

To use the field of the option, the *target* argument is essential. The only *target* which can be specified is the PCI Expansion unit.

`on`	Illuminates the LED.
`off`	Turns off the LED.

The chassis locator is the orange LED. If FRU is specified, the yellow service LED of FRU is used with the chassis (locator) LED.

There is only one FRU which activates the location indicators simultaneously in the chassis of PCI Expansion unit. If the chassis (locator) LED is turned off, the (service) FRU LED stops blinking. See Example 6.

`poweroff` *target*

Indicates that the specified FRU was shut down, the corresponding LED was turned on, and the FRU has become removable. If *target* is `PSU`, use it with the `-f`.

Note – Do not remove both of the two power supply units (PSU) of the same PCI Expansion unit. If the two power supply units are shut down, the power of PCI Expansion unit cannot be turned on again from the command line. The power of PCI Expansion unit needs to be turned on only from the chassis.

Note – The LED and fan may operate even if one of the power supply units is shut down, because they are powered from two power supply units.

`poweron` *target*

Recovers all power supply to the I/O Boards. Or reactivates the power supply from a removable power source. If a new power supply unit is installed and the POWER switch is turned on, or the I/O board is connected to a link card with a power source, the power supplies are automatically turned on. However, as for the power supply units or I/O Boards whose power has already been turned off for removal, this command can be used to turn on the power again only if the position of the POWER switch is ON.

`reset` *target*

Reinitializes the FRU components used for monitoring of the PCI Expansion unit environment. If the I/O Board or link card is specified, the bridge controller of the link card is reset and reinitialized. If PCI Expansion unit is specified, the fan controller and demultiplexer of PCI Expansion unit as well as the bridge controller associated with PCI Expansion unit are reset and reinitialized.

`setled` [`on`|`off`|`blink`] *target led_type*

Sets the LED status.

`off`	Turns off the LED.
`on`	Illuminates the LED.
`blink`	Makes the LED blink.

For details on the LED types, see *led_type*.

The only *target* which can be specified is the PCI Expansion unit.

`serial` *target serial_num*

Specifies a serial number of the PCI Expansion unit. This operand is used to re-register the serial number of the PCI Expansion unit when replacing the I/O board and Fan backplane at a time.

The only *target* which can be specified is the PCI Expansion unit.

`versionlist` [*target*]

If either the PCI Expansion unit or the link card is specified in the target, the firmware version of each device is compared according to the combination of the PCI Expansion unit and the link card.

If "versionlist" is executed with specifying a target, the comparison result of firmware versions is displayed. Comparison result is displayed in tabular form. Each line contains information on the device name of the PCI Expansion unit, firmware version of the PCI Expansion unit, device name of the link card, firmware version of the link card and the comparison result (mismatch : there is some difference, equal: there is no difference). In case of "mismatch", the respective line starts with an asterisk. Please refer to example 7.

EXAMPLES

EXAMPLE 1 Display the measurement values of the temperature, voltage, current, and fan rotation speed sensors.

```
XSCF> ioxadm env -te PCIBOX#A3B5
Location Sensor Value Res Units

PCIBOX#A3B4/PSU#0 FAN 3224.324 - RPM
PCIBOX#A3B4/PSU#1 FAN 3224.324 - RPM
PCIBOX#A3B4/FAN#0 FAN 3522.314 - RPM
PCIBOX#A3B4/FAN#1 FAN 3522.314 - RPM
PCIBOX#A3B4/FAN#2 FAN 3522.314 - RPM
PCIBOX#A3B4/FAN#0 FAN 3522.314 - RPM
PCIBOX#A3B4/IOB T_INTAKE 32.000 - C
PCIBOX#A3B4/IOB T_PART_NO1 32.000 - C
PCIBOX#A3B4/IOB T_PART_NO2 32.000 - C
PCIBOX#A3B4/IOB T_PART_NO3 32.000 - C
PCIBOX#A3B4/IOB V_12_0V 12.400 - V
PCIBOX#A3B4/IOB V_3_3_NO0 3.320 - V
PCIBOX#A3B4/IOB V_3_3_NO1 3.310 - V
PCIBOX#A3B4/IOB V_3_3_NO2 3.310 - V
PCIBOX#A3B4/IOB V_3_3_NO3 3.320 - V
PCIBOX#A3B4/IOB V_1_8V 1.820 - V
PCIBOX#A3B4/IOB V_0_9V 0.910 - V
```

EXAMPLE 2 Display all sensor measurement values regarding one link. Hides the header.

```
XSCF> ioxadm -A env BB#00-PCI#1
BB#00-PCI#1 LINK On - LED
BB#00-PCI#1 MGMT On - LED
```

EXAMPLE 3 Display the paths of all PCI Expansion unit or link cards.

```
XSCF> ioxadm list
PCIBOX      Link
PCIBOX#0033 BB#00-PCI#1
PCIBOX#12B4 BB#01-PCI#0
```

In Example 3, the connection between the PCI Expansion unit and the link card in the host server are displayed by `list`. The I/O Board and `PCIBOX#0033` with a power source are connected to the host server via the link card. `Link` shows the link card connected to the I/O Board.

EXAMPLE 4 Display a single PCI Expansion unit.

```
XSCF> ioxadm list PCIBOX#12B4
PCIBOX      Link
PCIBOX#12B4 BB#01-PCI#0
```

EXAMPLE 5 Display the card in the detailed output mode with the header hidden using the host path.

```
XSCF> ioxadm -A -v list BB#00-PCI#1
BB#00-PCI#1 F20 - 000004 5111500-01 On
```

EXAMPLE 6 Display the status of the locator LED of the PCI Expansion unit.

```
XSCF> ioxadm locator PCIBOX#12B4
Location          Sensor  Value Resolution Units
PCIBOX#12B4       LOCATE  Blink -          LED
```

The white LED of the chassis of PCI Expansion unit has a POWER button. This button can be used to switch the status of the white locator LED of the chassis to "Off" or "High-speed." If the locator LED is turned off using this button, the FRU service LED of high-speed blinking is cleared.

EXAMPLE 7 Firmware version of the PCI Expansion unit, firmware version of the link card at the point of connection and the comparison result is displayed.

```
XSCF> ioxadm versionlist
  PCIBOX      Ver. Link        Ver. Info
  PCIBOX#0033 1010 BB#00-PCI#1 1010 equal
* PCIBOX#12B4 1010 BB#00-PCI#0 1011 mismatch
```

EXAMPLE 8 Check whether it is possible to update the PCI expansion unit firmware to version 1180.

```
XSCF> ioxadm -c check PCIBOX#12B4 -s 1180
Firmware update executable.
XSCF>
```

EXAMPLE 9 Update the PCI expansion unit firmware to version 1180.

```
XSCF> ioxadm -c update PCIBOX#12B4 -s 1180
Firmware update is started. (version=1180)
Firmware update has been completed.
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

nslookup - Refers to the Internet name server for the host name.

SYNOPSIS

nslookup *hostname*

nslookup -h

DESCRIPTION

nslookup is a command to refer to the Internet name server for the specified host name.

The following information is displayed.

Server	Name of the Internet name server
Address	IP address of the Internet name server
Name	Host name
Address	IP address of the host

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

hostname	Specifies the host name set in the network interface. You can specify it by the Fully Qualified Domain Name (FQDN) or an abbreviation.

EXTENDED DESCRIPTION

Executing nslookup with nothing specified causes an error.

EXAMPLES

EXAMPLE 1 Display the information of the host name scf0-hostname0.

```
XSCF> nslookup scf0-hostname0
Server:  server.example.com
Address:  192.168.1.100

Name:    scf0-hostname0.example.com
Address:  192.168.1.101
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

password - Sets the password of the XSCF user account and the effective period.

SYNOPSIS

password [`-e` *days*| *date*|`NEVER`] [`-i` *inactive*] [`-M` *maxdays*] [`-n` *mindays*] [`-w` *warn*] [*user*]

password `-h`

DESCRIPTION

`password` is a command to set the password of the XSCF user account and the effective period of the password.

The password is specified within 32 characters. The following characters can be used.

- abcdefghijklmnopqrstuvwxyz
- ABCDEFGHIJKLMNOPQRSTUVWXYZ
- 0123456789
- !@#$%^&*[]{}()_-+='~,><⁄"?;:[SPACE]

If `password` is executed with one or more options specified, the effective period of the account is changed. For the default value, see `setpasswordpolicy`(8).

If `password` is executed with option omitted, the prompt to change the password is displayed.

If `password` is executed with the *user* operand omitted, the current user account becomes the target.

The user account must be local no matter whether the user name is specified. If the user account is not local, the `password` will cause an error.

Privileges

To execute this command, the following privileges are required.

`useradm`	The user can configure a password and effective period of any user account unconditionally.
the other privileges	The user can configure only its own password.

For details on user privileges, see `setprivileges`(8).

OPTIONS The following options are supported.

`-e` *days*|*date*|`Never` Sets the number of days of the effective period of the XSCF user account beginning today in *days*. 0 to 10730 can be specified.If the result of adding the value specified in *days* to the current date exceeds January 2038, the specified value becomes invalid and the command is not executed.

Sets the expiration date of the account in *date*. Specifies a date before January 2038. This can be specified using one of the following format.

mm/*dd*/*yy* (10/30/12)
yyyy-*mm*-*dd* (2012-10-30)
yy-*mm*-*dd* (12-10-30)
dd-*Mmm*-*yy* (30-Oct-12)
dd-*Mmm*-*yyyy* (30-Oct-2012)
dd Mmm yy ("30 Oct 12")
Mmm dd, *yy* ("Oct 30, 12")
Mmm dd, *yyyy* ("Oct 30, 2012")

If a format including a space is used, put it in double quotation marks ("). This is not case-sensitive.

`Never` indicates that the account has already expired. This is not case-sensitive.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-i` *inactive* Sets the number of days from the expiration of the password to account lock. This value is assigned when a new user account is created. The default is -1. If the value is -1, it indicates that the account is not locked even after the expiration of the password. This is specified with an integer from -1 to 999999999.

`-M` *maxdays* Sets the maximum number of days when the password is effective. This value is assigned when a new user account is created. The default is `999999`. This is specified with an integer from 0 to 999999999.

`-n` *mindays* Sets the minimum number of days from a change in the password to the next change. The default is 0. This indicates that the password can be changed at any time. This is specified with an integer from 0 to 999999999.

This value is assigned to a new user account when the account is created.

-w *warn*	Sets the number of days until the actual expiration after the issuance of the alarm of the expiration date of the password to the user. This value is assigned when a new user account is created. The default is 7. This is specified with an integer from 0 to 999999999.

OPERANDS

The following operand is supported.

user	Specifies the XSCF user account name.

EXTENDED DESCRIPTION

- When the password is changed with another user specified in the *user* operand, the password policy of the system is not reflected automatically. Use the *user* operand if the default password of a new user is to be created, the user account expires, or you forget the password. Be sure to specify a password in compliance with the password policy of the system when changing the password of another user. You can execute `showpasswordpolicy`(8) to refer to the current password policy.
- When the user with the `useradm` privilege attempts to execute the command, the password and effective period of another user account can be changed, even in a case where the effective period of the specified user account had already been specified with a different value.

  In this case, the password and effective period will be overwritten with the specified values.
- When the user with the `useradm` privilege attempts to execute the command, the password can be set regardless of the value specified in the `setpasswordpolicy`(8) command.

EXAMPLES

EXAMPLE 1 Set the expiration date of the password to February 2, 2012.

```
XSCF> password -e 2012-02-02
```

EXAMPLE 2 Lock the account 10 days after the expiration of the password.

```
XSCF> password -i 10
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setpasswordpolicy(8), **showpasswordpolicy**(8)

NAME

ping - Sends the ECHO_REQUEST packet of ICMP to the host on the network.

SYNOPSIS

ping [-c *count*] [-q] *host*

ping -h

DESCRIPTION

ping is a command to extract ECHO_RESPONSE from the specified host or gateway using the ECHO_REQUEST datagram of ICMP.

If ping can be executed normally, you can determine that the network between XSCF and the specified host or gateway is normal. It is also possible to measure the network performance from the result.

Privileges

To execute this command, any of the following privileges is required.

- Case that "localhost," the loop-back address "127.0.0.0/8," and the interface of the SSCP link is specified in *host*

  fieldeng

- Other than above

  No privileges are required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c *count*	Specifies the frequency to send a packet. If the specified number of packets is sent and the responses are received, ping is terminated. If omitted, packets continue to be sent until termination by the user.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-q	Controls the output. Outputs only at the time of start and termination without displaying the progress.

OPERANDS

The following operands are supported.

host	Specifies the host name or IP address to which a packet is to be sent.

EXAMPLES

EXAMPLE 1 Send a packet to the host name, scf0-hostname0, three times.

```
XSCF> ping -c 3 scf0-hostname0
PING scf0-hostname0 (192.168.1.100): 56 data bytes
64 bytes from 192.168.1.100: icmp_seq=0 ttl=64 time=0.1 ms
64 bytes from 192.168.1.100: icmp_seq=1 ttl=64 time=0.1 ms
64 bytes from 192.168.1.100: icmp_seq=2 ttl=64 time=0.1 ms
```

```
--- scf0-hostname0 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 0.1/0.1/0.1 ms
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

poweroff - Shuts down the physical partition (PPAR).

SYNOPSIS

poweroff [[-q] -{y|n}] [-f] [-M] -p *ppar_id*

poweroff [[-q] -{y|n}] [-M] -a

poweroff -h

DESCRIPTION

poweroff is a command to shut down PPAR.

Shuts down all of the specified PPARs. PPAR is shut down after the execution of the normal shut down processing for the Oracle Solaris.

Privileges

To execute this command, any of the following privileges is required.

platadm, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Shuts down all of the PPARs in operation. Only the users with the platadm and fieldeng privileges can specify this option. They shut down even during waiting for warm-up or air-conditioning, or start processing of PPARs.
-f	Forcibly shuts down the PPAR specified by XSCF. It is used with the -p option.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-n	Automatically responds to prompt with "n" (no).
-p *ppar_id*	Specifies the PPAR-ID of the physical partition to be shut down. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*. It does not shut down during waiting for warm-up or air-conditioning, or start processing for PPAR.
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- If the Oracle Solaris of the logical domain is running, the shutdown processing equivalent to the `-i 5` option of `shutdown` is executed.
- You cannot shut down PPAR if the Oracle Solaris of the logical domain is in operation. Execute `poweroff` again after completion of start.
- If the Oracle Solaris of the logical domain is running in the single user mode, you cannot shut it down using `poweroff`. Execute `shutdown` by the logical domain.
- When you changed the configuration of the logical domain, execute the `ldm add-spconfig` command on the control domain, to store the latest configuration information in XSCF. If you do not store the information, the PPAR stop processing may fail to work properly.
- If `poweroff` is executed, the shutdown result is displayed in the following format for each of the specified PPARs.

`Powering off`	Indicates normal end.
`Not powering off`	Indicates error occurrence, which prevented shutdown. An error message is displayed with the result.

- You can confirm whether each PPAR on the system has shut down by using `showdomainstatus`(8).
- The shutdown process may take time, depending on the status of the guest domain. For details, refer to "Chapter 6 Starting/Stopping the System" of *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.
- If `poweroff` is executed on the logical domain when any of the guest domains is in a state other than "Active", the powering off takes time.

EXAMPLES

EXAMPLE 1 Shut down all PPARs.

```
XSCF> poweroff -a
PPAR-IDs to power off:00,01,02,03
Continue? [y|n]:y
00:Powering off
01:Powering off
02:Powering off
03:Powering off

*Note*
 This command only issues the instruction to power-off.
 The result of the instruction can be checked by the "showpparprogress".
XSCF>
```

EXAMPLE 2 Shut down PPAR-ID 0.

```
XSCF> poweroff -p 0
PPAR-IDs to power off:00
Continue? [y|n]:y
00:Powering off

*Note*
 This command only issues the instruction to power-off.
 The result of the instruction can be checked by the "showpparprogress".
XSCF>
```

EXAMPLE 3 Forcibly shut down PPAR-ID 0.

```
XSCF> poweroff -f -p 0
PPAR-IDs to power off:00
The -f option will cause domains to be immediately resets.
Continue? [y|n]:y
00:Powering off

*Note*
 This command only issues the instruction to power-off.
 The result of the instruction can be checked by the "showpparprogress".
XSCF>
```

EXAMPLE 4 Shut down PPAR-ID 2. The prompt is automatically given a "y" response.

```
XSCF> poweroff -y -p 2
PPAR-IDs to power off:02
Continue? [y|n]:y
02:Powering off

*Note*
 This command only issues the instruction to power-off.
 The result of the instruction can be checked by the "showpparprogress".
XSCF>
```

EXAMPLE 5 Shut down PPAR-ID 2. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> poweroff -q -y -p 2

XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

poweron(8), **reset**(8), **showdomainstatus**(8), **showpparprogress**(8)

NAME

poweron - Starts the physical partition (PPAR).

SYNOPSIS

poweron [[-q] -{y|n}] [-M] -p *ppar_id*

poweron [[-q] -{y|n}] [-M] -a

poweron -h

DESCRIPTION

poweron is a command to start PPAR.

Starts all of the specified PPARs.

Privileges

To execute this command, any of the following privileges is required.

platadm, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Starts all of the PPARs whose setup has been completed. Only the users with the platadm or fieldeng privilege can specify this option. "PPAR whose setup has been completed" means PPAR whose setting has been completed by setupfru(8).
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-n	Automatically responds to prompt with "n" (no).
-p *ppar_id*	Specifies the PPAR-ID of the physical partition to be started. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

- If `poweron` is executed, the start result is displayed in the following format for each of the specified PPARs.

`Powering on`	Indicates normal start.
`Not Powering on`	Indicates error occurrence, which prevented start. An error message is displayed with the result.

- You can confirm whether PPAR has been started by using `showhardconf`(8).

EXAMPLES

EXAMPLE 1 Start all PPARs.

```
XSCF> poweron -a
PPAR-IDs to power on:00,01,02,03
Continue? [y|n]:y
00:Powering on
01:Powering on
02:Powering on
03:Powering on

*Note*
 This command only issues the instruction to power-on.
 The result of the instruction can be checked by the "showpparprogress".
```

EXAMPLE 2 Start PPAR-ID 0.

```
XSCF> poweron -p 0
PPAR-IDs to power on:00
Continue? [y|n]:y
00:Powering on

*Note*
 This command only issues the instruction to power-on.
 The result of the instruction can be checked by the "showpparprogress".
```

EXAMPLE 3 Start PPAR-ID 0. The prompt is automatically given a "y" response.

```
XSCF> poweron -y -p 0
PPAR-IDs to power on:00
Continue? [y|n]:y
00:Powering on

*Note*
 This command only issues the instruction to power-on.
 The result of the instruction can be checked by the "showpparprogress".
XSCF>
```

EXAMPLE 4 Start PPAR-ID 1. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> poweron -q -y -p 1
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

poweroff(8), **reset**(8), **showpparstatus**(8), **showpparprogress**(8)

NAME

prtfru - Displays the FRUID data of the system and PCI Expansion Unit.

SYNOPSIS

prtfru [-c] [-l] [-M] [-x] [*container*]

prtfru -h

DESCRIPTION

prtfru is a command to acquire Field Replaceable Unit Identifier (FRUID) from the system and PCI Expansion Unit.

The output format is the tree structure and each container is output with the FRU tree hierarchy.

If prtfru is executed with no argument specified, the hierarchy of FRU and all FRUID container data are output.

Note – The FRU information from the physical partition (PPAR) cannot be acquired even by using this command.

Privileges

To execute this command, fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c	Outputs only the container and container data. This option does not output the FRU tree hierarchy.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-l	Outputs only the FRU tree hierarchy. This option does not output the container data.
-M	Displays text one screen at a time.
-x	Outputs data with the system identifier of prtfrureg.dtd (SYSTEM) in the XML format.

OPERANDS

The following operands are supported.

container	Specifies the path name of specific hardware to store data.

EXTENDED DESCRIPTION

The prtfru command must be executed alone. An error returns when attempting the prtfru command while another user is executing the same command.

EXAMPLES

EXAMPLE 1 Display the FRU tree hierarchy on SPARC M10-4S.

```
XSCF> prtfru -l
/frutree
/frutree/BB#0 (fru)
```

```
/frutree/BB#0/CMUL (container)
/frutree/BB#0/CMUL/MEM#00A (container)
/frutree/BB#0/CMUL/MEM#01A (container)
/frutree/BB#0/CMUL/MEM#02A (container)
/frutree/BB#0/CMUL/MEM#03A (container)
/frutree/BB#0/CMUL/MEM#04A (container)
/frutree/BB#0/CMUL/MEM#05A (container)
/frutree/BB#0/CMUL/MEM#06A (container)
/frutree/BB#0/CMUL/MEM#07A (container)
/frutree/BB#0/CMUL/MEM#10A (container)
/frutree/BB#0/CMUL/MEM#11A (container)
/frutree/BB#0/CMUL/MEM#12A (container)
/frutree/BB#0/CMUL/MEM#13A (container)
/frutree/BB#0/CMUL/MEM#14A (container)
/frutree/BB#0/CMUL/MEM#15A (container)
/frutree/BB#0/CMUL/MEM#16A (container)
/frutree/BB#0/CMUL/MEM#17A (container)
/frutree/BB#0/CMUL/MEM#00B (container)
/frutree/BB#0/CMUL/MEM#01B (container)
/frutree/BB#0/CMUL/MEM#02B (container)
/frutree/BB#0/CMUL/MEM#03B (container)
/frutree/BB#0/CMUL/MEM#04B (container)
/frutree/BB#0/CMUL/MEM#05B (container)
/frutree/BB#0/CMUL/MEM#06B (container)
/frutree/BB#0/CMUL/MEM#07B (container)
/frutree/BB#0/CMUL/MEM#10B (container)
/frutree/BB#0/CMUL/MEM#11B (container)
/frutree/BB#0/CMUL/MEM#12B (container)
/frutree/BB#0/CMUL/MEM#13B (container)
/frutree/BB#0/CMUL/MEM#14B (container)
/frutree/BB#0/CMUL/MEM#15B (container)
/frutree/BB#0/CMUL/MEM#16B (container)
/frutree/BB#0/CMUL/MEM#17B (container)
/frutree/BB#0/CMUU (container)
/frutree/BB#0/CMUU/MEM#00A (container)
/frutree/BB#0/CMUU/MEM#01A (container)
/frutree/BB#0/CMUU/MEM#02A (container)
/frutree/BB#0/CMUU/MEM#03A (container)
/frutree/BB#0/CMUU/MEM#04A (container)
/frutree/BB#0/CMUU/MEM#05A (container)
/frutree/BB#0/CMUU/MEM#06A (container)
/frutree/BB#0/CMUU/MEM#07A (container)
/frutree/BB#0/CMUU/MEM#08A (container)
/frutree/BB#0/CMUU/MEM#09A (container)
/frutree/BB#0/CMUU/MEM#10A (container)
/frutree/BB#0/CMUU/MEM#11A (container)
/frutree/BB#0/CMUU/MEM#12A (container)
/frutree/BB#0/CMUU/MEM#13A (container)
/frutree/BB#0/CMUU/MEM#14A (container)
/frutree/BB#0/CMUU/MEM#15A (container)
/frutree/BB#0/CMUU/MEM#16A (container)
/frutree/BB#0/CMUU/MEM#17A (container)
/frutree/BB#0/CMUU/MEM#00B (container)
/frutree/BB#0/CMUU/MEM#01B (container)
```

```
/frutree/BB#0/CMUU/MEM#02B (container)
/frutree/BB#0/CMUU/MEM#03B (container)
/frutree/BB#0/CMUU/MEM#04B (container)
/frutree/BB#0/CMUU/MEM#05B (container)
/frutree/BB#0/CMUU/MEM#06B (container)
/frutree/BB#0/CMUU/MEM#07B (container)
/frutree/BB#0/CMUU/MEM#08B (container)
/frutree/BB#0/CMUU/MEM#09B (container)
/frutree/BB#0/CMUU/MEM#10B (container)
/frutree/BB#0/CMUU/MEM#11B (container)
/frutree/BB#0/CMUU/MEM#12B (container)
/frutree/BB#0/CMUU/MEM#13B (container)
/frutree/BB#0/CMUU/MEM#14B (container)
/frutree/BB#0/CMUU/MEM#15B (container)
/frutree/BB#0/CMUU/MEM#16B (container)
/frutree/BB#0/CMUU/MEM#17B (container)
/frutree/BB#0/XBU#0 (container)
/frutree/BB#0/XBU#1 (container)
/frutree/BB#0/PSUBP (container)
/frutree/BB#0/OPNL (container)
/frutree/BB#0/PSU#0 (container)
/frutree/BB#0/PSU#1 (container)
/frutree/BB#1 (fru)
/frutree/BB#1/CMUL (container)
/frutree/BB#1/CMUL/MEM#00A (container)
/frutree/BB#1/CMUL/MEM#01A (container)
      :
```

EXAMPLE 2 Display the FRU tree hierarchy on SPARC M12-2S.

```
XSCF> prtfru -l
/frutree
/frutree/BB#0 (fru)
/frutree/BB#0/CMUL (container)
/frutree/BB#0/CMUL/MEM#00A (container)
/frutree/BB#0/CMUL/MEM#01A (container)
/frutree/BB#0/CMUL/MEM#02A (container)
/frutree/BB#0/CMUL/MEM#03A (container)
/frutree/BB#0/CMUL/MEM#04A (container)
/frutree/BB#0/CMUL/MEM#05A (container)
/frutree/BB#0/CMUL/MEM#06A (container)
/frutree/BB#0/CMUL/MEM#07A (container)
/frutree/BB#0/CMUL/MEM#00B (container)
/frutree/BB#0/CMUL/MEM#01B (container)
/frutree/BB#0/CMUL/MEM#02B (container)
/frutree/BB#0/CMUL/MEM#03B (container)
/frutree/BB#0/CMUL/MEM#04B (container)
/frutree/BB#0/CMUL/MEM#05B (container)
/frutree/BB#0/CMUL/MEM#06B (container)
/frutree/BB#0/CMUL/MEM#07B (container)
/frutree/BB#0/CMUU (container)
/frutree/BB#0/CMUU/MEM#00A (container)
/frutree/BB#0/CMUU/MEM#01A (container)
```

```
/frutree/BB#0/CMUU/MEM#02A (container)
/frutree/BB#0/CMUU/MEM#03A (container)
/frutree/BB#0/CMUU/MEM#04A (container)
/frutree/BB#0/CMUU/MEM#05A (container)
/frutree/BB#0/CMUU/MEM#06A (container)
/frutree/BB#0/CMUU/MEM#07A (container)
/frutree/BB#0/CMUU/MEM#00B (container)
/frutree/BB#0/CMUU/MEM#01B (container)
/frutree/BB#0/CMUU/MEM#02B (container)
/frutree/BB#0/CMUU/MEM#03B (container)
/frutree/BB#0/CMUU/MEM#04B (container)
/frutree/BB#0/CMUU/MEM#05B (container)
/frutree/BB#0/CMUU/MEM#06B (container)
/frutree/BB#0/CMUU/MEM#07B (container)
/frutree/BB#0/XBU#0 (container)
/frutree/BB#0/XBU#1 (container)
/frutree/BB#0/XSCFU (container)
/frutree/BB#0/PSUBP (container)
/frutree/BB#0/OPNL (container)
/frutree/BB#0/PSU#0 (container)
/frutree/BB#0/PSU#1 (container)
/frutree/BB#0/PSU#2 (container)
/frutree/BB#0/PSU#3 (container)
```

EXAMPLE 3 Display the list of containers on SPARC M10-4.

```
XSCF> prtfru -lc
/frutree
/frutree/BB#0/CMUL/MEM#00A (container)
/frutree/BB#0/CMUL/MEM#01A (container)
/frutree/BB#0/CMUL/MEM#02A (container)
/frutree/BB#0/CMUL/MEM#03A (container)
/frutree/BB#0/CMUL/MEM#04A (container)
/frutree/BB#0/CMUL/MEM#05A (container)
/frutree/BB#0/CMUL/MEM#06A (container)
/frutree/BB#0/CMUL/MEM#07A (container)
/frutree/BB#0/CMUL/MEM#10A (container)
/frutree/BB#0/CMUL/MEM#11A (container)
/frutree/BB#0/CMUL/MEM#12A (container)
/frutree/BB#0/CMUL/MEM#13A (container)
  :
```

EXAMPLE 4 Display the FRUID data of XSCFU on SPARC M12-2S.

```
XSCF> prtfru /frutree/BB#0/XSCFU
/frutree/BB#0/XSCFU (container)
    AREA NAME:OPL_Header
        OPL_Header: OPLFRU
        reserved: 0000000000000000
    AREA NAME:TroubleInfo_Area
        header.csn_1st: 00000000000000000000
        header.csn_last: 00000000000000000000
        header.xcp_ver: 0000000000000000
```

```
        header.start_date: Thu Jan  1 09:00:00 1970
        xscfu_error0.common.record_id: 00000000
        xscfu_error0.common.type: 00
        xscfu_error0.common.time_stamp: Thu Jan  1 09:00:00 1970
        xscfu_error0.common.temperature: 00
        xscfu_error0.common.csn:
        xscfu_error0.common.error_code:
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000
        xscfu_error0.common.reserve: 0000000000
        rsv: 00000000000000000
        xscfu_error1.common.record_id: 00000000
        xscfu_error1.common.type: 00
        xscfu_error1.common.time_stamp: Thu Jan  1 09:00:00 1970
        xscfu_error1.common.temperature: 00
        xscfu_error1.common.csn:
        xscfu_error1.common.error_code:
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000
        xscfu_error1.common.reserve: 0000000000
        rsv: 00000000000000000
    AREA NAME:System_Area
        reserved:
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000000
000000000
    AREA NAME:Common_Header
        format_version: 01
        internal_use_area_starting_offset: 0d
        chassis_info_area_starting_offset: 00
        board_area_starting_offset: 01
        product_info_area_starting_offset: 00
        multirecord_area_starting_offset: 00
    AREA NAME:Board_Area
        Language: 19
        Manufacture_Data_Time: Sun Nov 29 09:00:00 2015
        Manufacturer: FUJITSU LIMITED
        Product_name: XSCFBQC_A
        Serial_number: PP154903GH
        Part_number: CA20369-B08X 001AA/9999999
    AREA NAME:Internal_Area
```

```
        area_length: 03
        board_id: 0101
        fru_type: 0000
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

ioxadm(8)

NAME

rastest - Causes a fault virtually.

SYNOPSIS

rastest -c {test|hb}

rastest -h

DESCRIPTION

rastest is a command to register an error log after causing a fault virtually.

Error logs to be registered are defined for this command. The registered error logs can be shown by the showlogs(8).

While the SNMP agent is enabled, SNMP trap can be sent. For the SNMP agent settings, refer to setsnmp(8).

Warnings are not sent to remote maintenance service or email when rastest is executed. Moreover, components are not degraded and LED is also not lighted up. PPAR does not also panic and restart.

When the rastest is executed, it automatically determines the model of the system and according to the model, logs errors about the following FRUs as pseudo trouble spots.

Depending on the option, pseudo failure of any one of the following will occur.

test

Record error logs on pseudo failures.

- SPARC M12-1/M10-1

No. 1 pseudo faulty unit	/MBU
No. 2 pseudo faulty unit	/OPNL
No. 3 pseudo faulty unit	/PSU#0

- SPARC M12-2/M10-4

No. 1 pseudo faulty unit	/BB#0/CMUL
No. 2 pseudo faulty unit	/BB#0/OPNL
No. 3 pseudo faulty unit	/BB#0/PSU#0

- SPARC M12-2S/M10-4S

No. 1 pseudo faulty unit	/XBBOX#80/XBU#0
No. 2 pseudo faulty unit	/XBBOX#80/OPNL
No. 3 pseudo faulty unit	/XBBOX#80/PSU#0

or

No. 1 pseudo faulty unit	/BB#0/CMUL
No. 2 pseudo faulty unit	/BB#0/OPNL
No. 3 pseudo faulty unit	/BB#0/PSU#0

`hb` Registers an error log of heart beat notifications.

- SPARC M12-1/M10-1
  No. 1 pseudo faulty unit /MBU
- SPARC M12-2/M10-4
  No. 1 pseudo faulty unit /BB#*xx*/CMUL
- SPARC M12-2S/M10-4S
  No. 1 pseudo faulty unit /XBBOX#*xx*/XBU#0
  or
  No. 1 pseudo faulty unit /BB#*xx*/CMUL

xx: BB-ID of master XSCF

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-c hb` Registers an error log of heart beat notifications.

`-c test` Registers an error log of suspected faults.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

- In case of suspected failure (`-c test`), the following error log is registered and trap is sent.
  - Error log

```
Date: May 30 17:10:45 JST 2013
   Code: 80000000-003e01009301009600-ff0200010000000000000000
   Status: Alarm                 Occurred: May 30 17:10:42.798 JST 2013
   FRU: /BB#0/CMUL,/BB#0/OPNL,/BB#0/PSU#0
    Msg: Pseudo error for test trap notice
```

  - Trap

```
2013-05-30 17:09:52 A4U4S144 [10.26.147.53] (via UDP: [10.26.147.53]:54687)
TRAP, SNMP v1,
community paplcommunity
       XSCF-SP-MIB::scfMIBTraps   Enterprise   Specific   Trap
(XSCF-SP-MIB::scfComponentStatusEvent) Uptime: 1:55:35.40
       XSCF-SP-MIB::scfComponentErrorStatus.bb.0.cmul.0.notApplicable.0 =
INTEGER:
faulted(3)
       XSCF-SP-MIB::scfTrapStatusEventType.0 = INTEGER: alarm(1)
```

```
       XSCF-SP-MIB::scfSystemSerialNumber.0 = STRING: 2081208019
       XSCF-SP-MIB::scfSystemType.0 = STRING: SPARC M10-4S
       XSCF-SP-MIB::scfSystemName.0 = STRING: A4U4S144
       XSCF-SP-MIB::scfTrapFaultEventCode.0 = STRING: FF020001
       XSCF-SP-MIB::scfTrapFaultTimestamp.0 = STRING: May 30 17:10:42.798
JST 2013
       XSCF-SP-MIB::scfTrapFaultKnowledgeUrl.0
https://support.oracle.com/msg/M10-Testalert
<https://support.oracle.com/msg/M10-Testalert>
       XSCF-SP-MIB::scfTrapFruSerialNumber1st.0 = STRING: PP120903GW
       XSCF-SP-MIB::scfTrapFruPartNumber1st.0 = STRING: CA07361-D912 A0 /
BGA-16CL-01
       XSCF-SP-MIB::scfTrapFruSerialNumber2nd.0 = STRING: PP120902HF
       XSCF-SP-MIB::scfTrapFruPartNumber2nd.0 = STRING: CA07361-D011 A0 /
NOT-FIXD-01
       XSCF-SP-MIB::scfTrapFruSerialNumber3rd.0 = STRING: MD12070325
       XSCF-SP-MIB::scfTrapFruPartNumber3rd.0 = STRING: CA01022-0761 / D-01
       XSCF-SP-MIB::scfTrapFruPartPath.0 = STRING: /BB#0/CMUL,/BB#0/OPNL,/
BB#0/PSU#0
       XSCF-SP-MIB::scfTrapProductName.0 = STRING: Fujitsu M10-4S
       XSCF-SP-MIB::scfTrapSupportServiceStatus.0 = INTEGER:
supportServiceRequired(1)
       XSCF-SP-MIB::scfMIBTrapData.26.0 = STRING: "M10-Testalert"
```

- In case of heartbeat notice (`-c hb`), the following error log is registered and trap is sent.
  - Error log

```
Date: May 31 15:28:23 JST 2013
   Code: 10000000-00a6010000ff0000ff-ff0100010000000000000000
   Status: Information            Occurred: May 31 15:28:20.370 JST 2013
   Msg: Pseudo error for heartbeat trap notice
```

  - Trap

```
2013-05-31 15:28:30 XB-SYS39 [10.26.147.113] (via UDP:
[10.26.147.113]:57525) TRAP, SNMP
v1, community paplcommunity
       XSCF-SP-MIB::scfMIBTraps   Enterprise   Specific   Trap
(XSCF-SP-MIB::scfComponentStatusEvent) Uptime: 0:15:14.83
       XSCF-SP-MIB::scfComponentErrorStatus.xbbx.1.xbux.0.notApplicable.0 =
INTEGER
normal(1)
       XSCF-SP-MIB::scfTrapStatusEventType.0 = INTEGER: information(4)
       XSCF-SP-MIB::scfSystemSerialNumber.0 = STRING: 2111206002
       XSCF-SP-MIB::scfSystemType.0 = STRING: SPARC M10-4S
       XSCF-SP-MIB::scfSystemName.0 = STRING: XB-SYS39
       XSCF-SP-MIB::scfTrapFaultEventCode.0 = STRING: FF010001
       XSCF-SP-MIB::scfTrapFaultTimestamp.0 = STRING: May 31 15:28:20.370
JST 2013
       XSCF-SP-MIB::scfTrapFaultKnowledgeUrl.0 = STRING:
       XSCF-SP-MIB::scfTrapFruSerialNumber1st.0 = STRING:
       XSCF-SP-MIB::scfTrapFruPartNumber1st.0 = STRING:
```

```
        XSCF-SP-MIB::scfTrapFruSerialNumber2nd.0 = STRING:
        XSCF-SP-MIB::scfTrapFruPartNumber2nd.0 = STRING:
        XSCF-SP-MIB::scfTrapFruSerialNumber3rd.0 = STRING:
        XSCF-SP-MIB::scfTrapFruPartNumber3rd.0 = STRING:
        XSCF-SP-MIB::scfTrapFruPartPath.0 = STRING:
        XSCF-SP-MIB::scfTrapProductName.0 = STRING: Fujitsu M10-4S
        XSCF-SP-MIB::scfTrapSupportServiceStatus.0 = INTEGER:
  supportServiceRequired(1)
        XSCF-SP-MIB::scfMIBTrapData.26.0 = STRING: "M10-Heartbeat"
```

EXAMPLES

EXAMPLE 1 Registering an error log of suspected faults.

```
XSCF> rastest -c test
XSCF>
```

EXAMPLE 2 Registering an error log of heart beat notifications.

```
XSCF> rastest -c hb
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showsnmp(8), **showlogs**(8)

NAME

rebootxscf - Reboots XSCF.

SYNOPSIS

rebootxscf [[-q] -{y|n}] -a

rebootxscf [[-q] -{y|n}] -b *bb_id*

rebootxscf [[-q] -{y|n}] -s

rebootxscf -h

DESCRIPTION

rebootxscf is a command to reboot XSCF.

The contents set by the following command is reflected in XSCF after rebooting XSCF by rebootxscf.

- applynetwork(8)
- setaltitude(8)
- setntp(8)

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Reboots the XSCFs of all SPARC M12/M10 systems chassis and crossbar boxes. It cannot be executed from an XSCF other than a master XSCF.
-b *bb_id*	Reboots the XSCF of the specified *bb_id*. It cannot be executed from an XSCF other than a master XSCF. *bb_id* can be specified with an integer from 0 to 15 for a SPARC M12/M10 systems, and with an integer from 80 to 83 for crossbar box.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.
-s	Reboots its own XSCF.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

- When you execute the command, the connections between telnet, ssh, etc. and XSCF are disconnected.
- If `-a` is specified, the XSCFs of all SPARC M12/M10 systems chassis and crossbar boxes are rebooted. To just reboot an individual SPARC M12/M10 systems, specify `-b` *bb_id*.
- If XSCF reboot executed automatically by `setdate`(8) is cancelled, rebooting XSCF by `rebootxscf` again does not reflect the set contents in XSCF.

EXAMPLES

EXAMPLE 1 Reboot all XSCFs.

```
XSCF> rebootxscf -a
The XSCF will be reset. Continue? [y|n]:y
```

EXAMPLE 2 Reboot all XSCFs. The prompt is automatically given a "y" response.

```
XSCF> rebootxscf -y -a
The XSCF will be reset. Continue? [y|n]:y
```

EXAMPLE 3 Reboot its own XSCF. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> rebootxscf -q -y -s
```

EXAMPLE 4 Cancel reboot of its own XSCF in the middle. The prompt is automatically given a "n" response.

```
XSCF> rebootxscf -n -s
The XSCF will be reset. Continue? [y|n]:n
XSCF>
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

applynetwork(8), **setdate**(8)

NAME

replacefru - Replaces the Field Replaceable Unit (FRU) and chassis.

SYNOPSIS

replacefru

replacefru `-h`

DESCRIPTION

`replacefru` is a command to replace the FRU and chassis.

You can interactively select, confirm, replace, etc. the FRU and chassis required for replacement of FRU in the menu format.

With `replacefru`, the following FRUs and chassis can be replaced.

- SPARC M10-1/M10-4
  - Fan unit for the SPARC M10-1/M10-4 (BB/FAN)
  - Power supply unit for the SPARC M10-1/M10-4 (BB/PSU)
- SPARC M10-4S
  - SPARC M10-4S (BB)
  - Fan unit for the SPARC M10-4S (BB/FAN)
  - Power supply unit for the SPARC M10-4S (BB/PSU)
  - Fan unit for the crossbar box (XB-Box/FAN)
  - Power supply unit for the crossbar box (XB-Box/PSU)
  - XSCF unit for the crossbar box (XB-Box/XSCFU)
- SPARC M12-1/M12-2
  - Fan unit for the SPARC M12-1/M12-2 (BB/FAN)
  - Power supply unit for the SPARC M12-1/M12-2 (BB/PSU)
- SPARC M12-2S
  - SPARC M12-2S (BB)
  - Fan unit for the SPARC M12-2S (BB/FAN)
  - Power supply unit for the SPARC M12-2S (BB/PSU)
  - XSCF unit for the SPARC M12-2S (BB/XSCFU)
  - Fan unit for the crossbar box (XB-Box/FAN)
  - Power supply unit for the crossbar box (XB-Box/PSU)
  - XSCF unit for the crossbar box (XB-Box/XSCFU)

Privileges

To execute this command, `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

- Depending on the implementation status of the FRU which is to be replaced or the status of the chassis, replacement may not be executed. In such a case an error message, stating that the target FRU or chassis cannot be selected, will be displayed.

  In the following conditions, replacement is not possible.

  - Common to all FRUs and chassis

    The target chassis (if the target is a FRU, then the chassis on which it is mounted) is in any of the following states.

    - In the middle of firmware updating

    - Not in the state of "SCF READY"

  - FAN for the SPARC M12-2S/M10-4S and crossbar box

    Due to removal for replacement, if the number of connected devices becomes less than the minimum number of devices required to start the chassis.

    However, the minimum number of connected devices that is required to start a chassis depends on the model and the power status.

  - PSU for the SPARC M12-2S/M10-4S and crossbar box

    If there is only one PSU which is running normally.

  - XSCFU for the SPARC M12-2S

    - In case the target XSCF unit is mounted on the master chassis.

    - If the target SPARC M12-2S is undergoing maintenance or not mounted.

    - In the middle of user setting operations involving power control, system configuration change, or XSCF restart.

    - In the middle of power-on of the target SPARC M12-2S when replacement work cannot be performed because the operating state of the incorporating PPAR or the non-replacement target XSCFU in the PPAR is as follows.

      -- The replacement target XSCFU is not faulty, and the non-replacement target XSCFU is faulty.

      -- The non-replacement target XSCFU is restarting.

      -- The PPAR is being powered on or off.

      -- The operating state of the control domain is not "Solaris running."

      -- There is a violation of CPU Activation.

  - XSCFU for the crossbar box

    In case the target XSCF unit is mounted on the master chassis.

- SPARC M12-2S/M10-4S

  - In case the target SPARC M12-2S/M10-4S is the master chassis.

  - Physical partitions (PPAR), including the target SPARC M12-2S/M10-4S is in a powered on state

  - If there is a chassis which has the same BB-ID as the target SPARC M12-2S/M10-4S, but was not implemented in any system before

- In case the target is any FRU other than an XSCF unit or the target is a chassis, removal only of this target can be executed by canceling all other procedures just after the removal of the target FRU or the chassis. In such case, the target FRU or chassis will have the state of maintenance. To consummate the maintenance status, undergo maintenance of the FRU or chassis, using the `replacefru`

Note – Removal of the chassis, as stated above, is a temporary removal of the chassis from the system for maintenance purposes. Information on the target system, like serial number etc., are not deleted. Moreover, the removed chassis is also not initialized. To permanently remove a chassis from a system, use the `initbb`(8).

- It is not possible to add a chassis anew with a BB-ID whose information is not registered in the system, using the `replacefru`. In such a case, use the `addfru`(8) to add the chassis.
- `replacefru` can be executed only in the master XSCF. Attempting to execute it on a standby XSCF causes an error.

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

addboard(8), **addfru**(8), **deleteboard**(8), **initbb**(8), **showhardconf**(8), **showlogs**(8), **showpparstatus**(8), **testsb**(8), **unlockmaintenance**(8)

NAME

reset - Resets the specified physical partition (PPAR) or a logical domain.

SYNOPSIS

reset [[-q] -{y|n}] -p *ppar_id* por

reset [[-q] -{y|n}] -p *ppar_id* -g *domainname* sir

reset [[-q] -{y|n}] -p *ppar_id* -g *domainname* panic

reset [[-q] -{y|n}] -p *ppar_id* xir

reset -h

DESCRIPTION

Note – reset may cause a failure of the disk, etc. because it forcibly resets the system. This shall be used exclusively for recovery in the case of hang-up of the Oracle Solaris, etc.

reset is a command to reset the specified PPAR or the logical domain.

The following four types can be specified as the reset method.

por	Resets PPAR.
sir	Resets the logical domain.
panic	Orders panic to the Oracle Solaris of the logical domain. It is ignored during shutdown processing or under suspension.
xir	Resets all CPUs in PPAR.

If PPAR is reset with specifying xir, the PPAR is restarted with the logical domain configuration as factory-default, and a hypervisor dump file is collected. For details, refer to "8.13 Collecting a Hypervisor Dump File" of *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Privileges

To execute this command, any of the following privileges is required.

platadm, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-g` *domainname*	Specify the logical domain name of the logical domain that is to be reset. It can be specified only if `panic` or `sir` is specified in *level*. When the control domain is reset, the logical domain name should be fixed at "primary".
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies only one PPAR-ID to be reset. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
`-q`	Prevents display of messages, including prompt, for standard output.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

`por`	Resets PPAR.
`sir`	Resets the logical domain.
`panic`	Orders panic to the Oracle Solaris of the logical domain.
`xir`	Resets all CPUs in PPAR.

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- You can confirm the current status of PPAR after ordering reset by using `showhardconf`(8).
- If `reset` is executed in the following status, the processing is stopped before the Oracle Solaris is started.
  - The autoboot function for the specified guest domain is disabled in `setpparmode`(8).
  - The autoboot function for the logical domain is disabled in OpenBoot PROM environment variable, `auto-boot?`.
- When changing the configuration of logical domains, render the state of all logical domains to either "active" or "bound" and then execute the `ldm add-spconfig` command on the control domain to store the latest configuration information in XSCF.

In case there is even one logical domain which was not in either "active" or "bound" state when configuration information was stored in XSCF, if that logical domain was specified with the -g option, any of the following symptoms will occur:

- The reset command will fail.
- A different logical domain will be reset.

EXAMPLES

EXAMPLE 1 Reset "GuestDomain0001" which is the logical domain of PPAR-ID 0.

```
XSCF> reset -p 0 -g GuestDomain0001 sir
PPAR-ID:00
GuestDomain to sir:GuestDomain0001
Be sure to execute "ldm add-spconfig" before using this command when you
have changed the ldm configuration.
Otherwise, an unexpected domain might be reset.
Continue? [y|n] :y
00 GuestDomain0001 :Resetting

*Note*
 This command only issues the instruction to reset.
 The result of the instruction can be checked by the "showdomainstatus".
XSCF>
```

EXAMPLE 2 Reset the CPU of PPAR-ID 0. The prompt is automatically given a "y" response.

```
XSCF> reset -y -p 0 xir
PPAR-ID to reset:00
Continue? [y|n]:y
00 :Resetting

*Note*
 This command only issues the instruction to reset.
 The result of the instruction can be checked by the "showpparprogress".
XSCF>
```

EXAMPLE 3 Reset PPAR-ID 0 immediately. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> reset -q -y -p 0 por
XSCF>
```

EXAMPLE 4 Cancel the executed reset in the middle.

```
XSCF> reset -p 0 -g GuestDomain0001 sir
PPAR-ID :00
GuestDomain to sir:GuestDomain0001
Be sure to execute "ldm add-spconfig" before using this command when you
have changed the ldm configuration.
```

```
Otherwise, an unexpected domain might be reset.
Continue? [y|n]:n
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

poweroff(8), **poweron**(8), **setpparmode**(8), **showpparstatus**(8), **showpparprogress**(8)

NAME

resetdateoffset - Resets the difference between the system time and the time of each physical partition (PPAR).

SYNOPSIS

resetdateoffset [`[-q] -{y|n}] -p` *ppar_id*

resetdateoffset [`[-q] -{y|n}] [-a]`

resetdateoffset `-h`

DESCRIPTION

`resetdateoffset` is a command to reset the difference between the system time managed by XSCF and the time managed by each PPAR.

In XSCF, the difference between the system time and the time of each PPAR is stored. If system time has been changed either by the `setdate`(8) or by synchronization with an NTP server, the difference between the time of each PPAR and the changed system time is updated. The stored difference of the time is retained even if PPAR or the system is restarted.

`resetdateoffset` resets the difference between the system time and the time of each PPAR. Thanks to this, the time of each PPAR after restart is set to the same time as the system time.

Note – `resetdateoffset` is to be used only at the time of initial configuration of physical partitions. Do not use `resetdateoffset` at any other time.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `fieldeng`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Initializes the differences form the time of all PPARs.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies the PPAR-ID to reset the time difference. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
`-q`	Prevents display of messages, including prompt, for standard output.

`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- If no option is specified, the differences form the time of all PPARs are reset.
- `resetdateoffset` shall be executed after PPAR has been shut down.

EXAMPLES

EXAMPLE 1 Initialize the difference between the system time and the time of PPAR-ID 1.

```
XSCF> resetdateoffset -p 1
Clear the offset of PPAR-ID 1? [y|n] :y
XSCF>
```

EXAMPLE 2 Initialize the differences between the system time and the times of all PPARs.

```
XSCF> resetdateoffset -a
Clear the offset of all PPARs? [y|n] :y
XSCF>
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

showdateoffset(8)

NAME

restorecodactivation - Restores the CPU Activation key.

SYNOPSIS

restorecodactivation [-v] [-V] [[-q] -{y|n}] [-P *password*] [-u *user*] [-p *proxy* [-t *proxy_type*]] *url*

restorecodactivation -h

DESCRIPTION

restorecodactivation is a command to restore the CPU Activation key, which is saved by using the dumpcodactivation(8), to XSCF.

Privileges

To execute this command, platadm or fieldeng privilege is required. You can execute it even with the default account initially prepared in the system.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-P *password*	Specifies the password to decode encrypted files. If the -P option is omitted when you restore the encrypted CPU Activation key, the command prompts for the password. You can specify this using up to 128 characters.
-p *proxy*	Specifies the proxy server to use for transfer. If -t *proxy_type* is not specified, the default proxy type is http. *proxy* is specified in the format of *servername*:*port*.
-q	Prevents display of messages, including prompt, for standard output.
-t *proxy_type*	Specifies the proxy type. It is specified with the -p option. You can specify any of http, socks4, and socks5. The default is http.
-u *user*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry. You can specify this using up to 127 characters.
-v	Displays detailed information. This option is used to diagnose server problems.
-V	Displays detailed network activities. This option is used to diagnose network and server problems.
-y	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported..

url — Specifies the URL storing the CPU Activation key. The following types of format are supported.

`http://`*server*[:*port*]/*path*/*file*
`https://`*server*[:*port*]/*path*/*file*
`ftp://`*server*[:*port*]/*path*/*file*
`file:///media/usb_msd/`*path*/*file*

EXTENDED DESCRIPTION

- The beginning of the CPU Activation key which has been saved contains the basic identification information in text format. Using the text viewer, you can confirm the following information.
  - System at the time when the CPU Activation key was saved
  - Date when it is saved
  - Whether it is encrypted
- It is necessary to shut down all physical partitions (PPARs) before executing `restorecodactivation`.
- CPU Activation key can only restore the data that was saved from a system with the same system serial number.

EXAMPLES

EXAMPLE 1 Restore the CPU Activation key which is saved on USB device.

```
XSCF> restorecodactivation -v -V file:///media/usb_msd/cpukey.cfg
initiating file transfer from 'file:///media/usb_msd/cpukey.cfg' ...
transfer from
'file:///media/usb_msd/cpukey.cfg' to '/ssd/transferred_file_cod.bin'
* Closing connection #0
done.
*** The CPU core Activation keys are overwritten in the backup data.
*** Do you want to restore this keys to your system? [y|n]:y
operation completed
```

EXIT STATUS

The following exit values are returned.

`0` — Indicates normal end.

`>0` — Indicates error occurrence.

SEE ALSO

dumpconfig(8), **restorecodactivation**(8)

NAME

restoreconfig - Restores the XSCF configuration information.

SYNOPSIS

restoreconfig [`-v`] [`-V`] [[`-q`] `-{y|n}`] [`-P` *password*] [`-s network={yes|no}`] [`-u` *user*] [`-p` *proxy* [`-t` *proxy_type*]] *url*

restoreconfig `-h`

DESCRIPTION

`restoreconfig` is a command to restore the XSCF configuration information saved by `dumpconfig` in XSCF.

The following are regarded as the XSCF configuration information.

- System specific information

  System specific information of each system includes the following information on the place of installation or network information etc.

  - NTP: NTP configuration
  - Altitude configuration
  - Power capping: power capping configuration
  - Power supply scheduling: power supply scheduling configuration, enable/disable scheduling, power recovery mode
  - Remote Power Management (RCIL): Remote Power Management configuration, Remote Power Management group configuration
  - XSCF network: take-over IP address, SSCP, host name, domain name, routing, DNS configuration, IP packet filtering rules
  - SSH/Telnet service: SSH service configuration, Telnet service configuration, hot public key, user public key, timeout value
  - HTTPS service: HTTPS service configuration, certification authority, web server private key, web server certificate
  - Remote maintenance service configuration information: REMCS configuration
  - CPU activation information: CPU activation key, CPU core resource information
  - Logical domain configuration information: logical domain configuration, startup reservation information
  - OpenBoot PROM environment variable configuration information: Oracle Solaris/OpenBoot PROM configuration
  - Verified Boot: Information of X.509 public key certificates used for performing Verified Boot of Oracle Solaris
  - Remote storage: Connection settings to remote storage

- System common information

  System common information includes the following information that are used among systems.

- User administration: user account, password policy, password, user privilege, lockout feature
- Audit: audit configuration
- Time: time zone, daylight saving time
- Warm-up operation time: warm-up operation time configuration
- Dual power feed: dual power feed configuration
- Air conditioning wait time: wait time before the system startup configuration
- Direct I/O function: enable/disable direct I/O function to PCI card mounted on a PCI expansion unit
- SSH/Telnet service: timeout value
- LDAP service: LDAP client, enable/disable LDAP
- Active Directory service: Active Directory client
- LDAP over SSL service: LDAP over SSL client
- Mail notification: SMTP configuration, mail notification function
- SNMP: SNMP agent, trap host, v3 trap host, User-based Security Model (USM) management information, View-based Access Control Model (VACM) management information
- System Board configuration: memory mirroring
- Remote maintenance service configuration information: ASR feature (enable/disable service tag)
- Physical partition configuration information: allocation status of physical partitions in PSB, configuration policy, I/O nullification option
- Physical partition mode configuration
- OpenBoot PROM environment variable configuration information: XSCF configuration
- High speed mode of the CPU of SPARC M12-2S

XSCF configuration information can be restored only to a server of the same model as the one on which the XSCF configuration information was saved by `dumpconfig`(8).

XSCF configuration information can be restored with the combination of the server on which it is to be restored and the `-s network` option in the following ways:

- When restoring to the system on which the XSCF configuration information was saved:

  Regardless of the value specified by the `-s network` option, both the system specific information and the system common information will be restored.
- When restoring to a different system from the one on which the XSCF configuration information was saved:

If `-s network=no` (default value) is specified, only the system common information will be restored and system specific information will remain the same as before.

If `-s network=yes` is specified, both the system specific information and the system common information will be restored.

This command confirms the consistency of the XSCF configuration information, searches the network information, and verifies whether the version of the XSCF configuration information file and system class match.

The XSCF configuration information file is a file in which the XSCF configuration information is saved in the base64 encoded text format. Users can specify any name for this file. This file is encrypted by specifying the `-e` option.

Privileges

To execute this command, `platadm` privilege is required. You can execute it even with the `default` account initially prepared in the system.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-P` *password*	Specifies the password to decode encrypted files. If the `-P` option is omitted when you restore the encrypted XSCF configuration information, the command prompts for the password. You can specify this using up to 128 characters.
`-p` *proxy*	Specifies the proxy server to use for transfer. If `-t` *proxy_type* is not specified, the default proxy type is http. *proxy* is specified in the format of *servername*:*port*. See Example 3.
`-q`	Prevents display of messages, including prompt, for standard output.

`-s network={yes|no}`

- `no` (default value)
  - When restoring to the system on which the XSCF configuration information was saved:

    Both the system specific information and system common information will be restored.
  - When restoring to a different system from the one on which the XSCF configuration information was saved:

    Only the system common information will be restored and system specific information will remain the same as before.
- `yes`

  Regardless of whether the system is the one on which the XSCF configuration information was saved or not, both the system specific information and the system common information will be restored.

`-t` *proxy_type*
: Specifies the proxy type. It is specified with the `-p` option. You can specify any of http, socks4, and socks5. The default is http.

`-u` *user*
: Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry. You can specify this using up to 127 characters.

`-v`
: Displays detailed information. This option is used to diagnose server problems.

`-V`
: Displays detailed network activities. This option is used to diagnose network and server problems.

`-y`
: Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

url
: Specifies the URL storing the XSCF configuration information. The following types of format are supported.

`http://`*server*[:*port*]`/`*path*`/`*file*
`https://`*server*[:*port*]`/`*path*`/`*file*
`ftp://`*server*[:*port*]`/`*path*`/`*file*
`file:///media/usb_msd/`*path*`/`*file*

EXTENDED DESCRIPTION

- At the head of the XSCF configuration information, the basic identification information is contained in the text format. The following information can be confirmed using a text viewer.
  - System at the time when the XSCF configuration information was saved
  - Date when it is saved
  - Whether it is encrypted
- Execute the `restoreconfig` command while the system is shut down. If the system is not shut down, it causes an error.

  The system shutdown status means the status in which all PPARs are shut down. If it is in operation, all PPARs are shut down by executing `poweroff -a` and then the power of the system is turned off. You can check the system power status by executing `showhardconf`(8) and referring to the "System_Power:" display ("On" or "Off").
- `restoreconfig` downloads the XSCF configuration information and verifies whether the information is correct. When authentication is finished, XSCF is rebooted and data is restored.

Note – If XSCF configuration information which was saved by `dumpconfig`(8), is restored by `restoreconfig` on the same chassis or on a different chassis, confirm that the XSCF configuration information has been properly restored.

Note – When powering on the PPAR after restoration using the `restoreconfig` command, set the time of Oracle Solaris on each logical domain by time synchronization with an NTP server or by using the `date` command on each logical domain.

EXAMPLES

EXAMPLE 1 Restore the XSCF configuration information using USB.

```
XSCF> restoreconfig -v -V file:///media/usb_msd/system.cfg
Making sure mount point is clear
umount: /media/usb_msd is not mounted (according to mtab)
Trying to mount USB device /dev/sdb1 as /media/usb_msd
mount: I could not determine the filesystem type, and none was specified
Trying to mount USB device /dev/sdb as /media/usb_msd
Mounted USB device
obtaining lock ... done
initiating file transfer from 'file:///media/usb_msd/system.cfg' ...
transfer from
'/ssd/transferred_file.bin' to 'file:///media/usb_msd/system.cfg'
* Closing connection #0
Unmounted USB device
done
file decoding done.
Configuration backup created on Tue Oct  9 10:31:22 2012
 from system 'M10-4S' with serial number '2081208014', version '0001'
validating backup configuration data
 :
```

```
  :
*** Do you want to restore this configuration to your system? [y/n]:y
requesting XSCF reboot to perform restore ... requested
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

dumpconfig(8), **restorecodactivation**(8)

NAME

restoredefaults - Restores settings of the XSCF unit and its back-up information to the factory default.

SYNOPSIS

restoredefaults -c factory [-r activation]

restoredefaults -c xscf

restoredefaults -h

DESCRIPTION

restoredefaults is a command to restore settings of XSCF unit and its back-up information to the factory default.

To execute restoredefaults, connect to XSCF by serial. If connected by XSCF-LAN, the network connection is disconnected during execution.

The following types of initialization scope can be specified.

factory	Restores the entire system to factory settings. Clears information of user settings and errors, out of setting and back-up information of the XSCF unit.
xscf	Restores the XSCF unit to factory settings. User settings, error information, and CPU Activation keys of the XSCF unit are cleared.

- For SPARC M12-1/M10-1

  The configuration information of the XSCF mounted unit will be saved in the XSCF unit on the motherboard unit (MBU), but its backup information will be saved in the PSU backplane (PSUBP).
- For SPARC M10-4/M10-4S (without crossbar box)

  The configuration information of the XSCF mounted unit will be saved in the XSCF unit on the CPU Memory Unit (Lower) (CMUL), but its backup information will be saved in the PSU backplane unit (PSUBP).
- For SPARC M12-2/M12-2S (without crossbar box)

  The configuration information of the XSCF mounted unit will be saved in the XSCF unit, but its backup information will be saved in the PSU backplane unit (PSUBP).
- For SPARC M12-2S (with crossbar box)/M10-4S (with crossbar box)

  The configuration information of the XSCF mounted unit will be saved in the XSCF interface unit (XSCFIF), but its backup information will be saved in the crossbar backplane unit (XBBP).

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-c factory`	Restores the entire system to the default.
`-c xscf`	Restores setting information of the XSCF unit to the factory default and deletes CPU Activation keys.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-r activation`	Deletes CPU Activation keys. It is used to delete CPU Activation keys while specifying `-c factory`. You cannot specify this option with "`-c xscf`".

EXTENDED DESCRIPTION

- `restoredefaults` is executed by the master XSCF. Confirm the master XSCF with `showbbstatus`(8).
- In use of SPARC M12-2S/M10-4S, be sure to execute restoredefaults only on a single SPARC M12-2S/M10-4S. Executing it with multiple SPARC M12-2S/M10-4S connected causes an error.
- After `restoredefaults` is executed, the XSCF configuration information is shut down. After shutdown, turn off the input power of the system and turn it on again.
- If you specify "`-c xscf`", the back-up information remains. Therefore, when the system is powered off then on, the information that has been saved is read and the XSCF unit settings are restored to its previous state before being restored. However, the CPU Activation key will be deleted along with the XSCF unit information and its back-up information.
- `restoredefaults` shall be executed with the system shut down. If the system is not shut down, it causes an error.

  The status in which the system is shut down means the status in which all physical partitions (PPARs) are shut down. If PPAR is in operation, executing `poweroff -a` shuts down all PPARs and after that the power of the system is turned off. Execute the `showhardconf`(8) and see the display of "System_Power:" ("On" or "Off"), to confirm the condition of system power.
- If only "`-c factory`" is specified, the information of CPU Activation keys in the system is not cleared. To clear the information of CPU Activation keys, be sure to specify "`-r activation`" too.
- If "`-c xscf`" is specified, CPU Activation keys, registered to XSCF unit and its back-up information, are deleted. To save CPU Activation keys, run `dumpcodactivation`(8) to save CPU Activation keys beforehand. To restore the saved CPU Activation keys, execute `restoredefaults -c xscf`, then `restorecodactivation`(8).

  In a case where `restoredefaults` was executed before saving the CPU ctivation key, you must register a CPU Activation key again.

- An error occurs if "`-c factory`" is specified when PSU backplane and crossbar backplane are not installed.

EXAMPLES

EXAMPLE 1 Restoring the XSCF unit to factory settings and clears CPU Activation keys.

```
XSCF> restoredefaults -c xscf

WARNING:
 If this system does not have BACK UP, this command will set all the user
 settable XSCF configuration parameters to their default value as they
 were set when the system was shipped out.
 Furthermore, this command will delete all logs in the intended chassis XSCF.
 Check the man page of this command before you run it.

 NOTE:
  The CPU core Activation keys will be also removed.

Continue?[yes/no](default no):yes
You must check the following points.

 1. Have the ability to power cycle the system.
 2. Have access to the serial console and hold the serial console of the
    XSCF to confirm the completion of the command.

If you answer "yes" this command will HALT the XSCF when it completes.
You will need to power cycle the system after the XSCF BOOT STOP.

Do you really want to continue?

Continue?[yes/no](default no):yes
The initialization of XSCF will be started.
 XSCF     : all data clear
            (Including CPU core Activation keys)
 BACK UP  : not clear
XSCF will be automatically rebooted. Afterwards, XSCF will be initialized.
Continue?[yes/no](default no):yes
CoD initialization complete.
Syncing file systems...  complete
Setting FRUID-ROM to writable complete
Clear BB-ID complete
XSCF shutdown request was completed.

    <snip>....XSCF reboot..<snip>

XSCF clear : start

    <snip>

XSCF clear : complete

Please turn off the breaker after XSCF halt.
```

EXAMPLE 2 Restoring the entire system to factory settings. In this case, CPU Activation keys are not cleared.

```
XSCF> restoredefaults -c factory

WARNING:
 If this system does not have BACK UP, this command will set all the user
 settable XSCF configuration parameters to their default value as they
 were set when the system was shipped out.
 Furthermore, this command will delete all logs in the intended chassis XSCF.
 Check the man page of this command before you run it.

Continue?[yes/no](default no):yes
You must check the following points.

 1. Have the ability to power cycle the system.
 2. Have access to the serial console and hold the serial console of the
    XSCF to confirm the completion of the command.

If you answer "yes" this command will HALT the XSCF when it completes.
You will need to power cycle the system after the XSCF BOOT STOP.

Do you really want to continue?

Continue?[yes/no](default no):yes
The initialization of XSCF will be started.
 XSCF     : all data clear (exclude SYSTEM ID data)
 BACK UP  : all data clear (exclude SYSTEM ID data)
XSCF will be automatically rebooted. Afterwards, XSCF will be initialized.
Continue?[yes/no](default no):yes
Disabling IDIAG prompt complete
Setting FRUID-ROM to writable complete
Clear BB-ID complete
Backup common DB complete
XSCF shutdown request was completed.

    <snip>....XSCF reboot..<snip>

XSCF clear : start

    <snip>

XSCF clear : complete

Please turn off the breaker after XSCF halt.
```

EXAMPLE 3 Restoring the entire system to factory settings and clearing CPU Activation keys.

```
XSCF> restoredefaults -c factory -r activation

WARNING:
 If this system does not have BACK UP, this command will set all the user
```

```
 settable XSCF configuration parameters to their default value as they
 were set when the system was shipped out.
 Furthermore, this command will delete all logs in the intended chassis XSCF.
 Check the man page of this command before you run it.

 NOTE:
  The CPU core Activation keys will be also removed.

Continue?[yes/no](default no):yes
You must check the following points.

 1. Have the ability to power cycle the system.
 2. Have access to the serial console and hold the serial console of the
    XSCF to confirm the completion of the command.

If you answer "yes" this command will HALT the XSCF when it completes.
You will need to power cycle the system after the XSCF BOOT STOP.

Do you really want to continue?

Continue?[yes/no](default no):yes
The initialization of XSCF will be started.
 XSCF     : all data clear (exclude SYSTEM ID data)
            (Including CPU core Activation keys)
 BACK UP  : all data clear (exclude SYSTEM ID data)
            (Including CPU core Activation keys)
XSCF will be automatically rebooted. Afterwards, XSCF will be initialized.
Continue?[yes/no](default no):yes
Disabling IDIAG prompt complete
Setting FRUID-ROM to writable complete
Clear BB-ID complete
CoD initialization complete.
Backup common DB complete
XSCF shutdown request was completed.

    <snip>....XSCF reboot..<snip>

XSCF clear : start

    <snip>

XSCF clear : complete

Please turn off the breaker after XSCF halt.
```

EXAMPLE 4 When restoring the entire system to factory settings, if there is a PPAR whose DR function is disabled, a notice that says that DR function will be enabled automatically, is output.

```
XSCF> restoredefaults -c factory

WARNING:
 If this system does not have BACK UP, this command will set all the user
```

```
 settable XSCF configuration parameters to their default value as they
 were set when the system was shipped out.
 Furthermore, this command will delete all logs in the intended chassis XSCF.
 Check the man page of this command before you run it.

Notice:
 PPAR DR function will be enabled automatically. Please confirm the current
 setting by showpparmode(8).

Continue?[yes/no](default no):yes
You must check the following points.

 1. Have the ability to power cycle the system.
 2. Have access to the serial console and hold the serial console of the
    XSCF to confirm the completion of the command.

If you answer "yes" this command will HALT the XSCF when it completes.
You will need to power cycle the system after the XSCF BOOT STOP.

Do you really want to continue?

Continue?[yes/no](default no):yes
The initialization of XSCF will be started.
 XSCF     : all data clear (exclude SYSTEM ID data)
 BACK UP  : all data clear (exclude SYSTEM ID data)
XSCF will be automatically rebooted. Afterwards, XSCF will be initialized.
Continue?[yes/no](default no):yes
Disabling IDIAG prompt complete
Setting FRUID-ROM to writable complete
Clear BB-ID complete
Backup common DB complete
Syncing file systems...  complete
XSCF shutdown request was completed.

    <snip>....XSCF reboot..<snip>

XSCF clear : start

    <snip>

XSCF clear : complete

Please turn off the breaker after XSCF halt.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showbbstatus(8), **showlogs**(8)

NAME

sendbreak - Sends a break signal to the control domain of the specified physical partition (PPAR).

SYNOPSIS

sendbreak [`[-q] -{y|n}] -p` *ppar_id*

sendbreak `-h`

DESCRIPTION

`sendbreak` is a command to send a break signal to the control domain of the specified PPAR.

If a break signal is sent to the Oracle Solaris on PPAR from the control domain console, the control is transferred from Oracle Solaris to OpenBoot PROM and the prompt for OpenBoot PROM (`ok`) is displayed.

Note – If the mode switch of the operator panel is set to "Locked," setting the break signal transmission suppression of `setpparmode`(8) to "on" prevents transmission of a break signal. For details, see `setpparmode`(8).

Privileges

To execute this command, any of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies PPAR-ID to which a break signal is to be sent. Depending on the system configuration, you can specify only one integer from 0 to 15 for *ppar_id*.
`-q`	Prevents display of messages, including prompt, for standard output.
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Send a break signal to the control domain of PPAR-ID 0.

```
XSCF> sendbreak -p 0
Send break signal to PPAR-ID 0?[y|n] :
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

console(8), **setpparmode**(8), **showconsolepath**(8)

NAME

setad - configure Active Directory.

SYNOPSIS

setad {enable|disable}

setad loadcert [[-q] -{y|n}] [-i *n*] [-u *username*] [-p *proxy* [-t *proxy_type*]] *URL*

setad loadcert [[-q] -{y|n}] [-i *n*] console

setad rmcert [[-q] -{y|n}] [-i *n*]

setad group {administrator|operator|custom} -i *n* name [*groupname*]

setad group custom -i *n* roles [*privileges*]

setad userdomain -i *n* [*domainname*]

setad defaultrole [*privileges*]

setad timeout *seconds*

setad server [-i *n*] [*ipaddr* [: *port*]]

setad logdetail {none|high|medium |low|trace}

setad log [[-q] -{y|n}] clear

setad {dnslocatormode|expsearchmode|strictcertmode} {enable|disable}

setad dnslocatorquery -i *n* [*service*]

setad default [[-q] -{y|n}]

setad -h

DESCRIPTION

setad configures Active Directory. To simply enable or disable Active Directory, execute the command with only those operands. To enable or disable an Active Directory mode, such as dnslocatormode, specify the mode along with enable or disable.

To clear or unset a property, issue a setad command with no value for the operand. For example, setad group custom -i 1 name clears the name property from group 1. If a property is not set, it is displayed with no value.

Note – If you are an Active Directory or LDAP over SSL user, do not upload a public key. If one has already been uploaded, use the following command to delete it:

XSCF> **setssh -c delpubkey -a -u proxyuser**

Privileges

You must have useradm privileges to run this command.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following options are supported:

`-h` Displays usage statement. When used with other options or operands, an error occurs.

`-i` *n* Sets an index marker, value 1 - 5. The target of index marker differs according to the operand.

`group`
Index marker of the group

`userdomain`
Index marker of the user domain

`server`, `loadcert`, `rmcert`
Index marker of the alternate Active Directory Server

`dnslocatorquery`
Index marker of the DNS server

`-n` Automatically answers "`n`" (no) to all prompts.

`-p` 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 server must be in the format *servername*[:*port*]. See EXAMPLE 8.

`-q` Suppresses all messages to stdout, including prompts.

`-t` *proxy_type* Use with the `-p` option to specify proxy type as `http`, `socks4`, or `socks5`. The default is `http`.

`-u` *username* Specifies the user name when logging in to a remote ftp or http server that requires authentication. Prompts for a password. See EXAMPLE 9.

`-y` Automatically answers "`y`" (yes) to all prompts.

OPERANDS

The following operands are supported:

`enable` When used with no other operands, enable the Active Directory feature.

`disable` When used with no other operands, disable the Active Directory feature.

`loadcert console`	Prompts for certificate information to be entered at the console. Use this command to paste certificate information copied from a file. Terminate input with `CTRL-D`. Set to the primary Active Directory server when `-i` is omitted. Set to the alternate Active Directory server when `-i` is specified.
`loadcert` *URL*	Load a certificate file for the Active Directory server. Supported formats for *URI* are: `http://`*server*`[:`*port*`]/`*path*`/`*file* `https://`*server*`[:`*port*`]/`*path*`/`*file* `ftp://`*server*`[:`*port*`]/`*path*`/`*file* `file:///media/usb_msd/`*path*`/`*file* Set to the primary Active Directory server when `-i` is omitted. Set to the alternate Active Directory server when `-i` is specified.
`rmcert`	Delete certificate file for the Active Directory server. strictcertmode must be in the disabled state for a certificate to be removed. Set to the primary Active Directory server when `-i` is omitted. Set to the alternate Active Directory server when `-i` is specified.
`group administrator name`	If *groupname* is specified, the group name is assigned to the name property of the administrator group specified by the index marker. The administrator group has the `platadm`, `useradm` and `auditadm` permissions, which cannot be changed. If *groupname* is omitted, the name property of the administrator group specified by the index marker, is deleted.
`group operator name`	If *groupname* is specified, the group name is assigned to the name property of the operator group specified by the index marker. The operator group has the `platop` and `auditop` permission which cannot be changed. If *groupname* is omitted, the name property of the operator group specified by the index marker, is deleted.

`group custom name` If *groupname* is specified, the group name is assigned to the name property of the group specified by the index marker. If *groupname* is omitted, the name property of the group specified by the index marker, is deleted.

`group custom roles` If *privileges* is specified, the role property of the group specified by the index marker is assigned to the group. If *privileges* is omitted, the role property of the group specified by the index marker is deleted.

`userdomain` Configure the specified user domain. A user domain can be configured explicitly through the **`setad userdomain`** command on XSCF, or entered at the login prompt using the form, *user@domain*.

- If a user domain is specified at the login prompt – for example, `login`: **`ima.admin@dc01.example.com`** – that user domain is used for this login attempt. Any pre-configured user domains (as displayed by **`showad userdomain`**) are ignored.
- If a user domain is not specified at the login prompt – for example, `login`: **`ima.admin`** – XSCF checks each of the pre-configured user domains, in turn, to authenticate the user.

`defaultrole` Configure default privileges. If defaultrole is configured, users have privileges as specified by defaultrole after authentication; user group membership is not checked. If defaultrole is not configured, users' privileges will be learned from Active Directory based on group membership.

`timeout` *seconds* 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.

`server` Configure the primary and up to five alternate Active Directory servers. To use a host name, DNS must be enabled. An IP address can be specified with port number; otherwise, the default port is used.

Set to the primary Active Directory server when `-i` is omitted. Set to the alternate Active Directory server when `-i` is specified.

`logdetail`	Enable logging of Active Directory authentication and authorization diagnostic messages at the specified detail level. This log is for use in troubleshooting and is cleared on SP reboot. Level can be one of the following:
	`none` — Do not log diagnostic messages. Use this setting during normal system operation
	`high` — Log only high-severity diagnostic messages
	`medium` — Log only high-severity and medium-severity diagnostic messages
	`low` — Log high-severity, medium-severity, and informational diagnostic messages
	`trace` — Log high-severity, medium-severity, informational, and trace-level diagnostic messages
`log clear`	Clear the log file of Active Directory authentication and authorization diagnostic messages.
`dnslocatormode`	Enable or disable DNS locator mode. This mode is disabled by default. If enabled, XSCF queries a DNS server to learn the Active Directory server to use for user authentication.
`expsearchmode`	Enable or disable expanded search mode. The default Active Directory functionality is intentionally restrictive to ensure proper security. Search criteria can be expanded to accommodate specific customer environments. The expanded search mode is disabled by default, which means the UserPrincipalName (UPN) is expected to have a fully qualified domain name suffix. When expanded search mode is enabled, more searches are attempted if the more specific UPN search does not immediately succeed.

`strictcertmode`	Enable or disable strictcertmode mode. This mode is disabled by default; the channel is secure, but limited validation of the certificate is performed. If strictcertmode is enabled, the server's certificate must have already been uploaded to the server so that the certificate signatures can be validated when the server certificate is presented. Data is always protected, even if strictcertmode is disabled. Strictcertmode applies to primary and alternate servers alike.
`dnslocatorquery`	Configure the DNS locator query. DNS and DNS Locator Mode must be enabled for DNS Locator Queries to work. The DNS Locator service query identifies the named DNS service. See EXAMPLES, below, for important information.
`default`	Reset Active Directory settings to factory default.

EXAMPLES

EXAMPLE 1 Configures the Active Directory primary server, specifying a port other than the default.

```
XSCF> setad server 10.1.12.250:4040
```

EXAMPLE 2 Sets name for administrator group 3.

```
XSCF> setad group administrator -i 3 name CN=spSuperAdmin, \
OU=Groups,DC=Sales,DC=aCompany,DC=com
```

EXAMPLE 3 Sets name for custom group 2.

```
XSCF> setad group custom -i 2 name CN=spLimitedAdmin, \
OU=Groups,DC=Sales,DC=aCompany,DC=com
```

EXAMPLE 4 Sets roles for custom group 2.

```
XSCF> setad group custom -i 2 roles auditadm,platop
```

EXAMPLE 5 Loads certificate information for Alternate Server 4 from the console.

```
XSCF> setad loadcert -i 4 console
Warning: About to load certificate for Alternate Server 4:
Continue? [y|n]: y
Please enter the certificate:

-----BEGIN CERTIFICATE-----
MIIETjCCAzagAwIBAgIBADANBgkqhkiG9w0BAQQFADB8MQswCQYDVQQGEwJVUzET
MBEGA1UECBMKQ2FsaWZvcm5pYTESMBAGA1UEBxMJU2FuIERpZWdvMRkwFwYDVQQK
ExBTdW4gTWljcm9zeXN0ZW1zMRUwEwYDVQQLEwxTeXN0ZW0gR3JvdXAxEjAQBgNV
...
```

```
-----END CERTIFICATE-----
CTRL-D
XSCF>
```

EXAMPLE 6 Configures user domain 2. <USERNAME> is a template that must be entered exactly as shown. During authentication the user's login name replaces <USERNAME>. `userdomain` can take the form of UPN or Distinguished Name (DN).

```
XSCF> setad userdomain -i 2 '<USERNAME>@yoshi.example.aCompany.com'
```

EXAMPLE 7 Loads a server certificate for Active Directory using the specified URI.

```
XSCF> setad loadcert http://domain_2/UID_2333/testcert
```

EXAMPLE 8 Loads a server certificate for Active Directory using an http Proxy Server with port 8080.

```
XSCF> setad loadcert -p webproxy.aCompany.com:8080 \
http://domain_2/UID_2333/testcert
```

EXAMPLE 9 Loads a server certificate for Active Directory using a username and password.

```
XSCF> setad loadcert -u yoshi \
http://domain_2/UID_2333/testcert
```

EXAMPLE 10 Removes the certificate for alternate server 3.

```
XSCF> setad rmcert -i 3
```

EXAMPLE 11 Sets logging of high-severity diagnostic messages.

```
XSCF> setad logdetail high
```

EXAMPLE 12 Clears diagnostic messages from the log file, answering Yes to all prompts.

```
XSCF> setad log -y clear
```

EXAMPLE 13 Enables strictcertmode.

```
XSCF> setad strictcertmode enable
```

EXAMPLE 14 Configures the dnslocatorquery configuration. *service* represents the DNS query to be performed. The port ID is generally part of the record, but you can override it by using the format <PORT:*portnumber*>. Also, named services specific for the domain being authenticated can be specified by using the <DOMAIN> substitution marker.

```
XSCF> setad dnslocatorquery -i 2 \
'ldap.tcp.gc.msdcs.<DOMAIN>.<PORT:3269>'
```

EXAMPLE 15 Configures the default privileges, where *privileges* are the same as those used in the `setad group custom roles` command.

```
XSCF> setad defaultrole platadm platop
```

EXIT STATUS

The following exit values are returned:

`0`	Successful completion.
`>0`	An error occurred.

SEE ALSO

showad`(8)`

NAME

setaltitude - Sets the altitude of the system.

SYNOPSIS

setaltitude -s altitude= *value*

setaltitude -h

DESCRIPTION

setaltitude is a command to set the altitude of the system.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-s altitude=*value*	Sets the altitude of the system. Specifies the altitude of the location where the system is installed by meter (m) in *value*. 0 or a larger integer can be specified by 100 m. Values less than 100 m are rounded up. The default value is 0 m.

EXTENDED DESCRIPTION

- If the altitude of the system is set, abnormalities in the intake temperature can be detected early. If the altitude of the system is unknown, set a high altitude. If the altitude of the system is not set, temperature abnormalities can be detected by an abnormality of the CPU temperature, etc. Therefore, the system will not be damaged seriously.
- To reflect the set contents, it is necessary to reboot XSCF by using rebootxscf(8).
- Negative numbers are not supported in the altitude setting. If the altitude is below sea level, specify altitude=0.
- You can confirm the altitude of the system set currently by using showaltitude(8).

EXAMPLES

EXAMPLE 1 Set the altitude of the system to 1000 m.

```
XSCF> setaltitude -s altitude=1000
1000m
```

EXAMPLE 2 Set the altitude of the system to 200 m. The specified value is rounded up to the nearest 100 m.

```
XSCF> setaltitude -s altitude=157
200m
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

rebootxscf(8), **showaltitude**(8)

NAME

setaudit - Manages the audit function of the system.

SYNOPSIS

setaudit `enable|disable|archive|delete`

setaudit [`-p count|suspend`] [`-m` *mailaddr*] [`-a` *users*`=enable|disable|default`] [`-c` *classes*`=` {`enable|disable`}]... [`-e` *events*`=enable|disable`]... [`-g` {`enable|disable`}] [`-t` *percents*]

setaudit `-h`

DESCRIPTION

`setaudit` is a command to manage collection of data on the use of the system resources.

Audit data contains the record of the system event related to security. This data can be used for assignment of responsibilities to the actions executed in the system. In audit, the record is generated when the specified event occurs. The events which generate an audit record are below.

- Start and shutdown of the system
- Login and logout
- Action of authentication
- Action of administration

Privileges

To execute this command, `auditadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` *users*`=enable|disable|default`

Sets the audit record generation policy of the specified user. *users* is the comma-separated list of the valid user names.

If `enable` or `disable` is set, the audit record generation of the user becomes enable or disable, respectively. This setting disables the global policy of each specified user. To set the global policy of the user, use the `-g` option.

Setting this to `default` enables the global policy for the policy of the user. To confirm the global audit record policy of the user, use `showaudit -g`.

-c *classes*=enable|disable

Changes the audit record generation policy of the specified audit class. *classes* is a comma-separated list of audit classes. Classes can be specified with a number or name. ACS_prefix can be omitted. For example, the classes of audit-related events can be expressed as ACS_AUDIT, AUDIT or 16.

The valid classes are below.

all
: All classes

ACS_SYSTEM(1)
: System-related event

ACS_WRITE(2)
: Command that can change the status

ACS_READ(4)
: Command to read the current status

ACS_LOGIN(8)
: Login-related event

ACS_AUDIT(16)
: Audit-related event

ACS_PPAR(32)
: Physical partition (PPAR) administration-related event

ACS_USER(64)
: User administration-related event

ACS_PLATFORM(128)
: Platform administration-related event

ACS_MODES(256)
: Mode-related event

You can specify more than one of these options. If more than one of these options are specified, they are handled in the order of the list with the -e option. See Example 1.

If enable or disable is set, the audit record generation of the specified class becomes enable or disable, respectively. It is possible to disable these settings for individual events by using the -e option. The audit record generation policies of classes and events are applied to all users. It is impossible to specify a unique policy of class or event for each individual user.

`-e` *events*`=enable|disable`

Changes the audit record generation policy of the specified audit event. *events* is a comma-separated list of audit events. Events can be specified with a number or name. `AEV_`prefix can be omitted. For example, the event of SSH login can be expressed as `AEV_LOGIN_SSH`, `LOGIN_SSH`, or `0`.

For the list of valid events, see `showaudit -e all`.

You can specify more than one of these options. If more than one of these options are specified, they are handled in the order of the list with the `-c` option. See Example 3.

If `enable` or `disable` is set, the audit record generation of the specified event becomes enable or disable, respectively. Setting these options disables the settings of classes for events. The settings of classes are set by the `-c` option.

The audit record generation policies of classes and events are applied to all users. It is impossible to specify a unique policy of class or event for each individual user.

`-g enable|disable`

Sets the global audit record generation policy of the user.

If it is set to `disable`, no audit record which can attribute to all user accounts is generated. These settings may be disabled depending on individual users by the `-a` option.

`-h`

Displays the usage. Specifying this option with another option or operand causes an error.

`-m` *mailaddr*

Sets the address of the e-mail sent when the usage of the local audit area reaches the threshold (See the `-t` option). The e-mail address needs to be an e-mail address in a valid format, "user@company.com." Specifying `none` in *mailaddr* disables e-mail notification.

-p suspend|count

Sets the policy to be followed if the audit trail reaches the full capacity. The valid values are below.

suspend
: Until free space is secured and it becomes possible to write on the record, or the policy is changed into count, all processes to write on the audit record are suspended.

count
: New audit records are deleted. The number of the records to be deleted are counted.

Note – If suspend is specified, degradation due to an error may occur or the XSCF may be rebooted. Specify the default value count as the write policy of the audit trail. Moreover, in XCP2250 or newer, specifying suspend will result in the same action as specifying count.

-t *percents*

Sets the threshold to issue a warning for the usage of the local region. *percents* is a comma-separated list showing the percentage of the used area. Up to four values can be set in this list. For example, if the values, 50, 75, 80, and 90 are set, a warning is issued when the usage of the ares available for audit records reaches 50%, 75%, 80%, and 90%, respectively. The default is 80%.

A warning is issued as a message to the console. Optionally, it is also possible to issue a warning to the administrator by using e-mail. See -m *mailaddr*.

OPERANDS

The following operands are supported.

`archive` Notifies the archive mechanism of logs to archive the current audit trail.

Note – Archiving of audit log files is not supported at this point.

`delete` Deletes the data of audit trail from the partition of audit logs in chronological order and uses the current partition. `delete` can be used to secure the area for new audit records when the local audit trail reaches the full capacity.

Note – The space in a partition is automatically cleared when logs are archived, if necessary. Operations are required only if a problem with the audit policy or network interrupts archiving of audit logs.

Note – If `setaudit delete` is executed twice, data is also deleted from the new audit log partition and no data of audit trail is kept.

Note – Archiving of audit log files is not supported at this point.

For details on administration of audit logs, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

`disable` Disables writing audit records on audit trail. After that, it notifies the archive mechanism of logs to archive the current audit trail.

Note – Archiving of audit log files is not supported at this point.

`enable` Enables writing audit records on audit trail.

EXTENDED DESCRIPTION

It is possible to confirm the contents of the audit system set currently by using `showaudit`(8).

EXAMPLES

EXAMPLE 1 Change the class by name. Disable the login- and audit-related audit classes and enable the lead-related audit classes.

```
XSCF> setaudit -c LOGIN,AUDIT=disable -c ACS_READ=enable
```

EXAMPLE 2 Change the class by number. Disable the classes 8 (login) and 16 (audit) and enable 1 (system).

```
XSCF> setaudit -c 8,16=disable -c 1=enable
```

EXAMPLE 3 Change the class and enable the event. Disable the event 64 (user) only and enable the class 1 (system).

```
XSCF> setaudit -c 1=enable -e 64=disable
```

EXAMPLE 4 Enable audit. Enable writing on records for audit trail.

```
XSCF> setaudit enable
```

EXAMPLE 5 Enable warning. If the capacity reaches 50% or 75%, a warning is sent.

```
XSCF> setaudit -t 50,75
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showaudit(8)

NAME

setautologout - Sets the session timeout time of XSCF shell.

SYNOPSIS

setautologout -s *timeout*

setautologout -h

DESCRIPTION

`setautologout` is a command to set the session timeout time of XSCF shell.

The default timeout time is 10 minutes.

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-s` *timeout*	Specifies the session timeout time of XSCF shell. Specify the time to timeout in *timeout* by minutes. You can specify an integer from 1 to 255.

EXTENDED DESCRIPTION

- The set session timeout time becomes valid from the next login.
- You can confirm the session timeout time of XSCF shell set currently by using `showautologout`(8).

EXAMPLES

EXAMPLE 1 Set the session timeout time of XSCF shell to 30 minutes.

```
XSCF> setautologout -s 30
30min
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

showautologout`(8)`

NAME

setcod - Sets up the CPU core resources to be used in physical partitions (PPAR).

SYNOPSIS

setcod [`-p` *ppar_id*] `-s cpu`

setcod [[`-q`] `-{y|n}`] `-p` *ppar_id* `-s cpu -c {set|add|del}` *permits*

setcod `-p` *ppar_id* `-s cpu` *permits*

setcod `-h`

DESCRIPTION

`setcod` is the command to set up the CPU core resources to be used in physical partitions (PPAR). To set CPU core resources to be used in PPARs, the number of CPU Activations is to be specified.

If `setcod` is executed without specifying the *permits* operand, the number of CPU Activations for each PPAR can be specified interactively. The prompt to enter the number of the CPU Activations shows the possible maximum value of the number in round brackets and the number currently set in square brackets ([]). If the number of the keys is not specified, the current value is retained.

Moreover, if the `-p` *ppar_id* option was not specified, a prompt is displayed where the number of CPU Activations for each PPAR can be input.

Note – When specifying the number of CPU Activations using `-c set`, specify the final number after addition to or removal from the present number, but not the number that is to be added or removed, to the operand *permits*. If the number to be added or removed is specified, the system may come to a halt, due to over-decrement of the number of CPU Activations. It will be the same even if the `-c` option is omitted.

Before executing this command, it is necessary to add the CPU Activation key to the SPARC M12/M10 systems using `addcodactivation`(8).

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS The following options are supported.

`-c set` Sets up CPU core resources to PPAR.

The number of CPU Activations that is to be allocated to a PPAR is specified to the operand *permits*.

`-c add` Adds CPU core resources to PPAR.

The number of CPU Activations that is to be added to a PPAR is specified to the operand *permits*.

`-c del` Removes CPU core resources from PPAR.

The number of CPU Activations that is to be removed from a PPAR is specified to the operand *permits*.

`-p` *ppar_id* Specifies the PPAR-ID that is to be configured. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

`-s cpu` Sets up CPU core resources to PPAR.

Specify the number of CPU Activations to be set to PPAR in the operand *permits*. If `setcod` is executed without specifying the *permits* operand, the number of CPU Activations for each PPAR can be specified interactively.

`-q` Prevents display of messages, including prompt, for standard output.

`-y` Automatically responds to prompt with "y" (yes).

`-n` Automatically responds to prompt with "n" (no).

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS The following operand is supported.

permits Specifies the number of the CPU Activations allocated for PPAR. CPU Activations can be allocated in units of 1 core.

The meaning of the numerical value, specified by *permits* changes like the following, in accordance with the parameter `{set|add|del}` specified by the `-c` option.

Caution – If the number of CPU Activations, specified by *permits* in respect to a running PPAR is inadequate, the system may come to a halt.

`-c set` Specifies the number of CPU Activations that is to be allocated to a PPAR. It is not possible to allocate more CPU Activations than what is available. The number of available CPU Activations can be obtained by `showcod`(8).

`-c add` Specifies the number of CPU Activations that is to be added to a PPAR. It is not possible to add more CPU Activations than what is available. The number of CPU Activations that can be added and the number of CPU Activations that have already been allocated to the PPAR, can be obtained by `showcod`(8).

Note – The number of CPU Activations that can be added is the installed CPU Activations that have not being allocated to any PPAR.

`-c del` Specifies the number of CPU Activations that is to be removed from a PPAR. It is not possible to remove more CPU Activations than what is being allocated to a PPAR. The number of CPU Activations that is currently allocated to a PPAR can be obtained by `showcod`(8).

Note – If the `-c` option is omitted, the value of *permit* will be rendered the same as when `-c set` is specified. However, if the `-c` option is omitted, `setcod` will function like the following. Therefore, it is recommended to use the `-c` option.

- When performing configuration change, the system will not ask for confirmation from the user.
- When reducing the number of CPU Activations from a running PPAR, the system will not output warning messages. In such a case, if the number of CPU Activations to reduce, as specified by *permits*, is equal to or more than what is allocated to it, the system may abruptly come to a halt.

EXTENDED DESCRIPTION

The following specification will be integrated in `-c set` and thus, may not be supported in the future.

`setcod -p` *ppar_id* `-s cpu` *permits*

EXAMPLES

EXAMPLE 1 Set up the number of CPU Activations that is to be allocated to PPAR-ID 0 to 30.

```
XSCF> setcod -p 0 -s cpu -c set 30
PROC Permits assigned for PPAR 0 :    0 -> 30

PROC Permits assigned for PPAR will be changed.
Continue? [y|n] :y

Completed.
```

EXAMPLE 2 Change the number of CPU Activations that is allocated to PPAR-ID 0 from 32 to 30. While a PPAR is running, if the specified number is less than that of the allocated number of CPU Activations, a warning message is output.

```
XSCF> setcod -p 0 -s cpu -c set 30
PROC Permits assigned for PPAR 0 :    32 -> 30

Note:
  There is a possibility that logical domains are stopped
  for CoD resource violation.

PROC Permits assigned for PPAR will be changed.
Continue? [y|n] :y

Completed.
```

EXAMPLE 3 Add 2 CPU Activations to PPAR-ID 0.

```
XSCF> setcod -p 0 -s cpu -c add 2
PROC Permits assigned for PPAR 0 :    30 -> 32

PROC Permits assigned for PPAR will be changed.
Continue? [y|n] :y

Completed.
```

EXAMPLE 4 Remove 2 CPU Activations from PPAR-ID 0.

```
XSCF> setcod -p 0 -s cpu -c del 2
PROC Permits assigned for PPAR 0 :    30 -> 28

PROC Permits assigned for PPAR will be changed.
Continue? [y|n] :y

Completed.
```

EXAMPLE 5 Remove 2 CPU Activations from PPAR-ID 0. If the PPAR is running when this action is performed, a warning message is output.

```
XSCF> setcod -p 0 -s cpu -c del 2
PROC Permits assigned for PPAR 0 :    30 -> 28

Note:
  There is a possibility that logical domains are stopped
  for CoD resource violation.

PROC Permits assigned for PPAR will be changed.
Continue? [y|n] :y

Completed.
```

EXAMPLE 6 Set the number of CPU Activations that is to be allocated to a PPAR. If the number of specified CPU Activations is less than what is already allocated to PPARs and if any of those PPARs is in a running state, a warning message is output.

```
XSCF> setcod -s cpu
PROC Permits installed: 10 cores
PROC Permits assigned for PPAR 0 (10 MAX) [Permanent 2cores]
 Permanent [2]:4
PROC Permits assigned for PPAR 1 (6 MAX) [Permanent 4cores]
 Permanent [4]:2
PROC Permits assigned for PPAR 2 (4 MAX) [Permanent 4cores]
 Permanent [4]:2
PROC Permits assigned for PPAR 3 (2 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 4 (2 MAX) [Permanent 0cores]
 Permanent [0]:2
PROC Permits assigned for PPAR 5 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 6 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 7 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 8 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 9 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 10 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 11 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 12 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 13 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 14 (0 MAX) [Permanent 0cores]
 Permanent [0]:
PROC Permits assigned for PPAR 15 (0 MAX) [Permanent 0cores]
```

```
 Permanent [0]:

PROC Permits assigned for PPAR will be changed.

PROC Permits assigned for PPAR 0 :    2 -> 4
PROC Permits assigned for PPAR 1 :    4 -> 2
PROC Permits assigned for PPAR 2 :    4 -> 2
PROC Permits assigned for PPAR 3 :    0 -> 0
PROC Permits assigned for PPAR 4 :    0 -> 2
PROC Permits assigned for PPAR 5 :    0 -> 0
PROC Permits assigned for PPAR 6 :    0 -> 0
PROC Permits assigned for PPAR 7 :    0 -> 0
PROC Permits assigned for PPAR 8 :    0 -> 0
PROC Permits assigned for PPAR 9 :    0 -> 0
PROC Permits assigned for PPAR 10:    0 -> 0
PROC Permits assigned for PPAR 11:    0 -> 0
PROC Permits assigned for PPAR 12:    0 -> 0
PROC Permits assigned for PPAR 13:    0 -> 0
PROC Permits assigned for PPAR 14:    0 -> 0
PROC Permits assigned for PPAR 15:    0 -> 0

Note:
  There is a possibility that logical domains are stopped
  for CoD resource violation.

Continue? [y|n] :y

Completed.
```

EXAMPLE 7 Set the number of CPU Activations of PPAR-ID 0 to 30.

```
XSCF> showcod -p 0
PROC Permits assigned for PPAR 0: 0
XSCF> setcod -p 0 -s cpu 30
XSCF> showcod -p 0
PROC Permits assigned for PPAR 0: 30
```

EXAMPLE 8 Increase the number of CPU Activations to 32 by adding 2 CPU Activations to PPAR-ID 0.

```
XSCF> showcod -p 0
PROC Permits assigned for PPAR 0: 30
XSCF> setcod -p 0 -s cpu 32
XSCF> showcod -p 0
PROC Permits assigned for PPAR 0: 32
```

EXAMPLE 9 Reduce the number of CPU Activations to 28 by removing 2 CPU Activations from PPAR-ID 0.

```
XSCF> showcod -p 0
PROC Permits assigned for PPAR 0: 30
```

```
XSCF> setcod -p 0 -s cpu 28
XSCF> showcod -p 0
PROC Permits assigned for PPAR 0: 28
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **showcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8), **showcodusage**(8)

NAME

setdate - Sets the date and time of the XSCF clock.

SYNOPSIS

setdate [[-q] -{y|n}] [-u] -s *date*

setdate -h

DESCRIPTION

setdate is a command to set the date and time of the XSCF clock.

If the local time is specified without specifying the -u option when setting the date and time, it is set after converted to the coordinated universal time (UTC).

After the command is executed, XSCF is automatically rebooted.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompt, for standard output.
-s *date*	Sets the date and time. *date* can be specified in either of the following formats.
	yyyy.MM.DD-hh:mm:ss "Year.Month.Date.-Hour (24 hour format):minute:second"
	MMDDhhmmyyyy.ss "Month Date Hour (24 hour format) Minute Year.Second"
-u	Specifies the time and date in UTC. If omitted, the local time is applicable.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- Setting the time by setdate may affect the difference from the Hypervisor time of each physical partition (PPAR) and cause a mismatch of the time when PPAR is started. After setting the time, confirm the difference between XSCF and the Hypervisor time of each PPAR by using showdateoffset(8). If the difference becomes large, reset the difference of the time by resetdateoffset(8).
- Execution of setdate, while the XSCF NTP client feature is enabled, causes an error. However, only in the case where the time has reverted back to the initial value of hardware clock (year 2001), time can be restored to the right value using

setdate even if XSCF NTP client feature is enabled. The status of the NTP client feature can be checked by showntp(8).

- You can confirm the date and time of XSCF set currently by using showdate(8).

EXAMPLES

EXAMPLE 1 Specify "October 20, 2012 16:59:00" in JST and set it after converting it into UTC. After the setting is made, XSCF is rebooted.

```
XSCF> setdate -s 102016592012.00
Sat Oct 20 16:59:00 JST 2012
The XSCF will be reset. Continue? [y|n] :y
Sat Oct 20 7:59:00 UTC 2012
XSCF>
(After this, the reset processing continues.)
```

EXAMPLE 2 Set the current time to "October 20, 2012 07:59:00" in UTC. After the setting is made, XSCF is rebooted.

```
XSCF> setdate -u -s 102007592012.00
Sat Oct 20 07:59:00 UTC 2012
The XSCF will be reset. Continue? [y|n] :y
Sat Oct 20 7:59:00 UTC 2012
XSCF>
(After this, the reset processing continues.)
```

EXAMPLE 3 Set the current time to "October 20, 2012 16:59:00" in JST. The prompt is automatically given a "y" response. After the setting is made, XSCF is rebooted.

```
XSCF> setdate -y -s 102016592012.00
Sat Oct 20 16:59:00 JST 2012
The XSCF will be reset. Continue? [y|n] :y
Sat Oct 20 7:59:00 UTC 2012
XSCF>
(After this, the reset processing continues.)
```

EXAMPLE 4 Set the current time to "October 20, 2012 16:59:00" in JST. The prompt is automatically given a "y" response after hiding the message. After the setting is made, XSCF is rebooted.

```
XSCF> setdate -q -y -s 102016592012.00
XSCF>
(After this, the reset processing continues.)
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setntp(8), **settimezone**(8), **showdate**(8), **showntp**(8), **showtimezone**(8)

NAME

setdomainconfig - Specifies the logical domain configuration when the physical partition (PPAR) is started.

SYNOPSIS

setdomainconfig -p *ppar_id*

setdomainconfig [[-q] -{y|n}] -p *ppar_id* -i *index*

setdomainconfig [[-q] -{y|n}] -p *ppar_id* -c default

setdomainconfig -h

DESCRIPTION

setdomainconfig is a command to specify the logical domain configuration when the PPAR is started next time.

If setdomainconfig is executed without specifying -i *index*, the list of the logical domain configurations is displayed on the prompt and then specify the Index of the logical domain configuration used when PPAR is started next time. If Index is not specified, the current setting is retained.

Privileges

To execute this command, any of the following privileges is required.

platadm, fieldeng	Enables execution for all PPARs.
pparadm	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c default	Sets the logical domain configuration to the factory settings (factory-default).
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-i *index*	Specifies the administration number specified for the logical domain configuration. The administration number can be confirmed by showdomainconfig(8). You can specify an integer from 1 to 8.
-n	Automatically responds to prompt with "n" (no).
-p *ppar_id*	Specifies the PPAR-ID to set the logical domain configuration. *ppar_id* can be 0-15 depending on the system configuration.
-q	Prevents display of messages, including prompt, for standard output.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- The logical domain configuration is saved by Logical Domains (LDoms) Manager.
- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- You can confirm the contents of the logical domain configuration set currently by using `showdomainconfig`(8).
- In case of a logical domain with a configuration other than that of "factory default", if the configuration is changed to "factory-default", using the `-c default` or the `-i` *index* option of this command or by using any setup of Oracle VM Server for SPARC, when the related PPAR is booted the next time, the OpenBoot PROM environment variables are initialized. Meanwhile, if the configuration of the logical domain is "factory default", executing any of the aforesaid procedures will not result in the initialization of the OpenBoot PROM environment variables.

EXAMPLES

EXAMPLE 1 Set the logical domain configuration of PPAR-ID 0 to "ldm-set1."

```
XSCF> setdomainconfig -p 0
PPAR-ID     :0
Booting config
 (Current)  :ldm-set2
 (Next)     :ldm-set2
-------------------------------------------------------------------------
-----
Index       :1
config_name :factory-default
domains     :1
date_created:-
-------------------------------------------------------------------------
-----
Index       :2
config_name :ldm-set1
domains     :8
date_created:'2012-08-08 11:34:56'
-------------------------------------------------------------------------
-----
Index       :3
config_name :ldm-set2
domains     :20
date_created:'2012-08-09 12:43:56'
-------------------------------------------------------------------------
-----
Select Index of Using config_name :2
PPAR-ID of PPARs that will be affected :00
Logical domain config_name will be set to "ldm-set1".
Continue? [y|n] :y
```

EXAMPLE 2 Set the logical domain configuration of PPAR-ID 0 to "ldm-set2."

```
XSCF> setdomainconfig -p 0 -i 1
Index       :1
config_name :ldm-set2
domains     :8
date_created:'2012-08-08 11:34:56'
-------------------------------------------------------------------------
-----
PPAR-ID of PPARs that will be affected:00
Logical domain config_name will be set to "ldm-set2".
Continue? [y|n] :y
```

EXAMPLE 3 Set the logical domain configuration of PPAR-ID 0 to the default. The prompt is automatically given a "y" response.

```
XSCF> setdomainconfig -y -p 0 -c default
PPAR-ID of PPARs that will be affected :00
Logical domain config_name will be set to "factory-default".
Continue? [y|n] :y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showdomainconfig(8)

NAME

setdualpowerfeed - Sets the dual power feed mode.

SYNOPSIS

setdualpowerfeed [`-a`|`-b` *bb_id*] `-s` *key*

setdualpowerfeed `-h`

DESCRIPTION

`setdualpowerfeed` is to enable or disable the dual power feed mode of the system.

Note – The SPARC M10 system and the SPARC M12-1 each have two mounted power supply units. Even when the dual power feed function is set to enabled/disabled, the setting will not make any changes to the system behavior in the redundant configuration. The function for setting dual power feed is used as a "memo" for the system administrator to check the current status.
The SPARC M12-2/M12-2S has four mounted power supply units. In cases of dual power feed, each power feed system consists of two power supply units. For details, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` — Configures the dual power feed mode of all SPARC M12/M10 systems chassis and the crossbar boxes.

`-b` *bb_id* — Specifies the BB-ID to which you set the dual power feed mode. In *bb_id*, you can specify an integer from 0 to 15 in case of SPARC M12/M10 systems, and from 80 to 83 in case of crossbar box.

`-h` — Displays the usage. Specifying this option with another option or operand causes an error.

`-s` *key* — Sets the dual power feed mode of the system. You can specify either of the following for *key*.

`enable`	Enables the dual power feed mode.
`disable`	Disables the dual power feed mode.

EXTENDED DESCRIPTION

- You can confirm the status of the dual power feed mode set currently by using `showdualpowerfeed`(8).
- You can confirm the information of the model and power supply unit (PSU) set currently by using `showhardconf`(8).
- The dual power feed setting is applied soon after `setdualpowerfeed` execution. It is not necessary to reboot the XSCF.

EXAMPLES

EXAMPLE 1 Disables the dual power feed mode of the entire system.

```
XSCF> setdualpowerfeed -a -s disable
BB#00:enable -> disable
BB#01:enable -> disable
BB#02:enable -> disable
BB#03:enable -> disable
BB#04:enable -> disable
BB#05:enable -> disable
BB#06:enable -> disable
BB#07:enable -> disable
BB#08:enable -> disable
BB#09:enable -> disable
BB#10:enable -> disable
BB#11:enable -> disable
BB#12:enable -> disable
BB#13:enable -> disable
BB#14:enable -> disable
BB#15:enable -> disable
XBBOX#80:enable -> disable
XBBOX#81:enable -> disable
XBBOX#82:enable -> disable
XBBOX#83:enable -> disable
```

EXAMPLE 2 Enables the dual power feed mode of BB-ID 01.

```
XSCF> setdualpowerfeed -b 1 -s enable
BB#00:disable -> disable
BB#01:disable -> enable
BB#02:disable -> disable
BB#03:disable -> disable
BB#04:disable -> disable
BB#05:disable -> disable
BB#06:disable -> disable
BB#07:disable -> disable
BB#08:disable -> disable
BB#09:disable -> disable
BB#10:disable -> disable
BB#11:disable -> disable
BB#12:disable -> disable
BB#13:disable -> disable
BB#14:disable -> disable
BB#15:disable -> disable
XBBOX#80:disable -> disable
```

```
XBBOX#81:disable -> disable
XBBOX#82:disable -> disable
XBBOX#83:disable -> disable
```

EXAMPLE 3 Enables the dual power feed mode on the SPARC M10-1.

```
XSCF> setdualpowerfeed -b 0 -s enable
BB#00:disable -> enable
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showdualpowerfeed(8), **showhardconf**(8)

NAME

setemailreport - Sets the e-mail report function.

SYNOPSIS

setemailreport [-v] [-t]

setemailreport [-s *variable*= *value*]...

setemailreport -h

DESCRIPTION

setemailreport is a command to set the e-mail report function for remote maintenance.

You can interactively set the e-mail report function by executing setemailreport without specifying an option. For interactive setting, use the following options.

-a	Addition of addressee
-d	Deletion of addressee
-r	Replacement of addressee (Default)

To set the e-mail report non-interactively, specify the -s option.

Setting the mail server and port using setsmtp(8) enables transmission of test mail by setemailreport -t.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

-s *variable=value* Sets the e-mail report function.

You can specify the following values for *variable*.

`enable`	Specifies whether to enable the e-mail report function.
`recipient`	Specifies the recipient address of e-mail.

If `enable` is set in *variable*, you can specify either of the following values for *value*.

`yes`	Enables the e-mail report function.
`no`	Disables the e-mail report function.

If `recipient` is set in *variable*, specify the recipient e-mail address for *value*. The e-mail addresses can be specified by separating them either with commas (,), colons (:), or semicolons (;). If multiple addresses are specified, enclose them in double quotation marks (").

-t Sends a test mail.

-v Displays detailed message.

EXTENDED DESCRIPTION

- You can confirm the data of the e-mail report set currently by using `showemailreport`(8).
- The e-mail addresses that are used with the `setemailreport` should be in the following format, which is based on "3.4.1. Addr-Spec Specification" of RFC5322.
  - The local-part and the domain should be combined by the "@" character in this format: local-part@domain, the local-part should not contain more than 64 characters, the domain should not contain more than 255 characters and the mail address as a whole should not contain more than 256 characters
  - The following character strings can be used in the local-part:

    - abcdefghijklmnopqrstuvwxyz

    - ABCDEFGHIJKLMNOPQRSTUVWXYZ

    - 0123456789

    - !#$%&'*+-/=?^_`{|}~.

    The dot (.) cannot be used as the first or last character of the local-part. Moreover, two or more of this character cannot be used consecutively.
  - The domain should be specified as a combination of its constituent labels, added by a dot (.), in this format: label1.label2.

    The dot (.) cannot be used as the first or last character of the domain part. Moreover, two or more of this character cannot be used consecutively.
  - The labels, which are part of domains, may contain the following characters:

- abcdefghijklmnopqrstuvwxyz
- ABCDEFGHIJKLMNOPQRSTUVWXYZ
- 0123456789
- .-

The hyphen (-) cannot be used as the first character of a label.

- If there are more than one recipients, put all the e-mail addresses in a pair of double quotes and separate individual e-mail addresses either with commas (,), colons (:), or semicolons (;).

Note – Depending on the mail server, the above symbols may not be used.

Note – The following formats as defined in RFC5322 are not supported:
3.2.1. quoted-pairs, as defined in "Quoted Characters".
3.2.2. CFWS, FWS, comment, as defined in "Folding White Space and Comments".
3.2.4. quoted-strings, as defined in "Quoted Strings".
3.4.1. domain-literal, as defined in "Addr-Spec Specification".
4. The obsolete formats described in "Obsolete Syntax".

EXAMPLES

EXAMPLE 1 Enable the e-mail report function interactively.

```
XSCF> setemailreport
Enable E-Mail Reporting? [no]:yes
E-mail Recipient Address [useradm@company.com]:
Do you want to send a test mail now [no]? yes
... Sending test mail to 'useradm@company.com'
```

EXAMPLE 2 Add the e-mail address to receive the e-mail report interactively.

```
XSCF> setemailreport
Enable E-Mail Reporting? [yes]:[Enter]
E-mail Recipient Address [useradm@company.com]: -a adm2@company.com
```

EXAMPLE 3 Delete the e-mail address to receive the e-mail report interactively.

```
XSCF> setemailreport
Enable E-Mail Reporting? [yes]:[Enter]
E-mail Recipient Address [adm2@company.com]: -d adm2@company.com
```

EXAMPLE 4 Set the e-mail report function non-interactively.

```
XSCF> setemailreport -s enable=yes -s
recipient="useradm@company.com,adm2@company.com"
```

EXAMPLE 5 Send a test mail.

```
XSCF> setemailreport -t
... Sending test mail to 'useradm@company.com'
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setsmtp(8), **showemailreport**(8)

NAME

sethostname - Sets the host names and DNS domain names of the master chassis and chassis whose XSCF is standby.

SYNOPSIS

sethostname *xscfu hostname*

sethostname -d *domainname*

sethostname -h

DESCRIPTION

`sethostname` is a command to set the host names and DNS domain names of the master chassis and chassis whose XSCF is standby.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

-d *domainname* — Specifies the DNS domain names to be set for the master chassis/chassis whose XSCF is standby. *domainname* is specified with the label elements separated by periods (.). For the label element, you can use alphanumeric characters and hyphens (-). However, make the specification using an alphabetic character for the beginning, and an alphanumeric character for the end of the element. (Based on RFC 1034.) It shall be specified keeping the number of characters including that of *hostname* 253 or lower. The reason why the number of characters is 253 or lower is that two characters are kept for one period to connect *hostname* with *domainname* and another one to indicate the root domain.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

hostname

Specifies the host names to be set for the master chassis and chassis whose XSCF is standby. Specifies it not by the Fully Qualified Domain Name (FQDN) but within 63 characters in the abbreviated format. It shall be specified keeping the number of characters including that of *domainname* 253 or lower. The reason why the number of characters is 253 or lower is that two characters are kept for one period to connect *hostname* with *domainname* and another one to indicate the root domain. *hostname* is specified with the label elements separated by periods (.). For the label element, you can use alphanumeric characters and hyphens (-). However, make the specification using an alphabetic character for the beginning, and an alphanumeric character for the end of the element. (Based on RFC 1034.)

xscfu

Specifies the chassis to be set. Depending on the system configuration, you can specify it as follows. Omitting this causes an error.

- For SPARC M12-2S/M10-4S (with crossbar box)

XBBOX#80	`xbbox#80`
XBBOX#81	`xbbox#81`

- For SPARC M12-2S/M10-4S (without crossbar box)

BB#00	`bb#00`
BB#01	`bb#01`

- For SPARC M12-1/M12-2/M10-1/M10-4

`bb#00`

EXTENDED DESCRIPTION

- The following cases cause an error when `applynetwork`(8) is executed.
  - Case that the host name and DNS domain name are not set
  - Case that the character strings "`localdomain`" and "`localhost`" are specified for the DNS domain name and host name, respectively.
  - Case that the total number of characters including the DNS domain name set by `sethostname` and search path set by `setnameserver`(8) exceeds 256.
- To reflect the set host name and DNS domain name in XSCF, execute `applynetwork`(8). After that, reboot XSCF by `rebootxscf`(8) and fix the contents of setting.
- You can confirm the host name and DNS domain name set currently by using `shownetwork`(8).

EXAMPLES

EXAMPLE 1 Set the host name, scf0-hostname, in BB#00.

```
XSCF> sethostname bb#00 scf0-hostname
```

EXAMPLE 2 Specify the DNS domain name, example.com, the master chassis/chassis whose XSCF is standby.

```
XSCF> sethostname -d example.com
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

applynetwork(8), **rebootxscf**(8), **setnameserver**(8), **showhostname**(8), **shownameserver**(8)

NAME

sethsmode - Enables/Disables the high speed mode of the CPU.

SYNOPSIS

sethsmode [[-q] -{y|n}] -s {on|off}

sethsmode -h

DESCRIPTION

sethsmode is a command to enable or disable the high speed mode of the CPU. Enabling (setting "on") the high speed mode increases the CPU frequency (maximum: 4.35 GHz) as the number of fan rotations increases and the cooling capability is improved.

The default setting is disabled (off).

Executing sethsmode reboots the XSCF, and the setting information is reflected at the system power-on time.

This command is not supported on SPARC M12-1/M12-2/M10-1/M10-4/M10-4S.

Note – When the high speed mode is enabled, noise becomes larger compared with the case where the mode is disabled. Enabling the mode does not guarantee the maximum value of 4.35 GHz of the CPU frequency.

Privileges

To execute this command, any of the following privileges is required.

platadm, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-q	Prevents display of messages, including prompts, for standard output.
-s {on|off}	Enables high speed mode with "on" or disables high speed mode with "off".
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- If an invalid option is specified, sethsmode terminates abnormally.
- Execute sethsmode while the system is shut down. If the system is not shut down, it causes an error.

The system shutdown status means the status in which all PPARs are shut down. If it is in operation, all PPARs are shut down by executing `poweroff -a` and then the power of the system is turned off. You can check the system power status by executing `showhardconf`(8) and referring to the "System_Power:" display ("On" or "Off").

- `showhsmode`(8) can check whether `sethsmode` has enabled or disabled high speed mode.
- After executing `sethsmode`, the XSCF is rebooted.
- Since the XSCF is rebooted, the high speed mode of the CPU cannot be set when any of the following commands is being executed:

  `diagxbu`(8), `flashupdate`(8), `poweron`(8), `rebootxscf`(8), `restoreconfig`(8), `setdate`(8), `testsb`(8)

EXAMPLES

EXAMPLE 1 Enable (set "on") the high speed mode of the CPU.

```
XSCF> sethsmode -s on
The specified modes will be changed.
The XSCF will be reset. Continue? [y|n] :y
```

EXAMPLE 2 The command is executed when the power to the system is on.

```
XSCF> sethsmode -s off
The specified modes will be changed.
The XSCF will be reset. Continue? [y|n] :y
Cannot perform this operation while the PPAR is powered on.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showhsmode(8)

NAME

sethttps - Sets the start and halt of the HTTPS service used in the XSCF network. Also it performs authentication-related settings.

SYNOPSIS

sethttps [[-q] -{y|n}] -c {enable|disable}

sethttps -c gencsr *country state | province locality organization organizationalunit common e-mail*

sethttps [[-q] -{y|n}] -c genserverkey

sethttps -c *importca*

sethttps [[-q] -{y|n}] -c selfsign *country state | province locality organization organizationalunit common e-mail*

sethttps -h

DESCRIPTION

sethttps is a command to set the start and halt of the HTTPS service used in the XSCF network. It also performs authentication-related settings used in the HTTPS service.

The following contents can be set as authentication-related items.

- Self-certificate-related settings
  - Construction of self-certificate authority
  - Generation of private keys of Web servers
  - Creation of self-signed Web server certificates
- External certificate-related settings
  - Generation of private keys of Web servers
  - Generation of certificate signing requests (CSR) for Web servers and requests for issuance of certificates
  - Import of Web server certificates

In multi-XSCF configuration, the settings are automatically reflected in the standby XSCF.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-c {enable|disable}` Specifies the start and half of the HTTPS service. You can specify either of the following. Omitting this causes an error.

`enable`	Starts HTTPS service.
`disable`	Halts HTTPS service.

If there is no Web server private key or Web server certificate when starting HTTPS service, creates a Web server private key and self-signed Web server certificate after creating a self-certificate authority and starts HTTPS service.

After HTTPS service is started, the settings are reflected when command execution is completed and the service is started.

`-c gencsr` Generates CSR.

`-c genserverkey` Creates private key for Web server.

`-c importca` Imports the Web server certificate signed at the certificate authority to XSCF.

`-c selfsign` Constructs a self-certificate authority. It also creates a self-signed Web server certificate.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-n` Automatically responds to prompt with "n" (no).

`-q` Prevents display of messages, including prompt, for standard output.

`-y` Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

common Specifies a common name such as the creator name and host name of servers within 64 characters. When specifying `-c selfsign`, you cannot specify values containing only space characters.

country Specifies a country name with two characters such as JP and US. When specifying `-c selfsign`, you cannot specify values containing only space characters.

e-mail Specifies the e-mail address within 64 characters.

locality	Specifies the name of a city, etc. within 64 characters.
organization	Specifies the name of a company, etc. within 64 characters. When specifying `-c selfsign`, you cannot specify values containing only space characters.
organizationalunit	Specifies the names of a division and department, etc. within 64 characters.
state|*province*	Specifies the names of a state and prefecture, etc. within 64 characters. When specifying `-c selfsign`, you cannot specify values containing only space characters.

Format rules of operands:

- If any symbols or space characters are included in the value, specify the entire value enclosing it in single quotation marks (') or double quotation marks (") like "Kawasaki city."
- To specify space characters only, specify the space characters enclosing it in single quotation marks (') or double quotation marks (") like " ". However, there are operands for which values composed of space characters only cannot be specified. For details, see the explanation of each operand.
- To create CSR, you cannot specify space characters for any operands.
- To omit operands, specify two continuous single quotation marks (') or double quotation marks (") like "". At this time, a Web server certificate is generated based on the contents set initially.
- To include a backslash (\) or dollar mark ($), specify it with a backslash (\) just before it like "\\" or "\$."
- As for `-c selfsign` or `-c gencsr`, the specification order of operands is fixed. See the format.

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- CSR is created by overwriting.
- For start of HTTPS service, the contents of settings are reflected just after execution of `sethttps`, and the service is started.

  If there is no Web server private key or Web server certificate when starting HTTPS service, creates a Web server private key and self-signed Web server certificate after creating a self-certificate authority and starts HTTPS service.
- Halt of HTTPS service is reflected just after execution of `sethttps`. At this time, the HTTPS sessions in operation are disconnected, if any.

- Creation of Web server private keys, (`-c genserverkey`), import of server certificates (`-c importca`), construction of self-certificate authority, and creation of self-signed Web server certificates (`-c selfsign`) can be executed only when HTTPS service is halted.
- You can confirm the contents of the HTTPS service set currently by using `showhttps`(8).

EXAMPLES

EXAMPLE 1 Start HTTPS service.

```
XSCF> sethttps -c enable
Continue? [y|n] :y
```

EXAMPLE 2 Halt HTTPS service.

```
XSCF> sethttps -c disable
Continue? [y|n] :y
```

EXAMPLE 3 If there is no Web server certificate when executing `enable`, create a self-certificate authority and self-signed Web server certificate, and start HTTPS service.

```
XSCF> sethttps -c enable
The Web serverkey or Web server certificate which has been signed by an
external certification authority does not exist.
Create self certification authority and Web server certificate which has
been self signed.
Continue? [y|n] :y
```

EXAMPLE 4 Generate a Web server certificate signing request (CSR) based on the following contents. *country*: JP, *state*|*province*: Kanagawa, *locality*: Kawasaki, *organization*: Example, *organizationalunit*: development, *common*: scf-host, *e-mail*: abc@example.com

```
XSCF> sethttps -c gencsr JP Kanagawa Kawasaki Example development
\ scf-host abc@example.com
```

EXAMPLE 5 Construct a self-certificate authority based on the following contents and generate a self-signed Web server certificate. *country*: JP, *state*|*province*: Kanagawa, *locality*: Kawasaki, *organization*: Example, *organizationalunit*: development, *common*: scf-host, *e-mail*: abc@example.com

```
XSCF> sethttps -c selfsign JP Kanagawa Kawasaki Example development
scf-host abc@example.com
CA key and CA cert already exist. Do you still wish to update? [y|n] :y
Enter passphrase:
Verifying - Enter passphrase:
```

EXAMPLE 6 Create private key for Web server.

```
XSCF> sethttps -c genserverkey
Server key already exists. Do you still wish to update? [y|n] :y
Enter passphrase:
Verifying - Enter passphrase:
```

EXAMPLE 7 Import the copied Web server certificate. To terminate it, press the [Enter] key and then press the [Ctrl]+[D] key.

```
XSCF> sethttps -c importca
Please import a certificate:
-----BEGIN CERTIFICATE-----
MIIDdTCCAt6gAwIBAgIBATANBgkqhkiG9w0BAQQFADCBgTELMAkGA1UEBhMCamox
DjAMBgNVBAgTBXN0YXRlMREwDwYDVQQHEwhsb2NhbGl0eTEVMBMGA1UEChMMb3Jn
YW5pemF0aW9uMQ8wDQYDVQQLEwZvcmdhbmkxDzANBgNVBAMTBmNvbW1vbjEWMBQG
CSqGSIb3DQEJARYHZWUubWFpbDAeFw0wNjA1MzAwNTI5MTVaFw0xNjA1MjcwNTI5
MTVaMG4xCzAJBgNVBAYTAmpqMQ4wDAYDVQQIEwVzdGF0ZTEVMBMGA1UEChMMb3Jn
YW5pemF0aW9uMQ8wDQYDVQQLEwZvcmdhbmkxDzANBgNVBAMTBmNvbW1vbjEWMBQG
CSqGSIb3DQEJARYHZWUubWFpbDCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEA
nkPntf+TjYtyKlNYFbO/YavFpUzkYTLHdt0Fbz/tZmGd3e6Jn34A2W9EC7D9hjLs
j+kAP41Al6wFwGO7KP3H4iImX0Uysjl9Hyk4jLBU51sw8JqvT2utTjltV5mFPKL6
5A51Yuhf8OGrR+bYGli6H1a6RPmlMSD7Z0AGDxR0eY0CAwEAAaOCAQ0wggEJMAkG
A1UdEwQCMAAwLAYJYIZIAYb4QgENBB8WHU9wZW5TU0wgR2VuZXJhdGVkIENlcnRp
ZmljYXRlMB0GA1UdDgQWBBQHIlCmI7QyZa8zpt1Hl6EfLR+EwDCBrgYDVR0jBIGm
MIGjgBTnQYs6jzD7wdDhk7wsFeJGVaUTtaGBh6SBhDCBgTELMAkGA1UEBhMCamox
DjAMBgNVBAgTBXN0YXRlMREwDwYDVQQHEwhsb2NhbGl0eTEVMBMGA1UEChMMb3Jn
YW5pemF0aW9uMQ8wDQYDVQQLEwZvcmdhbmkxDzANBgNVBAMTBmNvbW1vbjEWMBQG
CSqGSIb3DQEJARYHZWUubWFpbIIBADANBgkqhkiG9w0BAQQFAAOBgQCqBFbo88Hi
yvOUyW8E8ll1AbuA04IrnjHI4cjHq9NuSX1w8mJsXKTVMx3WZCJpJDC+f/WoRMKw
R+OpXAVQvb2tjIn3kO99dq+begECo4mwknW1t7QI7A1BkcW2/MkOolIRa6iP1Zwg
JoPmwAbrGyAvGUtdzUoyIH0jl7dRQrVIRA==
-----END CERTIFICATE-----
[Ctrl]+[D]
```

EXAMPLE 8 Create private key for Web server. The prompt is automatically given a "y" response.

```
XSCF> sethttps -c genserverkey -y
Server key already exists. Do you still wish to update? [y|n] :y
Enter passphrase:
Verifying - Enter passphrase:
```

EXAMPLE 9 Create private key for Web server. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> sethttps -c genserverkey -q -y
Enter passphrase:
Verifying - Enter passphrase:
```

EXAMPLE 10 For the operand *organizationalunit*, specify "`$development`" and create CSR.

```
XSCF> sethttps -c gencsr JP Kanagawa Kawasaki Example
'¥$development' xscf-host abc@example.com
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

showhttps(8)

NAME

setinterimpermit - Enables/Disables CPU Activation Interim Permit.

SYNOPSIS

setinterimpermit [[-q] -{y|n}] -p *ppar_id* -c {enable|disable}

setinterimpermit -h

DESCRIPTION

setinterimpermit is a command that enables/disables CPU Activation Interim Permit (hereafter "Interim Permit") for each physical partition (PPAR). On SPARC M12-1/M12-2/M10-1/M10-4 systems, "each PPAR" means the entire system.

Interim Permit is a function that permits the use of all CPU core resources physically present in a physical partition (PPAR) for a limited period of 30 calendar days. Interim Permit can be used when the quantity of activated CPU cores in the PPAR is not sufficient and more CPU core resources are required immediately. Interim Permit is a useful method to respond quickly to sudden workload expansion and can be used to provide CPU core resources while the order/delivery process for purchased CPU Activation permits in progress.

On SPARC M12-2S/M10-4S systems, Interim Permit can be enabled/disabled only for PPARs to which logical system boards (LSBs) have been assigned by setpcl(8).

When Interim Permit is enabled, CPU Activations for all CPU core resources on LSBs assigned to the specified PPAR are temporarily assigned to the PPAR. This enables the use of additional CPU core resources within the effective period (30 calendar days) and until purchased CPU Activation keys are received and registered in the system.

Use Interim Permit when the system does not have enough CPU Activations, you have a plan to purchase the appropriate quantity of additional CPU Activations, and need to use CPU core resources immediately.

Interim Permit can be enabled in either of these two cases:

1. Interim Permit has never been used for the PPAR. This state can be confirmed by using showinterimpermit(8). If Interim Permit has never been used, showinterimpermit(8) will display "Interim Permit is disabled".
2. Interim Permit has been used before for the PPAR, and after that use all of the following steps a to c have been performed (allowing Interim Permit to be used again):
   a. Interim Permit disabled using setinterimpermit.
   b. Additional (since the last time Interim Permit was enabled) purchased CPU Activation keys registered with the system using addcodactivation(8).
   c. Additional (since the last time Interim Permit was enabled) CPU core resources assigned to the PPAR using setcod(8).

Note – Once all of above steps have been completed, the `showinterimpermit`(8) command shows "Interim Permit is disabled (can be enabled)" as Status.

The `setinterimpermit` command was introduced in XCP 2320, but with support for SPARC M10-1/M10-4 models only. Case 2 functionality was introduced in XCP 2330. When XCP 232*x* is used on the system, Interim Permit can be enabled only on SPARC M10-1/M10-4 systems, and only once. Therefore, when XCP 232*x* is used, be careful not to enable Interim Permit by mistake.

When XCP 2330 or later is used on the system, Interim Permit can be re-enabled. But, to re-enable it the steps described in case 2 above must be completed. Otherwise, using `setinterimpermit` to enable Interim Permit fails with an error.

If Interim Permit was used with XCP 232*x* and then the firmware was updated to XCP 2330 or later, Interim Permit cannot be enabled again, even when the steps described in case 2 above have been completed. In this case, please contact your local service provider for assistance.

After Interim Permit is enabled, warning messages are displayed on the primary/control logical domain (and logged in XSCF) to show the remaining time until Interim Permit expires. The warning messages are displayed every four hours, beginning two weeks prior to the Interim Permit expiration date. Be sure to perform either of the following before Interim Permit expiration:

1. Increase the quantity of purchased CPU Activation keys:
   a. Register additional purchased CPU Activation keys with the system by using `addcodactivation`(8).
   b. Using `setcod`(8), set the number of CPU Activations assigned to the PPAR to be equal to or lower than the quantity of purchased CPU Activations.
   c. Disable Interim Permit using the `setinterimpermit` command.
2. Decrease the quantity of cores in use:
   a. Release CPU core resources from logical domains such that the total quantity of CPU core resources assigned to the logical domains is equal to or lower than the quantity of purchased CPU Activations.
   b. Disable Interim Permit using the `setinterimpermit` command.

For further details, please refer to the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

The warning messages continue to be displayed until all of above steps have been performed to either increase the quantity of purchased CPU Activation keys or decrease the quantity of cores in use.

When Interim Permit expires (after 30 calendar days), the Interim Permit function is disabled and the system goes back to "normal" CPU Activation control. In this state, if the quantity of CPU Activations assigned to the PPAR is greater than the quantity of purchased CPU Activations, a violation occurs, and a warning message is displayed. In addition, Oracle VM Server for SPARC will automatically delete CPU cores from logical domains until the quantity of assigned CPU cores is in compliance with purchased CPU Activations registered to the system. CPU cores may be deleted from any logical domain. If CPU cores cannot be deleted and the violation remains, all logical domains will be stopped. Perform the steps described in case 1 (Increase the quantity of purchased CPU Activation keys) or 2 (Decrease the quantity of cores in use) above to bring CPU Activation into compliance to complete the use of Interim Permit.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-c enable`	Specify this option to enable Interim Permit for a PPAR.
`-c disable`	Specify this option to disable Interim Permit for a PPAR. The function is disabled by default.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompts with "n" (no).
`-p` *ppar_id*	Specifies the PPAR-ID that is to be configured.
`-q`	Prevents display of messages, including prompts, for standard output.
`-y`	Automatically responds to prompts with "y" (yes).

EXTENDED DESCRIPTION

- When the command is executed, a prompt to confirm execution with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- To confirm the current setting information and state of Interim Permit, use `showinterimpermit`(8).
- Confirm the use of CPU core resources with `showcodusage`(8) or `showinterimpermitusage`(8) before enabling/disabling Interim Permit.
- The Interim Permit expiration date cannot be changed.
- When Interim Permit is enabled, all CPU cores are activated, and the "CPU Automatic Replacement Function" provided by Oracle VM Server for SPARC, does not function.

- Regardless of the state (enabled/disabled) of Interim Permit, showcodusage(8) output will show the same outputs for quantity of purchased and registered CPU Activations and the quantity of CPU core resources assigned to the PPAR. The showcodusage(8) command displays the following information:
  - If -p all or -p resource is specified, the quantity of CPU Activations displayed in "CoD Permitted" does not vary depending on the state (enabled/disabled) of Interim Permit. The quantity of purchased CPU Activations registered with the system is always displayed.
  - Also when -p all or -p ppar is specified, the quantity of CPU Activations displayed under "Assigned" does not vary depending on the state (enabled/disabled) of Interim Permit. The quantity of purchased CPU Activations assigned to the PPAR using setcod(8) is displayed.

EXAMPLES

EXAMPLE 1 Enable Interim Permit for PPAR-ID 0.

```
XSCF> setinterimpermit -p 0 -c enable

Note:
  Please add CPU Activation(s) within 30 days of enabling the
  Interim Permit.

The Interim Permit for the PPAR will be changed to enabled.
Continue? [y|n] :y

Completed.
```

EXAMPLE 2 Disable Interim Permit for PPAR-ID 0.

```
XSCF> setinterimpermit -p 0 -c disable
The Interim Permit will be disabled.
Continue? [y|n] :y

Completed.
```

EXAMPLE 3 Attempt to enable Interim Permit for PPAR-ID 0 when Interim Permit has already been used previously.

```
XSCF> setinterimpermit -p 0 -c enable

Note:
  Please add CPU Activation(s) within 30 days of enabling the Interim
  Permit.

The Interim Permit for the PPAR will be changed to enabled.
Continue? [y|n] :y

The Interim Permit cannot be enabled because it has already been used once
and cannot be enabled again (until more Purchased CPU Activations are
installed and Purchased cores are assigned to the PPAR).
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **setcod**(8), **showcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8), **showcodusage**(8), **showinterimpermit**(8), **showinterimpermitusage**(8)

NAME

setldap - configure the Service Processor as a Lightweight Directory Access Protocol (LDAP) client.

SYNOPSIS

setldap [-b *bind*] [-B *baseDN*] [-c *certchain*] [-p] [-s *servers*] [-t *user*] [-T *timeout*]

setldap -h

DESCRIPTION

setldap(8) allows you to configure the Service Processor as an LDAP client.

Note – The LDAP client supports passwords only in the CRYPT format; UNIX Crypt or MD5. Therefore the passwords on the LDAP server must support it as well. Refer to the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide* for more information. Also note that an XSCF user account user name cannot match an LDAP user name, and an XSCF user account (UID) number cannot match an LDAP UID number.

Privileges

You must have useradm privileges to run this command.

Refer to setprivileges(8) for more information.

OPTIONS

The following options are supported:

-B *baseDN*	Specifies distinguished name for the search base. Maximum character length is 128 characters.
-b *bind*	Sets the identity to use when binding to the LDAP server. Maximum character length is 128 characters
-c *certchain*	Imports an LDAP server certificate from the remote file specified in *certchain*. The server certificate must be in PEM format. Remote files are specified using the standard scp syntax, that is, [user@]host:file., and imported using scp. If the copy requires a user password you will be prompted for it. Use of this option implicitly enables the use of Transport Layer Security (TLS) when connecting to LDAP. This may be disabled by specifying *certchain* as none. The server certificate must be 64 Kbytes in size or less, and it must be valid or it will be rejected.
-h	Displays usage statement. When used with other options or operands, an error occurs.
-p	Sets a password to use when binding to the LDAP server. You will be prompted for the password.

`-s` *servers*	Sets the primary and secondary LDAP servers and ports. *servers* is a comma-separated list of *server*[:*port*]. Ports are specified numerically and servers can be specified either by name or IP address in the dotted decimal format. For example, `10.8.31.14:636,company:636`. The first server in the list is the primary. Server names must be resolvable. Maximum name length is 128 characters.
`-t` *user*	Tests connections to all configured LDAP servers. Attempts to retrieve the password data for the specified user from each configured server and reports success or failure in each case.
`-T` *timeout*	Sets the maximum time allowed for an LDAP search before it returns search results. Specify *timeout* by seconds.

EXAMPLES

EXAMPLE 1 Configuring Bind Name

```
XSCF> setldap -b user -p
Password: <Enter password>
XSCF> showldap
Bind Name:                user
Base Distinguished Name: Not set
LDAP Search Timeout:     0
Bind Password:           Set
LDAP Servers:            None
CERTS:                   None
```

EXAMPLE 2 Configuring Base Distinguished Name

```
XSCF> setldap -B  ou=people,dc=company,dc=com
XSCF> showldap
Bind Name:                user
Base Distinguished Name: ou=people,dc=company,dc=com
LDAP Search Timeout:     0
Bind Password:           Set
LDAP Servers:            None
CERTS:                   None
```

EXAMPLE 3 Setting the LDAP Timeout

```
XSCF> setldap -T 60
XSCF> showldap
Bind Name:                user
Base Distinguished Name: ou=people,dc=company,dc=com
LDAP Search Timeout:     60
Bind Password:           Set
LDAP Servers:            None
CERTS:                   None
```

EXAMPLE 4 Setting the LDAP Server

```
XSCF> setldap -s ldap://company.com,ldaps://company2.com
XSCF> showldap
Bind Name:                user
Base Distinguished Name: ou=people,dc=company,dc=com
LDAP Search Timeout:     60
Bind Password:           Set
LDAP Servers:            ldap://company.com:389 ldaps://company2.com:636
CERTS:                   None
```

EXAMPLE 5 Importing a Certificate

```
XSCF> setldap -c user@remote.machine:/path/to/cacert.pem
XSCF> showldap
Bind Name:                user
Base Distinguished Name: ou=people,dc=company,dc=com
LDAP Search Timeout:     60
Bind Password:           Set
LDAP Servers:            ldap://company.com:389 ldaps://company2.com:636
CERTS:                   cacert.pem
```

EXAMPLE 6 Testing the LDAP connection

```
XSCF> setldap -t jsmith
company.com:389 PASSED
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

setlookup(8), **showldap**(8)

NAME

setldapssl - configure LDAP over SSL.

SYNOPSIS

setldapssl {`enable`|`disable`}

setldapssl `loadcert` [[`-q`] `-{y|n}`] [`-i` *n*] [`-u` *username*] [`-p` *proxy* [`-t` *proxy_type*]] *URL*

setldapssl `loadcert` [[`-q`] `-{y|n}`] [`-i` *n*] `console`

setldapssl `rmcert` [[`-q`] `-{y|n}`] [`-i` *n*]

setldapssl `group` {`administrator`|`operator`|`custom`} `-i` *n* `name` [*groupname*]

setldapssl `group custom -i` *n* `roles` [*privileges*]

setldapssl `userdomain -i` *n* [*domainname*]

setldapssl `defaultrole` [*privileges*]

setldapssl `timeout` *seconds*

setldapssl `server` [`-i` *n*] [*ipaddr* [: *port*]]

setldapssl `logdetail` {`none`|`high`|`medium` |`low`|`trace`}

setldapssl `log` [[`-q`] `-{y|n}`] `clear`

setldapssl {`strictcertmode`|`usermapmode`} {`enable`|`disable`}

setldapssl `usermap` {`attributeInfo`|`binddn`|`bindpw`|`searchbase`} [*value*]

setldapssl `default` [[`-q`] `-{y|n}`]

setldapssl `-h`

DESCRIPTION

`setldapssl` configures LDAP over SSL. To enable or disable LDAP over SSL, execute only the command and one of those operands. To enable or disable LDAP over SSL strictcertmode or usermapmode, specify the mode along with enable or disable.

To clear or unset a property, issue a `setldapssl` command with no value for the operand. For example, `setldapssl group custom -i 1 name` clears the name property from custom group 1, and `setldapssl usermap searchbase` clears the searchbase property from the optional user mapping settings. If a property is not set, it is displayed with no value.

Note – If you are an Active Directory or LDAP over SSL user, do not upload a public key. If one has already been uploaded, use the following command to delete it:

```
XSCF> setssh -c delpubkey -a -u proxyuser
```

Privileges

You must have `useradm` privileges to run this command.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following options are supported:

`-h` — Displays usage statement. When used with other options or operands, an error occurs.

`-i` *n* — Sets an index marker, value 1 - 5. The target of index marker differs according to the operand.

`group`
: Index marker of the group

`userdomain`
: Index marker of the user domain

`server`, `loadcert`, `rmcert`
: Index marker of the alternate LDAP over SSL Server

`-n` — Automatically answers "`n`" (no) to all prompts.

`-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*].

`-q` — Suppresses all messages to stdout, including prompts.

`-t` *proxy_type* — Use with the `-p` option to specify proxy type as `http`, `socks4`, or `socks5`. The default is `http`.

`-u` *username* — Specifies the user name when logging in to a remote ftp or http server that requires authentication. Prompts for a password.

`-y` — Automatically answers "`y`" (yes) to all prompts.

OPERANDS

The following operands are supported:

`enable` — When used with no other operands, enable LDAP over SSL.

`disable` — When used with no other operands, disable LDAP over SSL.

`loadcert console`	Prompt for certificate information to be entered at the console. Use this command to paste certificate information copied from a file. Terminate input with `CTRL-D`. Set to the primary LDAP over SSL server when `-i` is omitted. Set to the alternate LDAP over SSL server when `-i` is specified.
`loadcert` *URL*	Load a certificate file for the LDAP over SSL server. Supported formats for *URI* are: `http://`*server*`[:`*port*`]/`*path*`/`*file* `https://`*server*`[:`*port*`]/`*path*`/`*file* `ftp://`*server*`[:`*port*`]/`*path*`/`*file* `file:///media/usb_msd/`*path*`/`*file* Set to the primary LDAP over SSL server when `-i` is omitted. Set to the alternate LDAP over SSL server when `-i` is specified.
`rmcert`	Delete certificate for an LDAP over SSL server. strictcertmode must be in the disabled state for a certificate to be removed. Set to the primary LDAP over SSL server when `-i` is omitted. Set to the alternate LDAP over SSL server when `-i` is specified.
`group administrator name`	If *groupname* is specified, the group name is assigned to the name property of the administrator group specified by the index marker. The administrator group has the `platadm`, `useradm` and `auditadm` permissions, which cannot be changed. If *groupname* is omitted, the name property of the administrator group specified by the index marker, is deleted.
`group operator name`	If *groupname* is specified, the group name is assigned to the name property of the operator group specified by the index marker. The operator group has the `platop` and `auditop` permission which cannot be changed. If *groupname* is omitted, the name property of the operator group specified by the index marker, is deleted.

`group custom name`	If *groupname* is specified, the group name is assigned to the name property of the group specified by the index marker. If *groupname* is omitted, the name property of the group specified by the index marker, is deleted.
`group custom roles`	If *privileges* is specified, the role property of the group specified by the index marker is assigned to the group. If *privileges* is omitted, the role property of the group specified by the index marker is deleted.
`userdomain`	When *domainname* is specified, create user domain that is specified by index marker. When *domainname* is omitted, remove user domain that is specified by index marker. When logged in as username@domainname, user authentication is executed in the specified user domain and the `userdomain` specified by `setldapssl` is ignored. When logged in only with user name, user authentication is executed in the `userdomain`, as has been specified in `setldapssl`.
`defaultrole`	Configure default privileges. If defaultrole is configured, users have privileges as specified by defaultrole after authentication; user group membership is not checked. If defaultrole is not configured, users' privileges will be learned from the LDAP over SSL server based on group membership.
`timeout` *seconds*	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.
`server`	Configure the primary and up to five alternate LDAP over SSL servers. To use a host name, DNS must be enabled. An IP address can be specified with port number; otherwise, the default port is used. Set to the primary LDAP over SSL server when `-i` is omitted. Set to the alternate LDAP over SSL server when `-i` is specified.

`logdetail`	Enable logging of LDAP over SSL authentication and authorization diagnostic messages at the specified detail level. This log is for use in troubleshooting and is cleared on SP reboot. Level can be one of the following:
	`none` — Do not log diagnostic messages. Use this setting during normal system operation
	`high` — Log only high-severity diagnostic messages
	`medium` — Log only high-severity and medium-severity diagnostic messages
	`low` — Log high-severity, medium-severity, and informational diagnostic messages
	`trace` — Log high-severity, medium-severity, informational, and trace-level diagnostic messages
`log clear`	Clear the log file of LDAP over SSL authentication and authorization diagnostic messages.
`strictcertmode`	Enable or disable strictcertmode mode. This mode is disabled by default; the channel is secure, but limited validation of the certificate is performed. If strictcertmode is enabled, the server's certificate must have already been uploaded to the server so that the certificate signatures can be validated when the server certificate is presented. Data is always protected, even if strictcertmode is disabled. Strictcertmode applies to primary and alternate servers alike.
`usermapmode`	Enable or disable use of the usermap. When enabled, user attributes specified with the usermap operand, rather than userdomain, are used for user authentication.

`usermap` — Only if `usermapmode` is enabled, configure the specified usermap parameter:

- `attributeInfo` — Use the specified attribute information for user validation
- `binddn` — Use the specified Distinguished Name for binding with the LDAP over SSL server
- `bindpw` — Use the specified password for binding with the LDAP over SSL server
- `searchbase` — Configure the specified search base

`default` — Reset LDAP over SSL settings to factory default.

EXAMPLES

EXAMPLE 1 Configures the LDAP over SSL primary server, specifying a port other than the default.

```
XSCF> setldapssl server 10.1.12.250:4040
```

EXAMPLE 2 Sets name for administrator group 3.

```
XSCF> setldapssl group administrator -i 3 name CN=spSuperAdmin, \
OU=Groups,DC=Sales,DC=aCompany,DC=com
```

EXAMPLE 3 Sets name for custom group 2.

```
XSCF> setldapssl group custom -i 2 name CN=spLimitedAdmin, \
OU=Groups,DC=Sales,DC=aCompany,DC=com
```

EXAMPLE 4 Sets roles for custom group 2.

```
XSCF> setldapssl group custom -i 2 role auditadm,platop
```

EXAMPLE 5 Loads certificate information for Alternate Server 4 from the console.

```
XSCF> setldapssl loadcert -i 4 console
Warning: About to load certificate for Alternate Server 4:
. Continue? [y|n]: y
Please enter the certificate:
```

```
-----BEGIN CERTIFICATE-----
MIIETjCCAzagAwIBAgIBADANBgkqhkiG9w0BAQQFADB8MQswCQYDVQQGEwJVUzET
MBEGA1UECBMKQ2FsaWZvcm5pYTESMBAGA1UEBxMJU2FuIERpZWdvMRkwFwYDVQQK
ExBTdW4gTWljcm9zeXN0ZW1zMRUwEwYDVQQLEwxTeXN0ZW0gR3JvdXAxEjAQBgNV
...
-----END CERTIFICATE-----
CTRL-D
XSCF>
```

EXAMPLE 6 Configures user domain 2. <USERNAME> is a template that must be entered exactly as shown. During authentication the user's login name replaces <USERNAME>. `userdomain` can only take the form of Distinguished Name (DN).

```
XSCF> setldapssl userdomain -i 2 \
'UID=<USERNAME>,OU=people,DC=aCompany,DC=com'
```

EXAMPLE 7 Configures the optional user mapping attribute info setting.

```
XSCF> setldapssl usermap attributeInfo \
'(&(objectclass=person)(uid=<USERNAME>))'
```

EXAMPLE 8 Configures the optional user mapping bind distinguished name setting.

```
XSCF> setldapssl usermap binddn CN=SuperAdmin,DC=aCompany,DC=com
```

EXAMPLE 9 Configures the optional user mapping bind password setting.

```
XSCF> setldapssl usermap bindpw b.e9s#n
```

EXAMPLE 10 Configures the optional user mapping search base setting.

```
XSCF> setldapssl usermap searchbase OU=yoshi,DC=aCompany,DC=com
```

EXAMPLE 11 Loads a server certificate for LDAP over SSL using the specified URI.

```
XSCF> setldapssl loadcert http://domain_2/UID_2333/testcert
```

EXAMPLE 12 Loads a server certificate for LDAP over SSL using an http Proxy Server with port 8080.

```
XSCF> setldapssl loadcert -p webproxy.aCompany.com:8080 \
http://domain_2/UID_2333/testcert
```

EXAMPLE 13 Loads a server certificate for LDAP over SSL using a username and password.

```
XSCF> setldapssl loadcert -u yoshi \
http://domain_2/UID_2333/testcert
```

EXAMPLE 14 Sets logging of high-severity diagnostic messages.

```
XSCF> setldapssl logdetail high
```

EXAMPLE 15 Clears diagnostic messages from the log file, answering Yes to all prompts.

```
XSCF> setldapssl log -y clear
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

showldapssl(8)

NAME

setlocator - Sets the blinking status of the CHECK LED of the operation panel.

SYNOPSIS

setlocator [`-b` *bb_id*] *value*

setlocator `-h`

DESCRIPTION

`setlocator` is a command to set the blinking status of the CHECK LEDs of the operation panels mounted in SPARC M12/M10 Systems chassis and crossbar boxes.

The following statuses can be set.

Blinking	Blinks CHECK LED.
Blinking cancel	Cancels blinking of CHECK LED.

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-b` *bb_id*
: Specifies the SPARC M12/M10 Systems chassis and crossbar boxes to set the blinking status of the CHECK LEDs. Depending on the system configuration, you can specify any of the following values for *bb_id*. If omitted, the blinking status of the CHECK LED of its own chassis is set.

  SPARC M12-2S/M10-4S (without crossbar box)
  0 to 15

  SPARC M12-2S/M10-4S (with crossbar box)
  0 to 15, 80 to 83

  SPARC M12-1/M12-2/M10-1/M10-4
  0

`-h`
: Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

value
: Specifies the status of CHECK LED. You can specify either of the following.

`blink`	Blinks CHECK LED.
`reset`	Cancels blinking of CHECK LED.

EXTENDED DESCRIPTION

You can confirm the status of CHECK LED set currently by using `showlocator`(8).

EXAMPLES

EXAMPLE 1 Blink the CHECK LED of BB-ID 1.

```
XSCF> setlocator -b 1 blink
XSCF>
```

EXAMPLE 2 Cancel blinking of the CHECK LED of BB-ID 80.

```
XSCF> setlocator -b 80 reset
XSCF>
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

showlocator`(8)`

NAME

setloginlockout - Enables or disables the lockout function when logging in.

SYNOPSIS

setloginlockout `-s unlock=` *time*

setloginlockout `-h`

DESCRIPTION

`setloginlockout` is a command to set the time when the user account cannot login after failing in login three times in a row.

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-s unlock=`*time*	Specifies the lockout time of the user account by minutes. You can specify it within the range from 0 to 1440 (24 hours). The default value is 0 minute and the lockout function is disabled.

EXTENDED DESCRIPTION

- If the lockout function for login is set, the user can try logging in three times in a row. Enter the user account name in the login prompt and press the [Enter] key, and then login will succeed. At this time, even if the user account name is entered without password or login causes timeout, it is recognized as login. If login fails three times in a low, login becomes impossible for the set period after that. The user can enter the user account name and password even during lockout, but even if the correct password is entered, the login will be rejected. Even if login fails during lockout, the lockout time is not prolonged.
- `setloginlockout -s 0` disables the lockout function of the user account. If the lockout function is disabled, login and failure can be repeated without limitation.
- If the lockout function of the user account is enabled again after disabled, the locked out user can try logging in until the function is enabled again after disabled. However, if login is not attempted until the lockout function is enabled again, there is no change and lockout continues as in the case that lockout is not disabled and enabled again.
- You can confirm the lockout function of the user account set currently by using `showloginlockout`(8).

EXAMPLES

EXAMPLE 1 Set the timeout time of lockout to 90 minutes.

```
XSCF> setloginlockout -s 90
90 minutes
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showloginlockout(8)

NAME

setlookup - enable or disable the use of the Lightweight Directory Access Protocol (LDAP) server for authentication and privilege lookup.

SYNOPSIS

setlookup -a {local|ldap}

setlookup -p {local|ldap}

setlookup -h

DESCRIPTION

setlookup sets whether authentication and privileges data are looked up in LDAP or not.

Privileges

You must have useradm privileges to run this command.

Refer to setprivileges(8) for more information.

OPTIONS

The following options are supported:

-a	Sets the authentication lookup. Used with one of the required operands ldap or local.
-h	Displays usage statement. When used with other options or operands, an error occurs.
-p	Sets privileges lookup. Used with one of the required operands ldap or local.

OPERANDS

The following operands are supported:

ldap	Used with the -a and -p options. When set to ldap, authentication or privileges are first looked up locally and then in LDAP if not found locally. Verify that LDAP servers have been correctly configured before executing **setlookup -a ldap** or **setlookup -p ldap**.
local	Used with the -a and -p options. When set to local, authentication or privileges are looked up only locally.

EXAMPLES

EXAMPLE 1 Enabling LDAP Lookup of Privilege Data

```
XSCF> setlookup -p ldap
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

setldap(8), **showlookup**(8)

NAME

setnameserver - Sets or deletes the name server and search path used in XSCF network.

SYNOPSIS

setnameserver [-c add] *address*...

setnameserver -c del *address*...

setnameserver -c del -a

setnameserver -c addsearch *domainname*...

setnameserver -c delsearch *domainname*...

setnameserver -c delsearch -a

setnameserver -h

DESCRIPTION

setnameserver is a command to set/delete the name server and search path used in XSCF network.

In XSCF, up to three name servers can be registered. If the number exceeds three, it causes an error. Up to five search paths can be registered. If the number exceeds five, it causes an error.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Deletes all of the name servers or search paths registered currently. To delete name server, use it with -c del. To delete search path, use it with -c delsearch.
-c add	Registers a name server. It is used with *address*. If you omit the -c option, -c add is assumed specified. To register a name server, the existing settings are deleted and the host specified by *address* is added.
-c addsearch	Registers a search path. It is used with *domainname*. If you omit the -c option, -c add is assumed specified. To register a search path, the existing settings are deleted and the domain name specified by *domainname* is added.
-c del	Deletes a name server. If you omit the -c option, -c add is assumed specified. When you delete multiple name servers, they are deleted in the order of setting.
-c delsearch	Deletes a search path. If you omit the -c option, -c add is assumed specified. You can make multiple specifications by separating them with spaces.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

address Specifies the IP address of the name server to be registered or deleted. Specify it putting a period (.) between four sets of integer values. This can be specified using the following format. You can make up to three specifications by separating them with spaces.

xxx.xxx.xxx.xxx
xxx Specifies an integer from 0 to 255. This can be specified using zero suppression.

You cannot specify a loop-back address (127.0.0.0/8), network address, or broadcast address. Setting this may cause a failure in name resolution.

domainname Specifies the domain name of the search path to be registered or deleted. You can make up to five specifications by separating them with spaces. *domainname* is specified within 256 characters by separating the label elements by periods (.). For the label element, you can use alphanumeric characters and hyphens (-). However, make the specification using an alphabetic character for the beginning, and an alphanumeric character for the end of the element. At the end, put a period (.) representing the root domain (Based on RFC 1034).

EXTENDED DESCRIPTION

- If multiple name servers are registered, name resolution is performed in the order of registering.
- The registered search path is used, for example, for referring to the name server for the host name by using `nslookup`(8). The host name specified by `nslookup`(8), followed by the domain name registered in the search path is confirmed with the name server in the FQDN format.

  For example, if the following command is executed after registering subdomain.example.com to the search path, hostname.subdomain.example.com is confirmed with the name server.

  XSCF> **`nslookup hostname`**
- If multiple search paths are registered, domain names are attached in the order of registering and confirmed with the name server.
- Specifies the DNS domain name set by `sethostname`(8) and the search path set by `setnameserver` within 256 characters in total.

- To reflect a name server and search path in XSCF, execute `applynetwork`(8). Reflect it in XSCF by `applynetwork`(8) and reboot XSCF by using `rebootxscf`(8), and then setting is completed.
- You can confirm the contents of the name server and search path set currently by using `shownameserver`(8).

EXAMPLES

EXAMPLE 1 Register the hosts whose IP addresses are 192.168.1.2, 10.18.108.10, 10.24.1.2 as the name server. Name resolution is performed in the order of registering.

```
XSCF> setnameserver 192.168.1.2 10.18.108.10 10.24.1.2
```

EXAMPLE 2 Delete the host whose IP address is 10.18.108.10 from the name server.

```
XSCF> setnameserver -c del 10.18.108.10
```

EXAMPLE 3 Delete all of the registered name servers.

```
XSCF> setnameserver -c del -a
```

EXAMPLE 4 Register the domain names search1.com, search2.com, search3.com, search4.com, and search5.com to the search path.

```
XSCF> setnameserver -c addsearch search1.com search2.com
search3.com search4.com search5.com
```

EXAMPLE 5 Delete the domain name search5.com from the search path.

```
XSCF> setnameserver -c delsearch search5.com
```

EXAMPLE 6 Delete all of the registered domain names from the search path.

```
XSCF> setnameserver -c delsearch -a
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

applynetwork(8), **sethostname**(8), **setsscp**(8), **shownameserver**(8)

NAME

setnetwork - Sets or deletes the network interface to be used in XSCF.

SYNOPSIS

setnetwork [`-m` *addr*] `interface` *address*

setnetwork `-c` {`up`|`down`} *interface*

setnetwork [[`-q`] `-{y|n}`] `-r` *interface*

setnetwork `-h`

DESCRIPTION

`setnetwork` is a command to set or delete the network interface to be used in XSCF.

The following contents can be set or deleted for the network interface of XSCF-LAN.

- Whether to enable or disable the network interface
- IP address
- Netmask

If an IP address or netmask is set, the specified network interface is enabled at the same time as setting.

If the network interface is deleted, the specified network interface is disabled at the same time as deletion. Also, if the routing information is set in the target network interface, it is deleted at the same time and its status becomes `down`.

If `applynetwork`(8) is executed setting `down`, the interface is disabled even with an IP address and netmask set.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-c` {`up`|`down`} Specifies whether to enable the specified network interface. You can specify either of the following. Omitting this causes an error.

`up`	Enables the network interface.
`down`	Disables the network interface.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-m` *addr* — Specifies the netmask. *addr* is specified in a format using four sets of integers separated by periods (.). This can be specified using the following format.

xxx.xxx.xxx.xxx

xxx — Specifies an integer from 0 to 255. This can be specified using zero suppression.

If the `-m` option is omitted, one of the following net mask values is set depending on the IP address specified by the *address* operand.

- If the specified IP address is Class A (e.g. 20.1.1.1)

  A netmask value of 255.0.0.0 is set.
- If the specified IP address is Class B (e.g. 136.18.1.1)

  A netmask value of 255.255.0.0 is set.
- If the specified IP address is Class C (e.g. 200.18.108.1)

  A netmask value of 255.255.255.0 is set.

`-n` — Automatically responds to prompt with "n" (no).

`-q` — Prevents display of messages, including prompt, for standard output.

`-r` — Deletes the IP address and netmask of the network interface.

`-y` — Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

address — Specifies an IP address. *address* is specified in a format using four sets of integers separated by periods (.).

xxx.xxx.xxx.xxx

xxx — Specifies an integer from 0 to 255. This can be specified using zero suppression.

You cannot specify a loopback address (127.0.0.0/8), network address, broadcast address, or Class D, E address (224.0.0.0 to 255.255.255.255).

interface Specifies the network interface to be set. You can specify any of the following.

- For SPARC M12-2S/M10-4S (with crossbar box)

`xbbox#80-lan#0`	XBBOX#80-LAN#0
`xbbox#80-lan#1`	XBBOX#80-LAN#1
`lan#0`	Take-over IP addresses of XBBOX#80-LAN#0 and XBBOX#81-LAN#0
`xbbox#81-lan#0`	XBBOX#81-LAN#0
`xbbox#81-lan#1`	XBBOX#81-LAN#1
`lan#1`	Take-over IP addresses of XBBOX#80-LAN#1 and XBBOX#81-LAN#1

- For SPARC M12-2S/M10-4S (without crossbar box)

`bb#00-lan#0`	BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1
`lan#0`	Take-over IP addresses of BB#00-LAN#0 and BB#01-LAN#0
`bb#01-lan#0`	BB#01-LAN#0
`bb#01-lan#1`	BB#01-LAN#1
`lan#1`	Take-over IP addresses of BB#00-LAN#1 and BB#01-LAN#1

- For SPARC M12-1/M12-2/M10-1/M10-4

`bb#00-lan#0`	BB#00-LAN#0
`lan#0`	Abbreviation of BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1
`lan#1`	Abbreviation of BB#00-LAN#1

EXTENDED DESCRIPTION

- The take-over IP address means IP addresses which can be used without switch of XSCF recognized in multi-XSCF configuration. Setting each LAN port of the master XSCF to `lan#0` or `lan#1` enables access by the name of `lan#0` or `lan#1`.
- For SPARC M12-1/M12-2/M10-1/M10-4, `lan#0` and `lan#1` are fixed to `bb#00-lan#0` and `bb#00-lan#1`, respectively. `lan#0` and `lan#1` can be used as abbreviations of `bb#00-lan#0` and `bb#00-lan#1`, respectively.
- In the following cases, `setnetwork` causes an error.
  - Case that the same IP address as an set IP address is specified
  - Case that a loopback address (127.0.0.0/8), network address, or broadcast address is specified for the IP address of *interface*
  - Case that the netmask specified by -m *addr* does not correspond to either of the following

Only the most significant bit is 1.

1 from the most significant bit is repeated.

- If the settings of the network interface whose status is up are as follows in SPARC M12-2S/M10-4S, it causes an error when `applynetwork`(8) is executed.
  - Case that the subnets of `xbbox#80-lan#0`, `xbbox#81-lan#0`, and the take-over IP address `lan#0` are different
  - Case that the subnets of `xbbox#80-lan#1`, `xbbox#81-lan#1`, and the take-over IP address `lan#1` are different
  - Case that some of `xbbox#80-lan#0`, `xbbox#80-lan#1`, and the SSCP link address have the same subnet
  - Case that some of `xbbox#81-lan#0`, `xbbox#81-lan#1`, and the SSCP link address have the same subnet
  - Case that some of `xbbox#80-lan#0`, `xbbox#81-lan#1`, and the SSCP link address have the same subnet
  - Case that some of `xbbox#81-lan#0`, `xbbox#80-lan#1`, and the SSCP link address have the same subnet
  - Case that the subnets of `bb#00-lan#0`, `bb#01-lan#0`, and the take-over IP address `lan#0` are different
  - Case that the subnets of `bb#00-lan#1`, `bb#01-lan#1`, and the take-over IP address `lan#1` are different
  - Case that some of `bb#00-lan#0`, `bb#00-lan#1`, and the SSCP link address have the same subnet
  - Case that some of `bb#01-lan#0`, `bb#01-lan#1`, and the SSCP link address have the same subnet
  - Case that some of `bb#00-lan#0`, `bb#01-lan#1`, and the SSCP link address have the same subnet
  - Case that some of `bb#01-lan#0`, `bb#00-lan#1`, and the SSCP link address have the same subnet
- If the settings of the network interface whose status is up are as follows in SPARC M12-1/M12-2/M10-1/M10-4, it causes an error when `applynetwork`(8) is executed.
  - Case that the subnets of `bb#00-lan#0` and `bb#00-lan#1` are the same
- If the IP address and netmask of the specified network interface are deleted, the routing information set in the target interface is also deleted and the status becomes down.
- If `applynetwork`(8) is executed after disabling the specified network interface, the network interface is disabled even with an IP address and netmask set.
- You can confirm the contents of the network interface set currently by using `shownetwork`(8).

- To reflect the contents of the set network interface, execute applynetwork(8). Reflect it in XSCF by applynetwork(8), use rebootxscf(8) to reboot XSCF and then setting is completed.
- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Set the IP address 192.168.10.10 and netmask 255.255.255.0 in LAN#0 of BB#00.

```
XSCF> setnetwork bb#00-lan#0 -m 255.255.255.0 192.168.10.10
```

EXAMPLE 2 Set the IP address 192.168.10.10 and netmask 255.255.255.0 in LAN#0 of BB#00 in SPARC M10-1.

```
XSCF> setnetwork lan#0 -m 255.255.255.0 192.168.10.10
```

EXAMPLE 3 Disable LAN#1 of XBBOX#80.

```
XSCF> setnetwork xbbox#80-lan#1 -c down
```

EXAMPLE 4 Set the IP address 192.168.11.10 and netmask 255.255.255.0 in LAN#0 of XBBOX#81.

```
XSCF> setnetwork xbbox#81-lan#0 -m 255.255.255.0 192.168.11.10
```

EXAMPLE 5 Set the IP address 192.168.1.10 and netmask 255.255.255.0 in the take-over IP address of LAN#0.

```
XSCF> setnetwork lan#0 -m 255.255.255.0 192.168.1.10
```

EXAMPLE 6 Delete the IP address and netmask set in LAN#0 of XBBOX#80.

```
XSCF> setnetwork -r xbbox#80-lan#0
You specified '-r' interface remove option.
So, we delete routing information that interface corresponds.
Continue? [y|n] :y
If you choose 'y'es, you must execute 'applynetwork' command for
application.
Or you choose 'y'es, but you don't want to apply, you execute 'rebootxscf'
for reboot.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO **applynetwork**(8), **rebootxscf**(8), **setroute**(8), **setsscp**(8), **shownetwork**(8)

NAME

setntp - Sets the time synchronization for XSCF

SYNOPSIS

setntp -s server -c {enable|disable}

setntp [-c add] *address* ...

setntp -c del *address* ...

setntp -c del -a

setntp -c stratum -i *stratum_no*

setntp -c {pool|server} *address* ...

setntp -s client -c {enable|disable}

setntp -m *type*= *value*

setntp -h

DESCRIPTION

setntp is a command to set the time synchronization for XSCF.

In setntp, the following items can be set.

- Whether to synchronize with upper NTP servers
- Whether to provide NTP service to other clients as an NTP server
- stratum value set in XSCF
- Existence of prefer as a client
- Clock address of the XSCF local clock
- Whether to enable DNS round robin in a specified NTP server when XSCF is configured as the NTP client

By default, the XSCF is not synchronized with upper NTP servers and does not provide NTP service to other clients.

Up to three NTP servers can be registered as upper NTP servers of the XSCF network. Attempting to register four or more causes an error. In multi-XSCF configuration, the settings are automatically reflected in the master XSCF and standby XSCFs.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS The following options are supported.

`-a`	Deletes all of the upper NTP servers set currently. It is used with `-c del`.
`-c add`	Adds to upper NTP servers. It is specified with *address*. If you omit the `-c` option, `-c add` is assumed specified. To register an NTP server, the existing settings are deleted and overwritten by the specified *address*.
`-c del`	Deletes an upper NTP server. It is specified with *address* or `-a`. If you omit the `-c` option, `-c add` is assumed specified. When you delete multiple NTP servers, they are deleted in the order of setting.
`-c disable`	Disables the settings of XSCF as an NTP server. It is specified with the `-s` option. If you omit the `-c` option, `-c add` is assumed specified.
`-c enable`	Enables the settings of XSCF as an NTP server. It is specified with the `-s` option. If you omit the `-c` option, `-c add` is assumed specified.
`-c pool`	Enables DNS round robin. DNS round robin is disabled by default.
`-c server`	Disables DNS round robin.
`-c stratum`	Sets the stratum value in the case that XSCF is set as an NTP server. If you omit the stratum value, the default is 5.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-i` *stratum_no*	Specifies stratum value. It is used with `-c stratum`. You can specify an integer from 1 to 15.

`-m` *type=value*

Sets a preferred server or the XSCF local clock. You can specify either of the following for *type*.

`prefer` Sets whether to give top priority to the DNS round robin-disabled NTP server that is registered first, at the time of synchronization.

`localaddr` Sets the XSCF local clock.

If `prefer` is specified in *type*, you can specify either of the following in *value*.

`on` Top priority is given to the DNS round robin-disabled NTP server that is registered first. After that, priorities are placed on NTP servers in ascending order of stratum value. The default is `on`.

`off` Priorities are placed on NTP servers in ascending order of stratum value regardless of the order of registering.

If `localaddr` is specified in *type*, specify the least significant byte of the clock address 127.127.1.*x* of the local clock in *value*. 0 to 3 can be specified. The default is 0 and the clock address of the local clock at that time is 127.127.1.0.

`-s server`

Sets whether to use the service as an NTP server of XSCF. It is used with `-c disable` or `-c enable`. To use XSCF as an NTP server, specify `-s server` with `-c enable`. Not to use XSCF as an NTP server, specify `-s server` with `-c disable`. The default is `-c disable`.

`-s client`

Sets whether to synchronize XSCF as an NTP client with upper NTP servers. It is used with `-c disable` or `-c enable`. To synchronize XSCF as an NTP client with upper NTP servers, specify `-s client` with `-c enable`. Not to set XSCF as an NTP client, specify `-s client` with `-c disable`. The default is `-c disable`. The upper NTP server to synchronize can be specified by `-c add`.

OPERANDS

The following operands are supported.

address

Specifies the IP address or host name of the NTP server to be added or deleted. You can specify up to three IP addresses or host names by separating them with spaces.

To specify them by the IP address, *address* can be specified in a format using four sets of integers separated by periods (.).

xxx.xxx.xxx.xxx

xxx

Specifies an integer from 0 to 255. This can be specified using zero suppression.

To specify them by the host name, specify *address* within 64 characters in a format separating the label elements by periods (.). For the label element, you can use alphanumeric characters and hyphens (-). However, make the specification using an alphabetic character for the beginning, and an alphanumeric character for the end of the element. (Based on RFC 1034.) Depending on the DNS server, the server name needs to be name-resolvable.

An error will occur when removing an NTP server or enabling/disabling DNS round robin configuration if the server that is specified in *address*, had not been registered.

EXTENDED DESCRIPTION

- To reflect the set contents, it is necessary to reboot XSCF by using `rebootxscf`(8).
- If prefer is set while multiple NTP servers are set, top priority is given to the NTP server set first. However, if DNS round robin is enabled in the NTP server that has been registered in the first place, the next DNS round robin-disabled NTP server will be prioritized. If there is no DNS round robin-disabled NTP server, `prefer` will be disabled, irrespective of whether it was enabled or disabled.
- If XSCF is set as an NTP client, ntpdate is executed when XSCF is started and the time of XSCF is synchronized with the time of the NTP server.
- If XSCF is set as a client, the time of the physical partition (PPAR) may be changed by the difference in the time kept in XSCF. Execute `resetdateoffset`(8) and reset the difference of the time.
- You can confirm the time synchronization currently specified by using `shownt`p(8).

EXAMPLES

EXAMPLE 1 Register the three NTP servers 192.168.1.2, 10.18.108.10, and 10.24.1.2 as up-

per NTP servers.

```
XSCF> setntp 192.168.1.2 10.18.108.10 10.24.1.2
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 2 Delete the NTP server 10.18.108.10 set as an upper NTP server.

```
XSCF> setntp -c del 10.18.108.10
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 3 Register the two NTP servers: ntp1.examples.com and ntp2.example.com.

```
XSCF> setntp ntp1.example.com ntp2.example.com
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 4 Set the stratum value used in XSCF network to 7.

```
XSCF> setntp -c stratum -i 7
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 5 Cancel the prefer specification of an NTP server.

```
XSCF> setntp -m prefer=off
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 6 Set the clock address of the XSCF local clock.

```
XSCF> setntp -m localaddr=3
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 7 Set XSCF to an NTP client to synchronize with upper NTP server.

```
XSCF> setntp -s client -c enable
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 8 Set XSCF to an NTP server to provide NTP service to other clients.

```
XSCF> setntp -s server -c enable
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 9 Enable DNS round robin of a registered NTP server.

```
XSCF> setntp -c pool ntp1.examples.com
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXAMPLE 10 Disable DNS round robin of all registered NTP servers.

```
XSCF> setntp -c server ntp1.examples.com ntp2.examples.com 10.24.1.2
Please reset the XSCF by rebootxscf to apply the ntp settings.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

rebootxscf(8), **setnameserver**(8), **showntp**(8)

NAME

setpacketfilters - Sets the IP packet filtering rules used in the XSCF network.

SYNOPSIS

setpacketfilters [[-q] -{y|n}] -c {add|del} [-i *interface*] [-s *address* [*/mask*]] -j *target*

setpacketfilters [[-q] -{y|n}] -c clear

setpacketfilters [[-q] -{y|n}] -c ipmi_port {enable|disable}

setpacketfilters -h

DESCRIPTION

setpacketfilters is a command to set the IP packet filtering rules used in XSCF network.

Setting the IP packet filtering rules prevents unauthorized access to the XSCF network. When setpacketfilters is executed, the setting is reflected immediately.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c {add|del|clear}

Specifies the operations for the IP packet filtering rules. You can specify any of the following. This cannot be omitted.

add	Adds an IP packet filtering rule.
del	Deletes an IP packet filtering rule.
clear	Deletes all of the set IP packet filtering rules.

However, the filtering rules set up by -c ipmi_port cannot be changed.

-c ipmi_port {enable|disable}

Enables/disables IP packets in respect to IPMI ports.

enable	Filtering on IPMI ports is disabled and the IPMI service used by the remote power management function (Remote Cabinet Interface over LAN: RCIL) is enabled.
disable	Filtering on IPMI ports is enabled and the IPMI service used by the remote power management function (Remote Cabinet Interface over LAN: RCIL) is disabled.

The initial value is disable, which discards IP packets in respect to IPMI ports.

`-h`

Displays the usage. Specifying this option with another option or operand causes an error.

`-i` *interface*

Specifies the XSCF network interface to set the IP packet filtering rules. You can specify any of the following.

- For SPARC M12-1/M12-2/M10-1/M10-4

`bb#00-lan#0`	BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1

Abbreviation:

`lan#0`	bb#00-lan#0
`lan#1`	bb#00-lan#1

- For SPARC M12-2S/M10-4S (without crossbar box)

`bb#00-lan#0`	BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1
`bb#01-lan#0`	BB#01-LAN#0
`bb#01-lan#1`	BB#01-LAN#1

- For SPARC M12-2S/M10-4S (with crossbar box)

`xbbox#80-lan#0`	XBBOX#80-LAN#0
`xbbox#80-lan#1`	XBBOX#80-LAN#1
`xbbox#81-lan#0`	XBBOX#81-LAN#0
`xbbox#81-lan#1`	XBBOX#81-LAN#1

If the `-i` option is omitted, all XSCF networks are subject.

- For SPARC M12-1/M12-2/M10-1/M10-4

  `bb#00-lan#0`, `bb#00-lan#1`

- For SPARC M12-2S/M10-4S (without crossbar box)

  `bb#00-lan#0`, `bb#01-lan#0`, `bb#00-lan#1`, `bb#01-lan#1`

- For SPARC M12-2S/M10-4S (with crossbar box)

  `xbbox#80-lan#0`, `xbbox#81-lan#0`, `xbbox#80-lan#1`, `xbbox#81-lan#1`

`-j` *target*

Specifies the operation in the case that the received IP packet matches the filtering rules. You can specify either of the following.

`ACCEPT`	Accepts passing of IP packets.
`DROP`	Drops IP packets.

`-n`

Automatically responds to prompt with "n" (no).

`-q` Prevents display of messages, including prompt, for standard output.

`-s` *address*[/*mask*] Specifies the source of IP packets. It can be specified with either of the IP address, or the network IP address with the netmask (/*mask*) added.

The IP address and network IP address can be specified in a format using four sets of integers separated by periods (.).

xxx.xxx.xxx.xxx

xxx Specifies an integer from 0 to 255. This can be specified using zero suppression.

If the `-s` option is omitted, the filtering rules are applied to all of the IP packets received in the specified network interface.

If /*mask* is omitted, /255.255.255.255 is specified.

`-y` Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- The IP packet filtering rules are prioritized in the order of setting.
- Be sure to set the sources to be accepted before limiting them by filtering. Firstly, set the sources to be accepted and then the IP packets to be dropped. If the order of setting is reversed, all IP packets are dropped and communication becomes impossible.
- Setting the IP packet filtering rules may disable the network function of XSCF.
- If both `-i` *interface* and `-s` *address*[/*mask*] are omitted, the rules are applied to all of the IP packets received by XSCF-LAN.
- If the netmask value specified by `-s` *address*[/*mask*] does not match any of the following, it causes an error.
  - Only the most significant bit is 1.
  - 1 from the most significant bit is repeated.
- Rules overlapping with the set IP packet filtering rules cannot be set.
- Up to 16 IP packet filtering rules can be set. However, the filtering rules set by `-c ipmi_port` are not included in this number.
- If a message encouraging reboot of XSCF is output, reboot XSCF by using `rebootxscf`(8).
- You can confirm the IP packet filtering rules of the XSCF network set currently by using `showpacketfilters`(8).

- When the IPMI service is enabled, it is started immediately.

  When using the remote power management function (Remote Cabinet Interface over LAN: RCIL), for all SPARC M12/M10 servers that are included in the remote power management group, first use `setpacketfilters` to enable the IPMI service and then use `setremotepwrmgmt`(8) to set up the remote power management function (Remote Cabinet Interface over LAN: RCIL).

- When the IPMI service is disabled, it is stopped immediately.

  When disabling the IPMI service, for all SPARC M12/M10 servers that are included in the remote power management group, disable the remote power management function (Remote Cabinet Interface over LAN: RCIL) using `setremotepwrmgmt`(8), beforehand. If the IPMI service is disabled while the remote power management function (Remote Cabinet Interface over LAN: RCIL) is still being enabled, the `setpacketfilters` will terminate abnormally.

EXAMPLES

EXAMPLE 1 Drop the IP packets sent from the IP address 10.10.10.10.

```
XSCF> setpacketfilters -c add -s 10.10.10.10 -j DROP
-s 10.10.10.10/255.255.255.255 -j DROP
NOTE: applied IP packet filtering rules.
Continue? [y|n] :y
```

EXAMPLE 2 Accept only the IP packets sent from the network of 192.168.100.0/255.255.255.0 in communication to bb#00-lan#0 in SPARC M10-4S (without crossbar box).

```
XSCF> setpacketfilters -c add -s 192.168.100.0/255.255.255.0 -i
bb#00-lan#0 -j ACCEPT
-s 192.168.100.0/255.255.255.0 -i bb#00-lan#0 -j ACCEPT
NOTE: applied IP packet filtering rules.
Continue? [y|n] :y
XSCF>
XSCF> setpacketfilters -c add -i bb#00-lan#0 -j DROP
-s 192.168.100.0/255.255.255.0 -i bb#00-lan#0 -j ACCEPT
-i bb#00-lan#0 -j DROP
NOTE: applied IP packet filtering rules.
Continue? [y|n] :y
```

EXAMPLE 3 Delete the drop settings of IP packets set in IP address 10.10.10.10.

```
XSCF> showpacketfilters -a
-s 172.16.0.0/255.255.0.0 -i bb#00-lan#0 -j DROP
-s 10.10.10.10/255.255.255.255 -j DROP
XSCF>
XSCF> setpacketfilters -c del -s 10.10.10.10 -j DROP
-s 172.16.0.0/255.255.0.0 -i bb#00-lan#0 -j DROP
NOTE: applied IP packet filtering rules.
Continue? [y|n] :y
```

EXAMPLE 4 Delete all of the set IP packet filtering rules (excluding the rules set by `-c ipmi_port`).

```
XSCF> setpacketfilters -c clear
(none)
NOTE: applied IP packet filtering rules.
Continue? [y|n] :y
```

EXAMPLE 5 Enable IP packets in respect to IPMI ports.

```
XSCF> setpacketfilters -c ipmi_port enable
Continue? [y|n] :y
```

EXAMPLE 6 Disable IP packets in respect to IPMI ports.

```
XSCF> setpacketfilters -c ipmi_port disable
Continue? [y|n] :y
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

showpacketfilters`(8)`

NAME

setpasswordpolicy - Manages the password policy of the system.

SYNOPSIS

setpasswordpolicy [`-d` *dcredit*] [`-e` *expiry*] [`-i` *inactive*] [`-k` *difok*] [`-l` *lcredit*] [`-M` *maxdays*] [`-m` *minlen*] [`-n` *mindays*] [`-o` *ocredit*] [`-r` *remember*] [`-u` *ucredit*] [`-w` *warn*] [`-y` *retry*]

setpasswordpolicy `-h`

DESCRIPTION

`setpasswordpolicy` is a command to change the password policy of the system.

These policies are executed by the XSCF on the service processor. Newly set password policies are applied to the user accounts added after execution of `setpasswordpolicy`.

When creating the user, the parameters, *expiry*, *inactive*, *maxdays*, *mindays*, and *warn parameters*, are used as the setting of the password effective period of the new account by `adduser`(8). The settings of the password effective periods of the existing accounts can be changed by using `password`(8).

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-d` *dcredit* — Sets the maximum credit of numbers included in a password. The minimum acceptable password length is reduced by one per a number included in the password to the value of *dcredit*. Valid values are integers from 0 to 999999999. The default value is 1. See Example 2.

`-e` *expiry* — Sets the number of days until the effective period of a new account expires and the account becomes invalid. When a new user account is created, this value is assigned to that user account. The default value is 0. Zero indicates that the account will not expire. Valid values are integers from 0 to 999999999.

`-h` — Displays the usage. Specifying this option with another option or operand causes an error.

`-i` *inactive* — Sets the number of days from the expiration of the password to account lock. When a new user account is created, this value is assigned to that user account. The default value is -1. If the value is -1, it indicates that the account is not locked even after the expiration of the password. Valid values are integers from -1 to 999999999.

`-k` *difok*	Sets the least number of new characters (characters not included in the old password) in the new password. The default value is 3. Valid values are integers from 0 to 999999999.
`-l` *lcredit*	Sets the maximum credit of lower-case characters included in a password. The minimum acceptable password length is reduced by one per a lower-case character included in the password to the value of *lcredit*. Valid values are integers from 0 to 999999999. The default value is `1`. See Example 2.
`-M` *maxdays*	Sets the maximum number of days when the password is effective. When a new user account is created, this value is assigned to that user account. The default value is `999999`. Valid values are integers from 0 to 999999999.
`-m` *minlen*	Sets the minimum acceptable password length if no limit of password for credit is applied. If the credit is specified by the `-d`, `-u`, `-l`, `-o` option, the necessary password length is reduced when the specified character type is used. The default value is `9`. Valid values are integers from 6 to 999999999. See Example 2.
`-n` *mindays*	Sets the minimum number of days from a change in the password to the next change. 0 (the default value of this field) indicates that the password can be changed at any time. When a new user account is created, this value is assigned to that user account. Valid values are integers from 0 to 999999999.
`-o` *ocredit*	Sets the maximum credit of characters other than alphanumeric characters included in a password. The minimum acceptable password length is reduced by one per a character other than alphanumeric characters included in the password to the value of *ocredit*. Valid values are integers from 0 to 999999999. The default value is `1`. See Example 2.
`-r` *remember*	Sets the number of passwords to be stored in the password history. The valid maximum value is `10`. The default value is `3`. If `setpasswordpolicy`(8) is executed specifying 0 in *remember*, the XSCF user cannot change the password and an error message is displayed.

`-u` *ucredit*
: Sets the maximum credit of upper-case characters included in a password. The minimum acceptable password length is reduced by one per an upper-case character included in the password to the value of *ucredit*.

  Valid values are integers from 0 to 999999999. The default value is `1`. See Example 2.

`-w` *warn*
: Sets the default number of days until the actual expiration after the issuance of the alarm of the expiration date of the password to the user. When a new user account is created, this value is assigned to that user account. The default value is 7.

  Valid values are integers from 0 to 999999999.

`-y` *retry password*
: Sets the number of attempts to accept retries of a password when a password for the user account is changed using a command. The default value is 3.

  Valid values are integers from 0 to 999999999.

EXTENDED DESCRIPTION

You can confirm the password policy set currently by using `showpasswordpolicy`(8).

EXAMPLES

EXAMPLE 1 Set the minimum size and number of the password to be stored.

```
XSCF> setpasswordpolicy -m 12 -r 5
```

EXAMPLE 2 Set the minimum password length and the maximum number of characters for each character type.

```
XSCF> setpasswordpolicy -m 10 -d 1 -u 0 -l 1 -o 1
```

Executing this command sets the minimum password length of a new password to 10 characters. If one or more numbers (or characters other than alphanumeric characters) are included, a password including 9 characters is accepted. If one number and one character other than alphanumeric characters are included, a password including 8 characters is accepted.

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

adduser(8), **password**(8), **showpasswordpolicy**(8)

NAME

setpciboxdio - Configures each PCI slot setting of whether to enable the direct I/O function for a PCI card mounted in the PCI expansion unit for the SPARC M12-2/M12-2S/M10-4/M10-4S.

SYNOPSIS

setpciboxdio [`-b` *bb_id*] `-s {enable|disable} [ [-q] -{y|n}] all`

setpciboxdio [`-b` *bb_id*] `-s {enable|disable} [ [-q] -{y|n}]` *slot_no...*

setpciboxdio `-h`

DESCRIPTION

`setpciboxdio` is a command to configure enable/disable of the direct I/O function for each PCI card mounted in the PCI expansion unit for the SPARC M12-2/M12-2S/M10-4/M10-4S.

The direct I/O function can be configured with each PCI slot on the SPARC M12-2/M12-2S/M10-4/M10-4S. The configured settings are reflected to each PCI expansion unit connected to the specified PCI slot of the SPARC M12-2/M12-2S/M10-4/M10-4S. `setpciboxdio` can be executed regardless of whether a PCI expansion unit link card is mounted to the SPARC M12-2/M12-2S/M10-4/M10-4S.

`setpciboxdio` is not available for SPARC M12-1/M10-1.

For SPARC M12-1/M10-1, the `setpciboxdio` setting need not be made. The direct I/O function can be used simply by connecting the PCI expansion unit to SPARC M12-1/M10-1.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-b` *bb_id*

Specifies the BB-ID of the SPARC M12-2/M12-2S/M10-4/M10-4S for which the direct I/O function is configured. You can specify any of the following values for *bb_id*.

For SPARC M12-2/M10-4: 0

For SPARC M12-2S/M10-4S (without crossbar box): an integer from 0 to 3

For SPARC M12-2S/M10-4S (with crossbar box): an integer from 0 to 15

For the SPARC M12-2S/M10-4S, omitting `-b` *bb_id* will apply the setting to the SPARC M12-2S/M10-4S currently being used for work.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-q`	Prevents display of messages, including prompt, for standard output.
`-s {enable|disable}`	Configures whether to enable the direct I/O function via PCI Expansion unit for the specified PCI slot. Any of the following values can be specified. When omitting the option, an error will be occurred.
	`enable` Enables the direct I/O function.
	`disable` Disables the direct I/O function.
`-y`	Automatically responds to prompt with "`y`" (yes).

OPERANDS

The following operands are supported.

`all`	Applies the settings to all PCI slots on the specified server. This operand cannot be used with the *slot_no* at the same time.
slot_no	Specifies the number of a PCI slot to be applied with the settings. An integer 0-10 can be specified in no particular order. Plural slot numbers can be specified at the same time by inserting space characters. This operand cannot be used with the `all` at the same time.

EXTENDED DESCRIPTION

- `setpciboxdio` cannot be executed to a crossbar box. And, omitting `-b` causes an error, when the own server has been a crossbar box.
- The setpciboxdio setting is reflected only when the power to the PPAR containing the physical system board (PSB) of the target SPARC M12-2/M12-2S/M10-4/M10-4S is turned off. In other cases, the command fails with an error. When the power of the PPAR is not turned off, an error occurs and the settings will be reflected at the next boot.
- The PCI hot plug function is disabled in the PCI slot where the direct I/O function has been enabled by `setpciboxdio`.
- The configured settings will be ignored when 8-10 is specified for the slot number in SPARC M12-2S/M10-4S.
- When the direct I/O function setting is changed by `setpciboxdio`, the logical domain configuration of the PPAR in which the target PSB of the SPARC M12-2/M12-2S/M10-4/M10-4S was added may be reset to factory-default. In this case, the OpenBoot PROM environment variables may also be initialized on SPARC

M10-4/M10-4S. On the SPARC M12-2/M12-2S, the OpenBoot PROM environment variables of the control domain are not initialized. For details, see the latest *Product Notes* for your servers.

- You can confirm the current setting of direct I/O function by using `showpciboxdio`(8).

EXAMPLES

EXAMPLE 1 Enables the direct I/O function, via PCI Expansion unit, of the PCI slots 2, 3, and 7 on BB#2.

```
XSCF> setpciboxdio -b 2 -s enable 2 3 7
The Direct I/O feature via the PCIBOX will be enabled.

Notice:
  Logical domain config_name will be set to "factory-default".

Continue? [y|n] :y
```

EXAMPLE 2 Enables the direct I/O function via PCI Expansion unit on all PCI slots of the own server.

```
XSCF> setpciboxdio -s enable -q -y all
```

EXAMPLE 3 Disables the direct I/O function via PCI Expansion unit on all PCI slots of M10-4.

```
XSCF> setpciboxdio -b 0 -s disable all
The Direct I/O feature via the PCIBOX will be disabled.

Notice:
  Logical domain config_name will be set to "factory-default".

Continue? [y|n] :y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showpciboxdio(8**)**

NAME

setpcl - Sets the physical partition (PPAR) configuration information (PCL).

SYNOPSIS

setpcl -p *ppar_id* -s policy= *value*

setpcl -p *ppar_id* -s *variable=value lsb* [*lsb*...]

setpcl -p *ppar_id* -a *lsb=psb* [*lsb=psb*...]

setpcl -p *ppar_id* -r *lsb* [*lsb*...]

setpcl -h

DESCRIPTION

`setpcl` is a command to set PCL.

PCL is hardware resource information which can be set in PPAR or logical system boards (LSB) composing PPAR.

LSB is the unit of system boards recognized by Hypervisor. It is indicated by an independent integer from 00 to 15 for each PPAR.

The physical system board (PSB) means the boards recognized by XSCF and mounted as hardware. `setpcl` links LSBs with PSBs and prevents the mounted hardware resource from being used by Oracle Solaris on the logical domains, by setting up PCL.

In `setpcl`, the following information in PCL can be set. For SPARC M12-1/M12-2/M10-1/M10-4, only `policy` can be set.

Settings for PPAR:

- Degradation range in the case that an abnormality is detected in the initial hardware diagnosis (`policy`)

  However, it cannot be set while PPAR is in operation. To reset it, it is necessary to turn off the power of PPAR.

`fru`	Degradation by part such as CPU and memory (Default)
`psb`	Degradation by PSB
`system`	Shutdown of the target PPAR without degradation

Settings for LSB:

- PSB number linked with LSB

  Specifies the PSB number to be linked with LSB.
- Using memory mounted in LSB (`no-mem`)

  You can set whether to make the Oracle Solaris on the logical domain use memory mounted in LSB.
- Using I/O device mounted in LSB (`no-io`)

You can set whether to make the Oracle Solaris on the logical domain use I/O devices such as PCI card mounted in LSB.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` *lsb=psb*

Specifies the PSB number to be linked to the LSB number of PPAR. This can be specified using the following format. You cannot specify it in SPARC M12-1/M12-2/M10-1/M10-4.

lsb=psb

lsb Specifies the LSB number. You can specify an integer from 0 to 15.

psb Specifies the PSB number. This can be specified using the following format.

xx-y

xx: Specifies the BB-ID which is an integer from 00 to 15.

y: It is fixed to 0.

You can specify it in a format separating *lsb* and *psb* by equal sign (=). Do not put any space before and after "=." You can specify multiple *lsb=xsb* by separating them with spaces.

Specifying the same LSB number and PSB number redundantly causes an error. It also causes an error that a PSB number is set in the specified *lsb*.

If the specified *psb* is set in another LSB, the existing settings is deleted and overwritten on the specified *lsb*.

`-h`

Displays the usage. Specifying this option with another option or operand causes an error.

`-p` *ppar_id*

Specifies the PPAR-ID to be set. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

`-r`

Clears the PSB number linked to the LSB number of the specified PPAR. You cannot specify it in SPARC M12-1/M12-2/M10-1/M10-4.

`-s` *variable=value* Sets the hardware resources of the PSB linked to LSB. In *variable*, the items to be set are specified. In *value*, the values for *variable* are specified. Specify just one *variable* and *value* in a format separating them by equal sign (=). Do not put any spaces before and after "=."

You can specify any of the following for *variable*. For SPARC M12-1/M12-2/M10-1/M10-4, you can only set `policy`.

`policy`	Degradation range in the case that an abnormality is detected in the initial hardware diagnosis
`no-mem`	Whether to use memory on the logical domain
`no-io`	Whether to use I/O devices on the logical domain

If `policy` is specified in *variable*, you can specify either of the following in *value*.

`fru`	If an abnormality is detected in the diagnosis, this degrades the target Field Replaceable Unit (FRU).
`psb`	If an abnormality occurs in the diagnosis, this degrades the target PSB.
`system`	If an abnormality occurs in the diagnosis, this shuts down the target PPAR.

If `no-mem` is specified in *variable*, you can specify either of the following in *value*.

`true`	Prohibits using memory on the logical domain.
`false`	Allows using memory on the logical domain (Default).

If `no-io` is specified in *variable*, you can specify either of the following in *value*.

`true`	Prohibits using I/O devices on the logical domain
`false`	Allows using I/O devices on the logical domain (Default).

OPERANDS

The following operands are supported.

lsb — Specifies the LSB number to be set. You can specify an integer from 00 to 15 for *lsb*. You can make multiple specifications by separating them with spaces. Specify a unique value in PPAR for *lsb*. Specifying the same *lsb* causes an error. You cannot specify it in SPARC M12-1/M12-2/M10-1/M10-4.

EXTENDED DESCRIPTION

- If the PSB linked to the specified LSB is incorporated into PPAR configuration, the contents set in LSB cannot be changed. Change them after releasing PSB from PPAR configuration by `deleteboard`(8).
- If the specified PPAR is in operation, the value of `policy` cannot be changed. Change it after shutdown of the specified PPAR.
- You can confirm the information of PCL set currently by using `showpcl`(8).
- If `policy` is changed when degradation has already occurred, degradation may be different from expected one.

Note – The `-s no-mem` option can be specified, but it cannot prevent Oracle Solaris on logical domains from using the memory mounted on LSBs.

EXAMPLES

EXAMPLE 1 Link LSB 0 of PPAR-ID 0 to PSB 00-0, and LSB 1 to PSB 01-0.

```
XSCF> setpcl -p 0 -a 0=00-0 1=01-0
```

EXAMPLE 2 Set policy=system in PPAR-ID 0.

```
XSCF> setpcl -p 0 -s policy=system
```

EXAMPLE 3 Delete the PSBs linked to LSB 0 and 1 of PPAR-ID 0.

```
XSCF> setpcl -p 0 -r 0 1
```

EXIT STATUS

The following exit values are returned.

`0` — Indicates normal end.

`>0` — Indicates error occurrence.

SEE ALSO

addboard(8), **deleteboard**(8), **setupfru**(8), **showboards**(8), **showfru**(8), **showpcl**(8)

NAME

setpowercapping - Sets caps for power consumption.

SYNOPSIS

setpowercapping [[-q] -{y|n}] -s *option*= *value* [[-s *option*= *value*]...]

setpowercapping [[-q] -{y|n}] -c default

setpowercapping -h

DESCRIPTION

setpowercapping is a command to set caps for power consumption of the system. All settings are reflected immediately.

All of the settings will be applied immediately after the command execution.

The settable items are below.

- Whether to enable/disable the power capping function

  Sets whether to enable/disable the power capping of the system. The default is off (disable).

- Upper limit of power consumption

  Sets the upper limit of power consumption. You can specify wattage or percent. The default is 100 (%) by percent specification.

  - Upper limit of power consumption (Wattage specification)

    Sets the upper limit of power consumption by wattage.

  - Upper limit of power consumption (Percent specification)

    Sets the upper limit of power consumption by percentage.

    Converts the minimum power consumption value (0%) and maximum power consumption value (100%) of the system to the upper limit power value (watt).

- Window time in the case that the upper limit is exceeded

  If the power consumption value of the system continues to exceed the upper limit of power consumption continuously, set the window time until it is judged as violation. The unit is second and the default is 30.

- System operation at the time of violation

  Sets the system operation if the window time elapses with the power consumption value of the system exceeding the upper limit of power consumption. You can specify any of none, shutdown, and poff. The default is none.

The maximum power supply of the power supply unit (PSU), and the minimum and the maximum power consumption of the system can be confirmed by using the showenvironment(8).

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-c default` Initializes the entire power capping function.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-n` Automatically responds to prompt with "n" (no).

`-q` Prevents display of messages, including prompt, for standard output.

`-s` *option=value* In *option*, the items to be set are specified. In *value*, the values for *option* are specified. Specify *option* and *value* in a format separating them by equal sign (=). Do not put any spaces before and after "=." You can make multiple specifications by separating them with spaces.

You can specify any of the following for *option*.

`activate_state`	Sets whether to cap power consumption.
`powerlimit_p`	Sets the upper limit of power consumption by percentage (%). You cannot specify this with `powerlimit_w`.
`powerlimit_w`	Sets the upper limit of power consumption by wattage. You cannot specify this with `powerlimit_p`.
`timelimit`	Sets the window time in the case that power consumption exceeds the upper limit.
`violation_actions`	Sets the system operation when the window time elapsed with the upper limit exceeded.

If `activate_state` is specified in *option*, you can specify either of the following in *value*.

`enabled`	Caps power consumption.
`disabled`	Does not cap power consumption (default).

If `powerlimit_p` is specified in *option*, you can specify an integer from 0 to 100 for *value*. You can specify a value which is larger than the maximum power consumption of the system, but cannot specify a value which is less than the minimum power consumption of the system.

If `powerlimit_w` is specified in *option*, you can specify an integer from 0 to 99999 for *value*.

If `timelimit` is specified in *option*, you can specify an integer from 10 to 99999 for *value*. The unit is second. Any of the following values also can be specified.

`default`	Sets the grace period for exceeding the upper limit of power consumption to 30 seconds.
`none`	Sets the grace period for exceeding the upper limit of power consumption to 0 second.

If `violation_actions` is specified in *option*, you can specify either of the following in *value*.

`none`	Outputs only the message for exceeding the upper limit (Default).
`shutdown`	Shuts down the physical partition (PPAR) below the upper limit after outputting the message for exceeding the upper limit.
`poff`	Forcibly shuts down PPAR below the upper limit after outputting the message for exceeding the upper limit.

`-y` Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- You can confirm the settings regarding power capping by using `showpowercapping`(8).
- If all of the following conditions are met while the Logical Domains (LDoms) Manager of a PPAR is halted, the performances of other PPARs may drop or the PPARs themselves may be shut down.
  - Case that the power capping function of the system is enabled

  - Case that the power consumption value of the system exceeds the upper limit of power consumption
- When you changed the configuration of the logical domain, execute the `ldm add-spconfig` on the control domain, to store the latest configuration information in XSCF. If you do not store the information, the PPAR stop processing which has been set by using the `-s violation_actions` may fail to work properly.
- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Enable the power capping of the system.

```
XSCF> setpowercapping -s activate_state=enabled
activate_state      :disabled  -> enabled
powerlimit          :500w      -> -
timelimit           :30        -> -
violation_actions   :none      -> -
The specified options will be changed.
Continue? [y|n]:y
configured.
activate_state      :enabled
powerlimit          :500w
timelimit           :30
violation_actions   :none
```

EXAMPLE 2 Set the upper limit of system power consumption to 75%.

```
XSCF> setpowercapping -s powerlimit_p=75
activate_state      :enabled   -> -
powerlimit          :25%       -> 75%
timelimit           :30        -> -
violation_actions   :none      -> -
The specified options will be changed.
Continue? [y|n]:y
configured.
activate_state      :enabled
powerlimit          :75%
timelimit           :30
violation_actions   :none
```

EXAMPLE 3 Set the upper limit of system power consumption to 1000 W and the window time in the case that power consumption exceeds the upper limit to 100 seconds.

```
XSCF> setpowercapping -s powerlimit_w=1000 -s timelimit=100
activate_state      :enabled   -> -
powerlimit          :500w      -> 1000w
timelimit           :30        -> 100
violation_actions   :none      -> -
```

```
The specified options will be changed.
Continue? [y|n]:y
configured.
activate_state      :enabled
powerlimit          :1000w
timelimit           :100
violation_actions   :none
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showenvironment(8), **showpowercapping**(8)

NAME

setpowerschedule - Sets the schedule operation information.

SYNOPSIS

setpowerschedule {`-p` *ppar_id*|`-a`} `-c control={enable|disable}`

setpowerschedule {`-p` *ppar_id*|`-a`} `-c recover={on|off|auto}`

setpowerschedule `-h`

DESCRIPTION

`setpowerschedule` is a command to set information related to schedule operation.

Schedule operation can be set for the entire physical partitions (PPAR) or each PPAR.

Privileges

To execute this command, either of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`

Sets for all PPARs.

`-c control={enable|disable}`

Enables/Disables schedule operation of the specified PPAR. To enable it, specify `enable`. To disabled it, specify `disable`. The default is off (disable).

`-c recover={on|off|auto}`

Sets whether to turn on the power at the time of resumption of power. You can specify any of the following.

`on`	Reverts back to the same power status before power failure (default). Turns on the power if the PPAR was powered on before the power failure.
`off`	Does not turn on the power.
`auto`	If the time of power recovery is within the scheduled operation period (within the scheduled period from power-on to power-off), power is turned on. If it is outside of the scheduled operation period, power is not turned on. If either power-on or power-off is not scheduled, it is regarded as outside of the scheduled operation period and power is not turned on. Example 1: If it is scheduled to power on at 9 and to power off at 13 - If power recovered at 10: power will be turned on - If power recovered at 15: power will not turned on Example 2: If it is scheduled to power on at 9 but has no power-off schedule - If power recovered at 10 or at 15: power will not be turned on in either case

`-h`

Displays the usage. Specifying this option with another option or operand causes an error.

`-p` *ppar_id*

Specifies the PPAR-ID to set schedule operation. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

EXTENDED DESCRIPTION

- In the uninterruptible power system (UPS) connection configuration, the schedule setting link function of the Power Chute Network Shutdown Enterprise (PCNS) is a different function from schedule setting by setpowerschedule. Sets only one of these functions for schedule. If both of them are set, the schedule set by the schedule setting link function of PCNS cannot be suspended by disabling the schedule operation set by `setpowerschedule` or suspending schedule operation (holiday setting).
- You can confirm the schedule operation information set currently by using `showpowerschedule`(8).
- Specifying a non-existent PPAR-ID or invalid option or parameter causes an error.

- When you changed the configuration of the logical domain, execute the `ldm add-spconfig` on the control domain, to store the latest configuration information in XSCF. If you do not store the information, the automatic power-off processing may fail to work properly.

EXAMPLES

EXAMPLE 1 Enable the schedule operation of PPAR-ID 1.

```
XSCF> setpowerschedule -p 1 -c control=enable
XSCF>
```

EXAMPLE 2 Set so that the power of PPAR-ID 1 can be turned on according to schedule operation at the time of resumption of power.

```
XSCF> setpowerschedule -p 1 -c recover=auto
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addpowerschedule(8), **deletepowerschedule**(8), **showpowerschedule**(8)

NAME

setpowerupdelay - Sets the warm-up operation time of the system and the wait time before start.

SYNOPSIS

setpowerupdelay `-p` *ppar_id* `-c warmup -s` *time*

setpowerupdelay `-a -c warmup -s` *time*

setpowerupdelay `-c wait -s` *time*

setpowerupdelay `-h`

DESCRIPTION

`setpowerupdelay` is a command to set the warm-up operation time of the system and the wait time before start.

The wait time before start can be used for control such as starting the system after waiting for the temperature to become appropriate by air conditioning in the data center. If the input power of the system has already been turned on and the system is in operation, the set contents will be enabled next time when the system is started.

The warm-up operation wait time is set for each physical partition (PPAR).

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Sets a warm-up operation time for all PPARs.
`-c warmup`	Sets the warm-up operation time.
`-c wait`	Sets the wait time before the system is started.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-p` *ppar_id*	Specifies the PPAR to set the warm-up operation time.
`-s` *time*	Specifies the warm-up operation time or the wait time before start by minutes. You can specify an integer from 0 to 255 for *time*.

EXTENDED DESCRIPTION

- You can confirm the warm-up operation time and wait time before start set currently by using `showpowerupdelay`(8).
- If the power is turned on by using `testsb`(8), the warm-up operation time and wait time before start are ignored. To monitor these times at start, use `poweron`(8).
- If the system is powered on using the operation panel, the waiting time until the system starts is ignored.

EXAMPLES

EXAMPLE 1 Set the warm-up operation time to 10 minutes.

```
XSCF> setpowerupdelay -p 00 -c warmup -s 10
```

EXAMPLE 2 Set the wait time before start to 20 minutes.

```
XSCF> setpowerupdelay -c wait -s 20
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

poweron(8), **showpowerupdelay**(8), **testsb**(8)

NAME

setpparmode - Sets the operation mode of the physical partition (PPAR).

SYNOPSIS

setpparmode [[-q] -{y|n}] -p *ppar_id* -m *function=mode*

setpparmode -h

DESCRIPTION

setpparmode is a command to set the operation mode of PPAR.

The type of the operation modes of PPAR are below.

Diagnosis level

Diagnosis level of Power-On Self-Test (POST). Set this while PPAR is not in operation. The default is standard. When the command is executed, the setting is reflected immediately.

Message level

Detailed level of the console message of the POST diagnosis. Set this while PPAR is not in operation. The default is standard. When the command is executed, the setting is reflected immediately.

Alive Check (the monitoring between XSCF and Hypervisor)

Whether to enable or disable Alive Check. The default is on (enable). When the command is executed, the setting is reflected immediately.

Operation after the Host Watchdog (the monitoring between Hypervisor and the logical domain) timeout

Operation of logical domain (including control domain) at the time of Host Watchdog timeout. By default, logical domain is reset. When the command is executed, the setting is reflected immediately.

Break signal (STOP-A) suppression

Whether to enable or disable break signal transmission suppression. The default is on (enable). When the command is executed, the setting is reflected immediately.

Autoboot of the guest domain

Whether to autoboot the guest domain when PPAR is started. The default is on (enable). To reflect the setting, PPAR must be powered on or reboot.

Power Aware Dispatcher function

Enables or disables the power-saving operation that uses Solaris Power Aware Dispatcher. Solaris Power Aware Dispatcher is used when the Power Aware Dispatcher function (PAD function) is enabled. The function is enabled by default. You cannot set it on the SPARC M10-1/M10-4/M10-4S.

The PAD function and the power-saving operation have the following combinations of settings.

- When the PAD function is enabled, you can set any of the following for the power-saving operation:
  disabled, performance, or elastic
- When the PAD function is disabled, you can set either of the following for the power-saving operation:
  disabled or elastic

If the power-saving operation is set to disabled or elastic, the operation does not differ between the two PAD function settings. It is set when the PPAR is stopped.

When the PAD function changes from disabled to enabled, or vice versa, the logical domain configuration information reverts to the factory-default state. In this case, the logical domains must be reconfigured.

If the power-saving operation is set to performance, the PAD function cannot change to disabled. To disable the function, you have to set the power-saving operation to disabled or elastic beforehand.

Note – For PAD function support information, see the latest version of the *Fujitsu SPARC M12 Product Notes*.

Power-saving operation

Sets the power-saving operation of CPUs or memory. In the SPARC M12, set it with the `powermgmt_policy` option. In the SPARC M10, set it with the `elastic` option. The default is off (disable). When the command is executed, the setting is reflected immediately.

If the Power Aware Dispatcher function is disabled, the power-saving operation setting cannot be changed to performance.

I/O bus reconfiguration (ioreconfigure)

Whether to reconfigure I/O bus according to the bus configuration when PPAR is powered on or reset. The default is off (disable). Execute the command while PPAR is not in operation. You cannot set it in SPARC M12-1/M10-1.

CPU operational mode

If SPARC64 X+ processors exist, you have to consider whether to operate with SPARC64 X+ functions or with SPARC64 X functions. The default value is `auto` mode. The `auto` mode makes automatic judgment on whether to operate with SPARC64 X+ functions or SPARC64 X functions.

If the PPAR is not stopped (in the status other than Powered Off), an error is produced.

To find out whether the PPAR is using SPARC64 X+ functions or SPARC64 X functions, execute the following command on Oracle Solaris:

```
# psrinfo -pv
```

You cannot set the CPU operational mode in SPARC M12-2/M12-2S.

`auto` mode

This mode is used to automatically judge whether to operate with SPARC64 X+ functions or not. If this mode is set, depending on the PPAR CPU configuration, the following operations are executed automatically when Oracle Solaris is boots up:

<In case all CPUs in the PPAR are SPARC64X+>

- Oracle Solaris can use the functions of SPARC64 X+ processors.
- PSBs with SPARC64 X+ processors can be added to PPARs, using DR.

- PSBs with SPARC64 X processors cannot be added to PPARs, using DR. When adding SPARC64 X processors to PPARs, the PSBs on which they are mounted, should be added to the PPARs after powering them off.

  <In case CPUs in the PPAR are either a mixture of SPARC64 X and SPARC64 X+ processors or all are SPARC64 X processors>

  - Oracle Solaris cannot use the functions of SPARC64 X+ processors.
  - PSBs with either SPARC64 X or SPARC64 X+ can be added to PPARS, using DR.
  - Please note that in case of PPARs setup with this mode, if no SPARC64 X processor remains in the PPAR after a reset due to some malfunctions, SPARC64 X processors may not be added to the PPAR, using DR. To avoid this, PPARs which contain SPARC64 X processors, should be set up in the `compatible` mode.

`compatible` mode

SPARC64 X compatible mode. This mode enforces SPARC64 X compatibility in the case of a mixture of SPARC64 X and SPARC64 X+ processors and also in the case of only SPARC64 X+ processors in the PPAR. Use this mode if there are PPARs with SPARC64 X processor-mounted PSBs or if you intend to use DR to add SPARC64 X processors to PPARS in the future.

- When this mode is set, Oracle Solaris cannot use the functions of SPARC64 X+ processors.
- When this mode is set, both SPARC64 X processor-mounted PSBs and SPARC64 X+ processor-mounted PSBs can be added to the PPARs using DR.

PPAR DR feature

Set up the enabling/disabling of the incorporation or detachment of physical system boards (PSB) to / from a running PPAR configuration. By default this feature is enabled. To reflect the setup, it is necessary to power on or reboot the PPAR. This setup is not available for SPARC M12-1/M12-2/M10-1/M10-4.

When PPAR DR setup is enabled from disabled or, disabled from enabled, the configuration information of the logical domain reverts back to factory-default after the physical partition is reset. For details refer to "2.5 Dynamic Reconfiguration Operation Conditions and Settings" of *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide*.

If any of the operation modes of PPAR is selected, the list of the current setting contents is displayed.

Privileges

To execute this command, any of the following privileges is required.

- Diagnosis level, message level, autoboot of the guest domain

`fieldeng`	Enables execution for all PPARs.

- Alive Check, operation at the time of Host Watchdog timeout, break signal, autoboot of the guest domain, Power Aware Dispatcher function, power-saving operation, reconfiguration of I/O buses, CPU operational mode, PPAR DR feature

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-m` *function=mode* Sets the operation mode and value. Specify the operation mode for *function*. You can specify any of the following.

`diag`
Sets the diagnosis level of POST.

`message`
Sets the detailed level of the console message of POST diagnosis.

`alive_check`
Sets whether to enable or disable Alive Check.

`watchdog_reaction`
Sets the operation at the time of Host Watchdog timeout.

`break_signal`
Sets whether to enable or disable break signal suppression.

`guestboot`
Sets whether to enable or disable autoboot of the guest domain.
Note – The `setpparparam`(8) sets whether to enable or disable autoboot of the control domain.

`pad`
Enables or disables the Power Aware Dispatcher function. You cannot set this on the SPARC M10-1/M10-4/M10-4S.

`elastic`
Sets the power-saving operation of CPUs or memory in the SPARC M10-1/M10-4/M10-4S.
This feature cannot be setup on SPARC M12-1/M12-2/M12-2S.

`powermgmt_policy`
Sets the power-saving operation of CPUs or memory in the SPARC M12-1/M12-2/M12-2S.
This feature cannot be setup on SPARC M10-1/M10-4/M10-4S.

`ioreconfigure`
Sets whether to enable or disable reconfiguration of I/O buses when PPAR is started or restarted.
This feature cannot be setup on SPARC M12-1/M10-1.

`cpumode`
Sets CPU operational mode.
This feature cannot be setup on SPARC M12-1/M12-2/M12-2S.

`ppar_dr`
Enable or disable the PPAR DR feature.
This feature cannot be setup on SPARC M12-1/M12-2/M10-1/M10-4.

If `diag` is specified in *function*, you can specify either of the following in *mode*. Set this while PPAR is not in operation.

`off`	Does not make a diagnosis.
`min`	Sets the diagnosis level to "standard" (Default).
`max`	Sets the diagnosis level to "Maximum."

If `message` is specified in *function*, you can specify either of the following in *mode*. Set this while PPAR is not in operation.

`none`	The diagnosis output is not displayed until a failure is detected.
`min`	Displays the limited volume of the diagnosis output.
`normal`	Displays an appropriate volume of the diagnosis output (Default).
`max`	Displays the complete diagnosis output including the names of diagnoses performed and the results.
`debug`	Displays a wide diagnosis output including the debug output of each diagnosis.

If `alive_check`, `break_signal`, `guestboot`, or `ppar_dr` is specified in *function*, you can specify either of the following for *mode*.

`on`	Enables alive check, break signal transmission control, autoboot of the guest domain, or PPAR DR feature.
`off`	Disables alive check, break signal transmission control, autoboot of the guest domain, or PPAR DR feature.

If `watchdog_reaction` is specified in *function*, you can specify either of the following in *mode*.

`none`	None.
`dumpcore`	Generates panic in the logical domain where an abnormality is detected.
`reset`	Resets the logical domain where an abnormality is detected.

If `pad` is specified in *function*, you can specify either of the following in *mode*.

`on`	Enables the Power Aware Dispatcher function (Default).
`off`	Disables the Power Aware Dispatcher function. To set this mode, powermgmt_policy must be disabled or elastic.

If `elastic` is specified in *function*, you can specify either of the following in *mode*.

`off`	Disables power-saving operation of CPU and memory (default). All CPUs and memory in the system operate normally at the highest performance.
`on`	Enables power-saving operation of CPU and memory. Changes system power usage according to the current utilization levels of CPUs and memory. This can reduce system power consumption.

If `powermgmt_policy` is specified in *function*, you can specify either of the following in *mode*.

`disabled`	Disables power-saving operation of CPU and memory (default). All CPUs and memory in the system will continuously operate at the highest performance.
`elastic`	Enables power-saving operation of CPU and memory. Changes system power usage according to the current utilization levels of CPUs and memory. This can reduce system power consumption.
`performance`	Enables power-saving operation of CPU. This can save power without much of an effect on performance because unused, idle CPUs in the system operate at slower speeds or may have entered the sleep state. To set this mode, pad must be on.

Note – For support information on the power-saving operation, see the latest version of the *Fujitsu SPARC M12 Product Notes*.

If `ioreconfigure` is specified in *function*, you can specify either of the following in *mode*.

`true`	Every time the power of the system is turned on, XSCF confirms I/O buses and reconfigures them, if necessary.
`false`	XSCF does not reconfigure I/O buses.
`nextboot`	Only when the power is turned on next time, XSCF reconfigures the I/O buses. It is automatically set to `false` after reconfiguration.

If `cpumode` is specified in *function*, you can specify either of the following in *mode*:

`auto`	Depending on the CPU configuration at the time of OS boot, automatically determines whether the SPARC64 X+ functions can be used.
`compatible`	Enforces SPARC64 X compatibility, even if SPARC64 X+ processors are mounted.

`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies the PPAR-ID to set the operation mode. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
`-q`	Prevents display of messages, including prompt, for standard output.
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- The operation mode set by `setpparmode` does not display the actual operation but the setting status.

  The actual operation varies according to the status of the mode switch of the operation panel. If the mode switch of the operation panel is "`Service`," the operation mode of PPAR is set as follows regardless of the contents set by `setpparmode`(8).

  - Diagnosis level, message level, operation after the Host Watchdog timeout, autoboot of the guest domain, Power Aware Dispatcher function, power-saving operation, reconfiguration of I/O buses, CPU operational mode, PPAR DR feature: As set by `setpparmode`

  - Alive Check: Disabled
  - Break signal (STOP-A) transmission control: Sends a break signal regardless of the settings
- You can confirm the contents of the PPAR operation mode set currently by using showpparmode(8). The contents set by setpparmode is displayed when showpparmode(8) is executed after executing setpparmode.

EXAMPLES

EXAMPLE 1 Set the diagnosis level of PPAR-ID 0 to "None" on SPARC M10-4S.

```
XSCF> setpparmode -p 0 -m diag=off
Diagnostic Level         :min      -> off
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Elastic Mode             :off      -> -
IOreconfigure            :true     -> -
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n] :y
configured.
Diagnostic Level         :off
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Elastic Mode             :off
IOreconfigure            :true
CPU Mode                 :auto
PPAR DR                  :off
```

EXAMPLE 2 Set the diagnosis level of PPAR-ID 0 to "None" on SPARC M12-2S.

```
XSCF> setpparmode -p 0 -m diag=off
Diagnostic Level         :min      -> off
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Power Aware Dispatcher   :on       -> -
Power Management Policy  :disabled -> -
IOreconfigure            :true     -> -
CPU Mode                 :-
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n] :y
configured.
```

```
Diagnostic Level         :off
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Power Aware Dispatcher   :on
Power Management Policy  :disabled
IOreconfigure            :true
CPU Mode                 :-
PPAR DR                  :off
```

EXAMPLE 3 Set the autoboot of the guest domain of PPAR-ID 0 to "On" on SPARC M10-4S. Automatically responds to prompt with "y" (yes).

```
XSCF> setpparmode -y -p 0 -m guestboot=on
Diagnostic Level         :off      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :off      -> on
Elastic Mode             :off      -> -
IOreconfigure            :true     -> -
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n]:y
configured.
Diagnostic Level         :max
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :none (watchdog reaction:none)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Elastic Mode             :off
IOreconfigure            :true
CPU Mode                 :auto
PPAR DR                  :off
```

EXAMPLE 4 Set the autoboot of the guest domain of PPAR-ID 0 to "On" on SPARC M12-2S. Automatically responds to prompt with "y" (yes).

```
XSCF> setpparmode -y -p 0 -m guestboot=on
Diagnostic Level         :off      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :off      -> on
Power Aware Dispatcher   :on       -> -
Power Management Policy  :disabled -> -
```

```
IOreconfigure            :true     -> -
CPU Mode                 :-
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n]:y
configured.
Diagnostic Level         :off
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Power Aware Dispatcher   :on
Power Management Policy  :disabled
IOreconfigure            :true
CPU Mode                 :-
PPAR DR                  :off
```

EXAMPLE 5 Set the operation after the Host Watchdog of PPAR-ID 0 to "None" on SPARC M10-4S.

```
XSCF> setpparmode -p 0 -m watchdog_reaction=none
Diagnostic Level         :max      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> none
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Elastic Mode             :off      -> -
IOreconfigure            :true     -> -
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n]:y
configured.
Diagnostic Level         :max
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :none (watchdog reaction:none)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Elastic Mode             :off
IOreconfigure            :true
CPU Mode                 :auto
PPAR DR                  :off
```

EXAMPLE 6 Enable the power-saving operation of PPAR-ID 0 on SPARC M10-4S.

```
XSCF> setpparmode -p 0 -m elastic=on
Diagnostic Level         :max      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
```

```
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Elastic Mode             :off      -> on
IOreconfigure            :true     -> -
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n]:y
configured.
Diagnostic Level         :max
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Elastic Mode             :on
IOreconfigure            :true
CPU Mode                 :auto
PPAR DR                  :off
```

EXAMPLE 7 Set `elastic` for the power-saving operation of PPAR-ID 0 on SPARC M12-2S.

```
XSCF> setpparmode -p 0 -m powermgmt_policy=elastic
Diagnostic Level         :max      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Power Aware Dispatcher   :on       -> -
Power Management Policy  :disabled -> elastic
IOreconfigure            :true     -> -
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n]:y
configured.
Diagnostic Level         :max
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Power Aware Dispatcher   :on
Power Management Policy  :elastic
IOreconfigure            :true
CPU Mode                 :auto
PPAR DR                  :off
```

EXAMPLE 8 Disable the I/O bus reconfiguration function of PPAR-ID 0 on SPARC M10-

4S.

```
XSCF> setpparmode -p 0 -m ioreconfigure=false
Diagnostic Level         :max      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Elastic Mode             :off      -> -
IOreconfigure            :true     -> false
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> -
The specified modes will be changed.
Continue? [y|n]:y
configured.
Diagnostic Level         :max
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
Elastic Mode             :off
IOreconfigure            :false
CPU Mode                 :auto
PPAR DR                  :off
```

EXAMPLE 9 Enable the PPAR DR feature of PPAR-ID 0 on SPARC M10-4S.

```
XSCF> setpparmode -p 0 -m ppar_dr=on
Diagnostic Level         :max      -> -
Message Level            :normal   -> -
Alive Check              :on       -> -
Watchdog Reaction        :reset    -> -
Break Signal             :on       -> -
Autoboot(Guest Domain)   :on       -> -
Elastic Mode             :off      -> -
IOreconfigure            :true     -> -
CPU Mode                 :auto     -> -
PPAR DR                  :off      -> on
The specified modes will be changed.

Notice:
  Logical domain config_name will be set to "factory-default".

Continue? [y|n]:y
configured.
Diagnostic Level         :max
Message Level            :normal
Alive Check              :on (alive check:available)
Watchdog Reaction        :reset (watchdog reaction:reset)
Break Signal             :on (break signal:non-send)
Autoboot(Guest Domain)   :on
```

```
Elastic Mode            :on
IOreconfigure           :false
CPU Mode                :auto
PPAR DR                 :on
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showpparmode(8)

NAME

setpparparam - Execute forced rewriting of OpenBoot PROM environment variables and registration or deletion of boot scripts of the control domain.

SYNOPSIS

setpparparam [[-q] -{y|n}] -p *ppar_id* use-nvramrc

setpparparam [[-q] -{y|n}] -p *ppar_id* security-mode

setpparparam [[-q] -{y|n}] -p *ppar_id* set-defaults

setpparparam [[-q] -{y|n}] -p *ppar_id* -s bootscript *value*

setpparparam [[-q] -{y|n}] -p *ppar_id* -s bootscript -r

setpparparam -h

DESCRIPTION

setpparparam is a command to execute forced rewriting of OpenBoot PROM environment variables and registration or deletion of boot scripts of the control domain.

You can set the following OpenBoot PROM environment variables.

use-nvramrc?	Whether to execute the contents of NVRAM when PPAR is started or restarted
security-mode	Setting of the security level of the firmware

Privileges

To execute this command, any of the following privileges is required.

platadm, fieldeng	Enables execution for all physical partitions (PPARs).
pparadm	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-n	Automatically responds to prompt with "n" (no).
-p *ppar_id*	Specify the PPAR-ID of the target control domain. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

Note – Set this while PPAR is not in operation.

`-q`	Prevents display of messages, including prompt, for standard output.
`-r`	Deletes the set bootscript.
`-s bootscript`	Register or delete boot scripts. If specified along with *value*, the value of *value* is registered as the boot script. If specified along with `-r`, the registered boot script will be deleted. Only one boot script can be registered. If several boot scripts are specified, the last boot script will be enabled.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

`use-nvramrc`	Sets the environment variable `use-nvramrc?` to `false`.
`security-mode`	Sets the environment variable `security-mode` to `none`.
`set-defaults`	Restores the OpenBoot PROM environment variables to the default.
value	Specify the boot script to be registered. Enter the value enclosing it in double quotation marks ("). You can set it within 254 characters. When specifying the OpenBoot PROM environment variables, input a line feed after every `setenv` command.

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- Execute the `setpparparam` only when the target PPAR is powered off. An error is produced if it is executed when the PPAR is powered on.
- The OpenBoot PROM variables can be rewritten by registering the `setenv` commands in the boot script. However, as the `use-nvramrc?` and `security-mode` variables are used before the execution of the boot script, these variables cannot be rewritten by the boot script.
- The variables that are setup with `setpparparam` are effective only at the next powering on of the PPAR. To execute forced rewriting of OpenBoot PROM environment variables and registration or deletion of boot scripts, set them again by using `setpparparam`.

EXAMPLES

EXAMPLE 1 Set the OpenBoot PROM environment variable `use-nvramrc?` of PPAR-ID 0 to `false`.

```
XSCF> setpparparam -p 0 use-nvramrc
PPAR-ID of PPARs that will be affected:0
OpenBoot PROM variable use-nvramrc will be set to false.
Continue? [y|n] :
```

EXAMPLE 2 Set the OpenBoot PROM environment variable `security-mode` of PPAR-ID 0 to `none`.

```
XSCF> setpparparam -p 0 security-mode
PPAR-ID of PPARs that will be affected:0
OpenBoot PROM variable security-mode will be set to none.
Continue? [y|n]:
```

EXAMPLE 3 Initialize the OpenBoot PROM environment variables of PPAR-ID 0 to the default.

```
XSCF> setpparparam -p 0 set-defaults
PPAR-ID of PPARs that will be affected:0
All OpenBoot PROM variables will be reset to original default values.
Continue? [y|n]:
```

EXAMPLE 4 Initialize the OpenBoot PROM environment variables of PPAR-ID 1 to the default. The message is hidden and the prompt is automatically given a "`y`" response.

```
XSCF> setpparparam -q -y -p 1 set-defaults
```

EXAMPLE 5 Set up the boot script of PPAR-ID 0. To rewrite several environment variables, put a line feed after each `setenv` command and include the whole command in double quotes ("").

```
XSCF> setpparparam -p 0 -s bootscript "setenv auto-boot? true
setenv input-device virtual-console
setenv output-device virtual-console"
PPAR-ID of PPARs that will be affected:0
OpenBoot PROM variable bootscript will be changed.
Continue? [y|n]:
```

EXAMPLE 6 Clear the bootscript of PPAR-ID 0.

```
XSCF> setpparparam -p 0 -s bootscript -r
PPAR-ID of PPARs that will be affected:0
OpenBoot PROM variable bootscript will be cleared.
Continue? [y|n]:
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

setpparmode(8), **showpparparam**(8)

NAME

setprivileges - Assigns the user privileges.

SYNOPSIS

setprivileges *user* [*privileges*] [*pparprivilege @ ppars*]

setprivileges `-h`

DESCRIPTION

`setprivileges` is a command to assign the user privileges to the XSCF user account.

It is only the user privileges of XSCF that can be changed by `setprivileges`. You can assign up to 100 user accounts to one privilege. You can set multiple user privileges for a user account separating them with spaces. For the list of user privileges, see "OPERANDS."

`pparop`, `pparmgr`, and `pparadm` privileges are the user privileges which can be specified for each physical partition (PPAR). For details, see "OPERANDS" and Example 1.

If no user privilege is specified, `setprivileges` deletes all privilege data on XSCF of the specified user account. If the reference of the user privileges to Lightweight Directory Access Protocol (LDAP) is enabled, the privilege data of the user account is referred to in LDAP.

If `none` is assigned to the user account, no privilege is given to the target user account regardless of the contents of the privilege data in LDAP.

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS The following operands are supported.

pparprivilege`@`*ppars*

Specifies `pparadm`, `pparmgr`, or `pparop` privileges for one or more PPARs.

Specify the names of the user privileges which can be assigned to each PPAR in *pparprivilege*. It is specified with `@`*ppars*. You can specify any of the following.

`pparadm`	Enables all operations regarding hardware assigned to the PPARs to which privileges are assigned (assignment, assignment cancellation, power operation, etc.). It enables display of the statuses of all hardware assigned to the PPARs to which privileges are given. It enables execution of all operations regarding the PPARs to which privileges are given. It enables display of all statuses of the PPARs to which privileges are given.
`pparmgr`	Enables restarting, starting, and shutting down the PPARs to which privileges are given. It enables display of the statuses of all hardware assigned to the PPARs to which privileges are given. It enables display of all statuses of the PPARs to which privileges are given.
`pparop`	Enables display of the statuses of all hardware assigned to the PPARs which have privileges. It enables display of the statuses of all PPARs which have this privilege.
ppars	Specifies one or more PPARs for the appropriate value for *pparprivilege* attaching the `@` sign and *ppars* descriptor. To specify PPAR, use it attaching PPAR-ID after the `@` sign. Example: `pparadm@3-4` If PPARs are specified by range, specify by separating the beginning and end of the PPARs included in the range by "`-`." Example: `pparadm@3-4` To specify multiple PPARs or PPAR ranges, separate them by commas (`,`). Overlapping specification of PPARs causes an error. Example: `pparadm@1-2,4`

privileges

Specifies the user privileges which affect the entire system. You can specify any of the following.

`auditadm`	Enables display and setting of all audit statuses and audit trails.
`auditop`	Enables display of all audit statuses and audit trails.
`fieldeng`	Enables all operations limited to the field engineers and service engineers.
`none`	If privileges are set for the user in LDAP, no operation regarding the service processor requiring user privileges can be executed. The administrator can limit access to such operations on the service processor and PPAR by using this privilege.
`platadm`	Enables execution of the settings of all XSCFs excluding the contents which can be executed by the `useradm` and `auditadm` privileges. It enables assignment of hardware to PPAR and cancellation of assignment from PPAR to hardware. It enables power operations for the PPAR and XSCF. It enables operations regarding fail-over of XSCF units. It enables display of all statuses of platforms.
`platop`	Enables display of all statuses of platforms but they cannot be changed.
`useradm`	Enables creation, deletion, enabling, and disabling of user accounts. It enables changes in user passwords and password policies. It enables changes in user privileges.

user

Specifies a valid user name.

EXAMPLES

EXAMPLE 1 Set the platadm privilege for the user account (JSmith), and the pparadm privilege for PPAR-ID 1 to 4 and 6.

```
XSCF> setprivileges jsmith platadm pparadm@1-4,6,9
```

EXAMPLE 2 Delete all privileges set in the user account (JSmith).

```
XSCF> setprivileges jsmith none
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO **setpasswordpolicy**(8), **showuser**(8)

NAME

setremotepwrmgmt - Set up the remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems.

SYNOPSIS

setremotepwrmgmt `-c config` [`-V`] [`-u` *user*] [`-X` *proxy* [`-t` *proxy_type*]] [`-y`|`-n`] *configuration_file*

setremotepwrmgmt `-c enable` [`-y`|`-n`]

setremotepwrmgmt `-c disable` [`-y`|`-n`]

setremotepwrmgmt `-h`

DESCRIPTION

`setremotepwrmgmt` is a command to perform the following settings regarding the remote power management function.

- Constructing the remote power management group
- Changing the settings of the remote power management group
- Disabling the remote power management function of the remote power management group
- Enabling the remote power management function of the remote power management group

When using the remote power management function (Remote Cabinet Interface over LAN: RCIL), enable IP packets in respect to IPMI ports using `setpacketfilters`(8), beforehand. If the IPMI service is disabled, this command will terminate abnormally.

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-c config`	Reads the management information file of the remote power management group and constructs or changes the settings of the remote power management group by transferring the settings to the host controller. It is used for initialization, addition, removal, and replacement of the devices whose powers are to be linked.
`-c disable`	Disables the remote power management function of all the set remote power management groups. It is used when starting maintenance of the devices whose powers are to be linked.
`-c enable`	Enables the remote power management functions of all the set remote power management groups. Used when maintenance of the devices whose powers are to be linked is completed.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

`-n`	Automatically responds to prompt with "n" (no).
`-t` *proxy_type*	Specifies the proxy type. It is used with the `-X` option. You can specify any of `http`, `socks4`, and `socks5`. The default is `http`.
`-u` *user*	Specifies your user name when logging in to remote FTP or HTTP server requiring authentication. The command will display a prompt for password entry.
`-v`	Displays detailed information. This option is used to diagnose network and server problems.
`-X` *proxy*	Specifies the proxy server to use for transfer. If `-t` *proxy_type* is not specified together, the default proxy type is http. *proxy* is specified in the format of *servername*:*port*.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

configuration_file Specifies the URL where the management information file of the remote power management group to use for setting exists.

The following types of format are supported.

`http://`*server*[:*port*]`/`*path*`/`*file*
`https://`*server*[:*port*]`/`*path*`/`*file*
`ftp://`*server*[:*port*]`/`*path*`/`*file*
`file:///media/usb_msd/`*path*`/`*file*

EXTENDED DESCRIPTION

- While `setremotepwrmgmt` is executed, do not execute `setremotepwrmgmt` for the same group ID.
- If the remote power management device (host node) to be added to the remote power management group is registered to another group, delete the management information by using `clearremotepwrmgmt`(8) in advance.
- To execute `-c config`, `-c enable`, and `-c disable` by `setremotepwrmgmt`, set a network of the IPv4 format for all remote power management devices in the target remote power management group and turn on the resident power.
- Set the format of the management information file to CSV. For details on the format of the management information file, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.
- It is necessary to create the management information file for each group. If one management information file has multiple group IDs, it causes an error.

- If the password to access the distribution destination of the information is not set in the management information file and the default user is not specified, it is required to enter the password when distributing the information of the remote power management group.
- In the first configuration of the remote power management group, execute `setremotepwrmgmt` in the following procedure.

1. Execute `setremotepwrmgmt -c config` and construct the remote power management group.
2. Execute `setremotepwrmgmt -c enable` and enable the remote power management function of the constructed remote power management group.

- To update a constructed remote power management group, execute `setremotepwrmgmt` in the following procedure.

1. Execute `setremotepwrmgmt -c disable` and disable the remote power management function of the constructed remote power management group to be updated.
2. Execute `setremotepwrmgmt -c config` and update the settings of the remote power management group.
3. Execute `setremotepwrmgmt -c enable` and enable the remote power management function of the updated remote power management group.

- If `-c config` is specified and the target remote power management group has been constructed and the remote power management function is `enable`, it causes an error.
- If `-c enable` or `-c disable` is specified and no remote power management group is constructed, it causes an error.
- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Construct the remote power management group 1 reading the management information file on the FTP server.

```
XSCF> setremotepwrmgmt -c config ftp://dataserver/data/rpmgroup.1.conf
Download successful: 29184Byte at 1016.857KB/s
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a1

The following Remote power management group setting will be applied:
GroupID :01
NodeID NodeType    NodeIdentName                    PowerLinkage           Operation
------ ----------- -------------------------------- ---------------------- -----------
001    Master HOST XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Enable(Power-On Link)  IPMI
002    PwrLinkBox  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Enable                 IPMI
003    Others      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Enable                 IPMI
------ ----------- -------------------------------- ---------------------- -----------

Continue? [y|n]: y
```

```
Enter password for user [xxx] on host [zz.zz.zz.zz]:
  :
The command completed successfully.
XSCF>
```

EXAMPLE 2 Construct the remote power management group 2 reading the management information file on the USB memory.

```
XSCF> setremotepwrmgmt -c config file:///media/usb_msd/path/rpmgroup.2.conf
Mounted USB device
Download successful: 29184Byte at 1016.857KB/s
Checking file...
MD5: e619e6dd367c888507427e58cdb8e0a1

The following Remote Power Management Group setting will be applied:
GroupID :02
NodeID NodeType    NodeIdentName                    PowerLinkage           Operation
------ ----------- -------------------------------- ---------------------- -----------
001    Master HOST XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Enable                 IPMI
002    I/O         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Enable                 IPMI
------ ----------- -------------------------------- ---------------------- -----------

Continue? [y|n]: y
Enter password for user [xxx] on host [xx.xx.xx.xx]:
Enter password for user [xxx] on host [yy.yy.yy.yy]:
Enter password for user [xxx] on host [zz.zz.zz.zz]:
  :
The command completed successfully.
XSCF>
```

EXAMPLE 3 Enable the remote power management function.

```
XSCF> setremotepwrmgmt -c enable
Remote power management is enabled. Continue? [y|n]: y
The command completed successfully.
XSCF>
```

EXAMPLE 4 Disable the remote power management function.

```
XSCF> setremotepwrmgmt -c disable
Remote power management is disabled. Continue? [y|n]: y
The command completed successfully.
XSCF>
```

EXAMPLE 5 In case the operation failed because IPMI service had been disabled.

```
XSCF> setremotepwrmgmt -c config ftp://dataserver/data/
rpmgroup.1.conf
IPMI service is disabled. Please enable IPMI service by the
"setpacketfilters".
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

clearremotepwrmgmt`(8)`, **getremotepwrmgmt**`(8)`, **setpacketfilters**`(8)`, **showremotepwrmgmt**`(8)`

NAME

setremotestorage - Manages connection to remote storage.

SYNOPSIS

setremotestorage `-c config` *interface address* [`-m addr`] [`-g addr`]

setremotestorage `-c clear` *interface*

setremotestorage [[`-q`] `-{y|n}`] `-c attach` *interface target*

setremotestorage [[`-q`] `-{y|n}`] `-c detach` *interface*

setremotestorage `-h`

DESCRIPTION

`setremotestorage` manages connection to a remote storage over XSCF-LAN.

Remote storage is usually used over XSCF Web.

`setremotestorage` configures the following, which can also be configured on XSCF Web.

- Connect to or disconnect from remote storage.
- Specify the network interface through which remote storage can be accessed over a slave XSCF.

The following operations should be performed on XSCF Web before connecting to or disconnecting from remote storage, using XSCF Web or the `setremotestorage` command.

1. Start"XSCF Remote Storage Server" which provides remote storage selection screen.
2. Select a PC drive or ISO file.
3. Start remote storage.

After performing the aforesaid operations on XSCF Web, connecting to or disconnecting from remote storage can be performed using either XSCF Web or the `setremotestorage` command.

Meanwhile, when connecting to a remote storage, only one of the XSCF-LAN network interface of master XSCF, standby XSCF or slave XSCF can be used.

Moreover, when connecting to remote storage over a slave XSCF, the XSCF-LAN network interface of the slave XSCF should be configured before starting the "XSCF Remote Storage Server" remote storage selection screen on XSCF Web.

For details on operations relating to remote storage on XSCF Web, refer to "4.6 Using the Remote Storage" of *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-c config` Configures slave XSCF network interface. For example, if remote storage is connected to chassis BB#02, specify `bb#02-lan#0` or `bb#02-lan#1` as the *interface*. The configured content is used only when connection is made to the remote storage. The "telnet" or "ssh" services cannot be used.

This option is not supported on SPARC M12-1/M12-2/M10-1/M10-4.

`-c clear` Deletes slave XSCF network interface configuration.

This option is not supported on SPARC M12-1/M12-2/M10-1/M10-4.

`-c attach` Connect to remote storage.

`-c detach` Disconnect from remote storage.

`-m addr` Configures the netmask of the *interface*. Specify four sets of integers from 0 to 255 placing periods (.) between them. The integer can be specified using zero suppression.

If this option is left out, the netmask value will be set up in the following way:

- If the specified IP address is Class A (e.g. 20.1.1.1)

  A netmask value of 255.0.0.0 is set.
- If the specified IP address is Class B (e.g. 136.18.1.1)

  A netmask value of 255.255.0.0 is set.
- If the specified IP address is Class C (e.g. 200.18.108.1)

  A netmask value of 255.255.255.0 is set.

`-g addr` Specifies a dedicated default gateway address for a remote storage. Specify four sets of integers from 0 to 255 placing periods (.) between them. The integer can be specified using zero suppression. If this option is left out, no dedicated gateway will be configured.

Do not specify the loopback address (127.0.0.0/8), the network address or the broadcast address as the default gateway address.

`-q` Prevents display of messages, including prompt, for standard output.

`-y` Automatically responds to prompt with "y" (yes).

`-n` Automatically responds to prompt with "n" (no).

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS The following operands are supported.

interface Specifies the network interface that is to be set up. Any of the following can be specified:

- For SPARC M12-2S/M10-4S (with crossbar box)

```
bb#00-lan#0    : BB#00-LAN#0
bb#00-lan#1    : BB#00-LAN#1
bb#01-lan#0    : BB#01-LAN#0
bb#01-lan#1    : BB#01-LAN#1
 ...
bb#14-lan#0    : BB#14-LAN#0
bb#14-lan#1    : BB#14-LAN#1
bb#15-lan#0    : BB#15-LAN#0
bb#15-lan#1    : BB#15-LAN#1
```

- For SPARC M12-2S/M10-4S (without crossbar box)

```
bb#00-lan#0    : BB#00-LAN#0
bb#00-lan#1    : BB#00-LAN#1
bb#01-lan#0    : BB#01-LAN#0
bb#01-lan#1    : BB#01-LAN#1
bb#02-lan#0    : BB#02-LAN#0
bb#02-lan#1    : BB#02-LAN#1
bb#03-lan#0    : BB#03-LAN#0
bb#03-lan#1    : BB#03-LAN#1
```

  However, in case of the `-c config` or `-c clear` option, *interface* cannot be specified for bb#00 and bb#01.

- For SPARC M12-1/M12-2/M10-1/M10-4

```
bb#00-lan#0    : BB#00-LAN#0
bb#00-lan#1    : BB#00-LAN#1
```

address Specifies slave XSCF network interface IP address. Specify four sets of integers from 0 to 255 placing periods (.) between them. The integer can be specified using zero suppression.

However, class D or class E addresses (from 224.0.0.0 to 255.255.255.255) cannot be specified here.

target — Specifies the IP address or host name of remote storage. Specifies the IP address or host name of the PC on which "XSCF Remote Storage Server" has been started on XSCF Web.

In case of IP address, specify four sets of integers from 0 to 255 placing periods (.) between them. The integer can be specified using zero suppression.

The host name must be resolvable by DNS servers.

EXTENDED DESCRIPTION

- Configuring the loopback address (127.0.0.0/8), network address or broadcast address as the IP address of slave XSCF network interface, will result in the display of a rule violation message.
- The following configuration of slave XSCF network interface will result in error:
  - In case the configured IP address of slave XSCF network interface is a duplicate of the IP address of the XSCF network interface of the master XSCF, standby XSCF or another slave XSCF, or a takeover IP address or an SSCP link address.
  - In case the configured IP address of slave XSCF network interface is in the same subnet as that of the SSCP link address of the slave XSCF.
- If the netmask value specified by `-m addr` does not match either of the following, it causes an error.
  - Only the most significant bit is 1.
  - 1 is placed in a row from the most significant bit.
- The maximum number of remote storages that can be connected concurrently to a single SPARC M12/M10 chassis is only one. Moreover, if already connected to a remote storage, the `-c config`, `-c clear` and `-c attach` options cannot be executed in respect to the connected network interface. If you want to execute these options, first disconnect the remote storage.
- Remote storage configurations change simultaneously with the execution of `setremotestorage`. Meanwhile, if XSCF has been rebooted, the configuration information of slave XSCF network interface will be retained but the connection to the remote storage will be cutoff.

EXAMPLES

EXAMPLE 1 Set up the BB#02-LAN#00 network interface.

```
XSCF> setremotestorage -c config bb#02-lan#0 10.26.147.222 -m
255.255.255.0 -g 10.26.147.1
```

EXAMPLE 2 Set up the BB#00-LAN#0 (master XSCF) network information on SPARC M10-4S (without crossbar box).

```
XSCF> setremotestorage -c config bb#00-lan#0 10.26.147.220
Can not set network for Master or Standby BB.
```

EXAMPLE 3 Connect to remote storage by specifying the master XSCF.

```
XSCF> setremotestorage -c attach bb#00-lan#0 10.20.43.26
Remote Storage Server will be attached. Continue? [y|n] :y
```

EXAMPLE 4 Connect to remote storage by specifying an unconfigured building block of network interface. The confirmation message will be automatically answered as "y".

```
XSCF> setremotestorage -c attach bb#03-lan#0 remote-
server.example.com -y
Remote Storage Server will be attached. Continue? [y|n] :y
bb#03-lan#0 has not been configured for connection.
Please check the network settings.
```

EXAMPLE 5 Disconnect from remote storage by specifying the network interface that is connected to the remote storage.

```
XSCF> setremotestorage -c detach bb#02-lan#0
Remote Storage Server will be detached. Continue? [y|n] :y
```

EXAMPLE 6 Disconnect from remote storage by specifying a network interface that is not connected to the remote storage. The confirmation message will be automatically answered as "y".

```
XSCF> setremotestorage -c detach bb#03-lan#0 -y
Remote Storage Server will be detached. Continue? [y|n] :y
```

EXAMPLE 7 Delete the setup information of the network interface for remote storage on BB#04-LAN#1.

```
XSCF> setremotestorage -c clear bb#04-lan#1
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

applynetwork(8), **showremotestorage**(8)

NAME

setroute - Sets the routing information of the XSCF network interface.

SYNOPSIS

setroute -c {add | del} -n *address* [-m *address*] [-g *address*] *interface*

setroute -h

DESCRIPTION

setroute is a command to set the routing information of the XSCF network interface.

Up to eight sets of the routing information can be registered per network interface. If the number exceeds eight, it causes an error.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c {add|del} Specifies the function for the routing information. You can specify either of the following. Omitting this causes an error.

add	Adds the routing information.
del	Deletes the routing information.

-g *address* Specifies the gateway address used for routing. *address* is specified in standard format using four sets of integers separated by periods (.). For example, for *xxx.xxx.xxx.xxx*, an integer from 0 to 255 is specified for each *xxx*. This can be specified using zero suppression.

You cannot specify a loop-back address (127.0.0.0/8), network address, or broadcast address.

-h Displays the usage. Specifying this option with another option or operand causes an error.

-m *address*

Specifies the netmask to be the destination of the routing information. *address* is specified in standard format using four sets of integers separated by periods (.). For example, for *xxx*.*xxx*.*xxx*.*xxx*, an integer from 0 to 255 is specified for each *xxx*. This can be specified using zero suppression. If the netmask is specified, the network applying the netmask to the address specified by -n is set as the target of routing.

If -m option is omitted or 0.0.0.0 is specified for the netmask when the destination IP address is other than 0.0.0.0, the following netmasks are set depending on the address specified by the -n option.

- If the specified address is Class A

  If the host part of the address (lower 24 bits) is 0 (Example: 20.0.0.0)

  A netmask value of 255.0.0.0 is set.

  If the host part of the address (lower 24 bits) is other than 0 (Example: 20.18.108.10)

  A netmask value of 255.255.255.255 is set.

- If the specified address is Class B

  If the host part of the address (lower 16 bits) is 0 (Example: 136.18.0.0)

  A netmask value of 255.255.0.0 is set.

  If the host part of the address (lower 16 bits) is other than 0 (Example: 136.18.108.10)

  A netmask value of 255.255.255.255 is set.

- If the specified address is Class C

  If the host part of the address (lower 8 bits) is 0 (Example: 200.18.108.0)

  A netmask value of 255.255.255.0 is set.

  If the host part of the address (lower 8 bits) is other than 0 (Example: 200.18.108.10)

  A netmask value of 255.255.255.255 is set.

If 0.0.0.0 is specified by the -n option, specify 0.0.0.0 for the -m option or omit the -m option.

`-n` *address*

Specifies the IP address to be the destination of the routing information. *address* is specified in standard format using four sets of integers separated by periods (`.`). For example, for *xxx.xxx.xxx.xxx*, an integer from 0 to 255 is specified for each *xxx*. This can be specified using zero suppression.

If 0.0.0.0 is specified in *address*, the default routing information is set. However, Class D and E address (224.0.0.0 to 255.255.255.255) cannot be specified.

OPERANDS

The following operands are supported.

interface

Specifies the network interface to be set. You can specify any of the following.

- For SPARC M12-2S/M10-4S (with crossbar box)

`xbbox#80-lan#0`	XBBOX#80-LAN#0
`xbbox#80-lan#1`	XBBOX#80-LAN#1
`xbbox#81-lan#0`	XBBOX#81-LAN#0
`xbbox#81-lan#1`	XBBOX#81-LAN#1

- For SPARC M12-2S/M10-4S (without crossbar box)

`bb#00-lan#0`	BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1
`bb#01-lan#0`	BB#01-LAN#0
`bb#01-lan#1`	BB#01-LAN#1

- For SPARC M12-1/M12-2/M10-1/M10-4

`bb#00-lan#0`	BB#00-LAN#0
`lan#0`	Abbreviated form of bb#00-lan#0
`bb#01-lan#0`	BB#00-LAN#1
`lan#1`	Abbreviated form of bb#00-lan#1

EXTENDED DESCRIPTION

- In the following cases, `setroute` causes an error.
  - Case that more than 8 routings are to be set
  - Case that the netmask specified by -m *addr* does not correspond to any of the following
    - Only the most significant bit is 1.
    - 1 from the most significant bit is repeated.
    - All bits are 0.
  - Case that the routing information is set in the take-over IP (`lan#0` or `lan#1`) for other than SPARC M12-1/M12-2/M10-1/M10-4
- Only the routing information added by `setroute` can be deleted.

- If the gateway addresses of the routing information have any addresses not included in each XSCF-LAN network, executing `applynetwork`(8) causes an error.
- If the subnets of the IP address to be the destination of the routing information and subnet of the SSCP link are overlapping, executing `applynetwork`(8) causes an error.
- To reflect the set routing information in XSCF, execute `applynetwork`(8). Reflect it in XSCF by `applynetwork`(8), use `rebootxscf`(8) to reboot XSCF and then setting is completed.
- You can confirm the routing information of the XSCF network interface set currently by using `showroute`(8).

EXAMPLES

EXAMPLE 1 Add the routing with the destination and netmask set to 192.168.1.0 and 255.255.255.0, respectively, to XBBOX#80-LAN#0.

```
XSCF> setroute -c add -n 192.168.1.0 -m 255.255.255.0 xbbox#80-
lan#0
```

EXAMPLE 2 Add the routing with the destination and netmask set to 192.168.1.0 and 255.255.255.0, respectively, to BB#00-LAN#0 of SPARC M12-1/M12-2/M10-1/M10-4.

```
XSCF> setroute -c add -n 192.168.1.0 -m 255.255.255.0 lan#0
```

EXAMPLE 3 Add the routing with the destination and gateway set to 192.168.1.0 and 192.168.1.1, respectively, to XBBOX #80-LAN#1.

```
XSCF> setroute -c add -n 192.168.1.0 -g 192.168.1.1 xbbox#80-lan#1
```

EXAMPLE 4 Add the routing with the destination set to 192.168.1.0 and the default netmask (255.255.255.0) to XBBOX #80-LAN#1.

```
XSCF> setroute -c add -n 192.168.1.0 -m 255.255.255.0 xbbox#80-
lan#1
```

EXAMPLE 5 Delete the routing with the destination set to 192.168.1.0 and the default netmask (255.255.255.0) to XBBOX #80-LAN#1.

```
XSCF> setroute -c del -n 192.168.1.0 -m 255.255.255.0 xbbox#80-
lan#1
```

EXAMPLE 6 Add the routing with the destination set to 192.168.1.4 to BB#00-LAN#1.

```
XSCF> setroute -c add -n 192.168.1.4 bb#00-lan#1
```

EXAMPLE 7 Delete the routing with the destination set to 192.168.1.4 to BB#00-LAN#1.

```
XSCF> setroute -c del -n 192.168.1.4 bb#00-lan#1
```

EXAMPLE 8 Add the routing with the gateway set to 192.168.10.1 by default to BB#00-LAN#1.

```
XSCF> setroute -c add -n 0.0.0.0 -g 192.168.10.1 bb#00-lan#1
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

applynetwork(8), **rebootxscf**(8), **setsscp**(8), **showroute**(8)

NAME

setservicetag - Enables or disables the servicetag agents.

SYNOPSIS

setservicetag `-c {enable | disable} [-v]`

setservicetag `-h`

DESCRIPTION

`setservicetag` is a command to enable or disable the servicetag agents. The new settings take effect after the XSCF is rebooted by using `rebootxscf`(8). Servicetags provide information -- platform, type, chassis serial number, etc, on platforms that support it.

Privileges

To execute this command, `platadm` privilege is required.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following options are supported:

`-c enable`	Enables the servicetag agents.
`-c disable`	Disables the servicetag agents.
`-h`	Displays usage statement. When used with other options or operands, an error occurs.
`-v`	Specifies verbose output.

EXAMPLES

EXAMPLE 1 Enabling the servicetag agents.

```
XSCF> setservicetag -c enable
Settings will take effect the next time the XSCF is rebooted.
```

EXAMPLE 2 Disabling the servicetag agents.

```
XSCF> setservicetag -c disable
Settings will take effect the next time the XSCF is rebooted.
```

EXIT STATUS

The following exit values are returned:

`0`	Successful completion.
`>0`	An error occurred.

SEE ALSO

showservicetag`(8)`

NAME

setsmtp - Sets the Simple Mail Transfer Protocol (SMTP) service.

SYNOPSIS

setsmtp [`-v`]

setsmtp [`-s` *variable*= *value*]...

setsmtp `-h`

DESCRIPTION

`setsmtp` is a command to set the SMTP service.

If this is used without specifying any options, it is required to enter the SMTP e-mail server name to be used, port name to be used for e-mail for transmission, and Reply-To address. Confirm that the e-mail address specified here is valid. If the `-s` option is specified, you can set up the SMTP setting value non-interactively.

Setting the e-mail server and port by using `setsmtp` enables transmission of test mail setting e-mail report by `setemailreport`(8).

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

-s *variable=value* Sets SMTP. You can specify either of the following for *variable*.

`mailserver`
Specifies the IP address or server name. If a server name is specified, it is necessary to enable name-resolution.

`port`
Specifies the port address for reply.

`auth`
Specifies the authentication method. The valid values are below.
`none`, `pop`, `smtp-auth`

`user`
Specifies the user name to be the authentication information for the SMP mail server.

`password`
Specifies the password to be the authentication information for the SMP mail server.

`replyaddress`
Specifies the only one address for reply. For the e-mail addresses that are used with the `setsmtp`, see EXTENDED DESCRIPTION.

`popserver`
Specifies an IP address or a server name for the popserver. Server name, if specified, must be resolvable.

-v Displays detailed information.

EXTENDED DESCRIPTION

- You can confirm the information of SMTP set currently by using `showsmtp`(8).
- The e-mail addresses that are used with the `setsmtp` should be in the following format, which is based on "3.4.1. Addr-Spec Specification" of RFC5322.
  - The local-part and the domain should be combined by the "@" character in this format: local-part@domain, the local-part should not contain more than 64 characters, the domain should not contain more than 255 characters and the mail address as a whole should not contain more than 256 characters
  - The following character strings can be used in the local-part:

    - abcdefghijklmnopqrstuvwxyz
    - ABCDEFGHIJKLMNOPQRSTUVWXYZ
    - 0123456789
    - !#$%&'*+-/=?^_`{|}~.

The dot (.) cannot be used as the first or last character of the local-part. Moreover, two or more of this character cannot be used consecutively.

- The domain should be specified as a combination of its constituent labels, added by a dot (.), in this format: label1.label2.

  The dot (.) cannot be used as the first or last character of the domain part. Moreover, two or more of this character cannot be used consecutively.

- The labels, which are part of domains, may contain the following characters:

  - abcdefghijklmnopqrstuvwxyz

  - ABCDEFGHIJKLMNOPQRSTUVWXYZ

  - 0123456789

  - .-

  The hyphen (-) cannot be used as the first character of a label.

- Only one address for reply can be specified. The multiple addresses cannot be specified.

Note – Depending on the mail server, the above symbols may not be used.

Note – The following formats as defined in RFC5322 are not supported:
3.2.1. quoted-pairs, as defined in "Quoted Characters".
3.2.2. CFWS, FWS, comment, as defined in "Folding White Space and Comments".
3.2.4. quoted-strings, as defined in "Quoted Strings".
3.4.1. domain-literal, as defined in "Addr-Spec Specification".
4. The obsolete formats described in "Obsolete Syntax".

EXAMPLES

EXAMPLE 1 Set up the mail server without specifying the authentication method in the non-interactive mode.

```
XSCF> setsmtp -s mailserver=10.4.1.1 -s auth=none
```

EXAMPLE 2 Set up with POP authentication specified as the authentication method in non-interactive mode.

```
XSCF> setsmtp -s auth=pop -s user=jsmith -s password=******
```

EXAMPLE 3 Set up with SMTP authentication (SMTP-auth) specified as the authentication method and 587 specified as the port address for reply in interactive mode.

```
XSCF> setsmtp
Mail Server [10.4.1.1]:
Port [25]: 587
Authentication Mechanism [none]: smtp-auth
 User Name []: jsmith
 Password []: ******
Reply Address [useradm@company.com]:
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setemailreport(8), **setnameserver**(8), **showsmtp**(8)

NAME

setsnmp - Manages the SNMP agent.

SYNOPSIS

setsnmp `enable` [*mib_name*]

setsnmp `disable` [*mib_name*]

setsnmp `addtraphost -t` type `-s` *community-string* [`-p` *trap-port*] *traphost*

setsnmp `remtraphost -t` type [`-s` *community-string*] [`-p` *trap-port*] *traphost*

setsnmp `addv3traphost -u` *username* `-r` *authentication-protocol* {`-n` *engine_id* | `-i`} [`-x` *encryption-protocol*] [`-a` *authentication-password*] [`-e` *encryption-password*] [`-p` *trap-port*] *traphost*

setsnmp `remv3traphost -u` *username* [`-p` *trap-port*] *traphost*

setsnmp `enablev1v2c` *read-only-community-string*

setsnmp `disablev1v2c`

setsnmp [`-l` *system-location*] [`-c` *system-contact*] [`-d` *system-description*] [`-p` *agent-port*]

setsnmp `default`

setsnmp `-h`

DESCRIPTION

`setsnmp` is a command to not only define the setting value of the SNMP agent but also enable or disable the SNMP agent.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

-c *system-contact*	Specifies the contact of the system of the agent.
-d *system-description*	Specifies the explanation of the system of the agent.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
-l *system-location*	Specifies the location of the system of the agent.
-p *agent-port*	Specifies the listen port of the agent. The default is `161`.
`-s` *community-string*	Works much like the password controlling access to the SNMP v1 and v2 agents. It is an interceptable plane text character string. `addv3traphost` is used to encrypt and hide the password.

OPERANDS The following operands are supported.

`addtraphost` Enables transmission of the selected type of trap from the SNMP agent to the target host. If *trap-port* is not specified, the default is `162`. Community string is required.

`addtraphost` has the following options and operands.

-p *trap-port*
Specifies the ID of trap port. The default is `162`.

-s *community-string*
Works much like the password controlling access to the SNMP v1 and v2 agents. It is an interceptable plane text character string. `addv3traphost` is used to encrypt and hide the password.

-t *type*
Specifies the type of trap. The valid types of trap are below.

- `v1` = The agent sends the SNMPv1 trap.
- `v2` = The agent sends the SNMPv2 trap.
- `inform` = The agent sends information notification.

traphost Specifies the traphost name or the IP address.

`addv3traphost` Enables the transmission or notification of the SNMPv3 trap from the SNMP agent to the target host. It is necessary to select the authentication protocol. The valid protocols are below.

`MD5` = Uses the Message Digest 5 (MD5) algorithm for authentication.

`SHA` = Uses Secure Hash Algorithm (SHA) for authentication.

The encryption protocol is to be selected. The valid protocols are as follows. If none of these protocols are specified, the Data Encryption Standard (DES) protocol is used.

`DES` = Use Data Encryption Standard (DES) for encryption.

`AES`= Use Advanced Encryption Standard (AES) for encryption.

If no password option is used, it is required to enter the password. The password is read but not echoed to the screen. `addv3traphost` has the following options and operands.

`-a` *authentication-password*
Sets the authentication password. It needs to have eight or more characters.

`-e` *encryption-password*
Sets the encryption password. It needs to have eight or more characters.

`-i`
Requests the receiving host for acknowledgment.

`-n` *engine_id*
Sets the ID of the local agent to send trap. You can specify the engine ID of the local SNMP agent, but even if not specified, this needs to match the engine ID expected by the receiving host. It needs to begin with "0x" and be composed of an even number of hex characters. If not, it causes an error.

`-p` *trap-port*
Specifies the ID of trap port. The default is `162`.

`-r` *authentication-protocol*
Sets the authentication protocol.

`-u` *username*
Specifies the user name.

`-x` *encryption-protocol*
Specifies the encryption protocol.

traphost
Specifies the traphost name or the IP address.

`default` Shuts down the SNMP agent and restores the settings of SNMP to the default. After using this operand, it is necessary to reconfigure SNMP before restarting the SNMP agent.

`disable` Shuts down the SNMP agent, if used alone.

If it is used with the value `ALL` of *mib_name* of the option, the SNMP agent is shut down.

If it is used with other than the value `ALL` of *mib_name* of the option, the support for the target MIB module is deleted. If the support for another MIB module is maintained, the SNMP agent remains enabled. If the supports for both MIB modules are deleted, the SNMP agent is disabled and shut down. Just one *mib_name* can be specified at a time.

mib_name
This is the name of the MIB module to be disabled. The valid MIB modules are below.

- `SP_MIB` = XSCF extension MIB
- `ALL` = All MIB modules in this list

`disablev1v2c` Disables the communication of the SNMP agent using SNMPv1 or SNMPv2c. SNMP communication using these versions are not secure.

`enable` To use it alone, enable the SNMP agent to support all MIB modules.

If it is used with the value `ALL` of *mib_name* of the option, the SNMP agent supporting all MIB modules is activated.

If it is used with other than the value `ALL` of *mib_name* of the option, the support for the target MIB module is added and the SNMP agent is enabled, if necessary. Just one *mib_name* can be specified at a time.

mib_name
This is the name of the MIB module to be enabled. The MIB modules which can be specified are below.

- `SP_MIB` = XSCF extension MIB
- `ALL` = All MIB modules in this list

`enablev1v2c` Enables the communication of the SNMP agent using SNMPv1 or SNMPv2c. SNMP communication using these versions are not secure. Therefore, the agent executes SNMPv3 by default. This agent is read only. The only community string requested is read only.

`remtraphost` Disables transmission of the selected type of trap from the SNMP agent to the target host. `remtraphost` has the following options and operands.

`-p` *trap-port*
Specify the trap port ID. If omitted, it is considered as if all the trap ports have been specified.

`-s` *community-string*
Specify the community string. If omitted, it is considered as if all the community strings have been specified.

`-t` *type*
Specifies the type of trap. The valid types of trap are below.

- `v1` = The agent sends the SNMPv1 trap.
- `v2` = The agent sends the SNMPv2 trap.
- `inform` = The agent sends information notification.

traphost
Specifies the traphost name or the IP address.

`remv3traphost` Disables the transmission of the SNMPv3 trap from the SNMP agent to the target host. `remv3traphost` has the following options and operands.

`-u` *username*
Specifies the user name.

`-p` *trap-port*
Specify the trap port ID. If omitted, it is considered as if all the trap ports have been specified.

traphost
Specifies the traphost name or the IP address.

EXTENDED DESCRIPTION

- More trap hosts cannot be registered when the total number of characters in the entries, which are registered by executing the following three commands, exceed 8000.
  - Registered trap hosts by `setsnmp`(8)
  - Registered users by `setsnmpusm`(8)
  - Registered groups, views and accesses by `setsnmpvacm`(8)
- The present SNMP agent setting information can be confirmed by `showsnmp`(8), `showsnmpusm`(8) and `showsnmpvacm`(8).
- A community string can contain a maximum of 64 characters. Moreover, the following characters can be used in a community string.
  - `abcdefghijklmnopqrstuvwxyz`

- ABCDEFGHIJKLMNOPQRSTUVWXYZ
- 0123456789
- !"#$%&'()=-~^|\@`[;+:*}],<.>/_{?

EXAMPLES

EXAMPLE 1 Set the system information.

```
XSCF> setsnmp -l sandiego -c username@company.com -d ff1
```

EXAMPLE 2 Set the SNMPv3 trap host using the password option.

```
XSCF> setsnmp addv3traphost -u jsmith -n 0x### -r SHA -a xxxxxxxx
-e yyyyyyyy fiche
```

EXAMPLE 3 Set the SNMPv3 trap host without the password option.

```
XSCF> setsnmp addv3traphost -u bob -i -r SHA fiche
Enter the trap authentication passphrase:
Enter the trap encryption passphrase:
```

EXAMPLE 4 Enable the SNMP agent.

```
XSCF> setsnmp enable SP_MIB
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showsnmp(8)

NAME

setsnmpusm - Sets the User-based Security Model (USM) of the SNMPv3 agent.

SYNOPSIS

setsnmpusm `create -a` *authentication_protocol* [`-x` *encryption-protocol*] [`-p` *authentication_password*] [`-e` *encyrption_password*] *user*

setsnmpusm `delete` *user*

setsnmpusm `clone -u` clone_*user* *user*

setsnmpusm `passwd` [`-c {auth|encrypt}`] [`-o` *old_password*] [`-n` *new_password*] *user*

setsnmpusm `-h`

DESCRIPTION

`setsnmpusm` is a command to set the USM of the SNMP agent.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

`clone` The specified user comes to be recognized by the agent with the same settings as the specified *clone_user* in the subsequent SNMP communication.

`-u` *clone_user* Specifies the user name to create clone.

user Specifies another user name to create a clone of *clone_user*.

`create` Creates the user to be recognized by the agent with the specified settings in the subsequent SNMP communication. If it is used without specifying the `-e` option or `-p` option, the prompt to require the password is displayed and the password is read, but it is not echoed to the screen. In the `setsnmpusm`, either Advanced Data Encryption (AES) or Data Encryption Standard (DES) can be used as encryption protocols to be used in SNMP connections. When none of these protocols are specified, DES is used by default. Moreover, either Message Digest 5 (MD5) algorithm or Secure Hash Algorithm (SHA) can be used as authentication protocols in such connections.

user

Specifies the user name.

`-a` *authentication_protocol*

Specifies the authentication protocol. You can specify either of `MD5` or `SHA`.

`-e` *encryption_password*

Specifies the encryption password. Specify `8` or more characters.

`-p` *authentication_password*

Specifies the authentication password. Specify `8` or more characters.

`-x` *encryption_protocol*

Setup the encryption protocol. Either `DES` or `AES` can be specified. When none is specified, `DES` is used.

`delete` Makes the specified user unrecognized by the agent in the subsequent SNMP communication.

user Specifies the user name.

`passwd` Changes the password of the specified user. Either authentication password or encryption password can be changed. If the -c option is not specified, both are applicable. If the -c option is not specified, the authentication password needs to match the encryption password. If not, it causes an error. If no option is specified, the prompt to require the password is displayed. The password is read but not displayed on the screen.

`-c auth|encrypt`
Specifies the password to be changed. For the authentication password and encryption password, specify `auth` and `encrypt`, respectively.

`-n` *new_password*
Specifies a new password. Specify `8` or more characters.

`-o` *old_password*
Specifies an old password.

user
Specifies the user name.

EXTENDED DESCRIPTION

More users cannot be registered when the total number of characters in the entries, which are registered by executing the following three commands, exceed 8000.

- Registered trap hosts by `setsnmp`(8)
- Registered users by `setsnmpusm`(8)
- Registered groups, views and accesses by `setsnmpvacm`(8)

The present SNMP agent setting information can be confirmed by `showsnmp`(8), `showsnmpusm`(8) and `showsnmpvacm`(8).

EXAMPLES

EXAMPLE 1 Add a user specifying the password.

```
XSCF> setsnmpusm create -a SHA -p xxxxxxxx -e yyyyyyyy jsmith
```

EXAMPLE 2 Add a user without specifying the password.

```
XSCF> setsnmpusm create -a SHA bob
Enter the user authentication passphrase:
Enter the user encryption passphrase:
```

EXAMPLE 3 Create a clone of the user.

```
XSCF> setsnmpusm clone -u sue joe
```

EXAMPLE 4 Delete a user.

```
XSCF> setsnmpusm delete joe
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showsnmpusm(8)

NAME

setsnmpvacm - Sets the View-based Access Control Model (VACM) settings of the SNMPv3 agent.

SYNOPSIS

setsnmpvacm `creategroup -u` *username groupname*

setsnmpvacm `deletegroup -u` *username groupname*

setsnmpvacm `createview -s` *OID_subtree* [`-e`] [`-m` *OID_Mask*] *viewname*

setsnmpvacm `deleteview -s` *OID_subtree viewname*

setsnmpvacm `createaccess -r` *read_viewname groupname*

setsnmpvacm `deleteaccess` *groupname*

setsnmpvacm `-h`

DESCRIPTION

`setsnmpvacm` is a command to set the VACM of the SNMP agent.

To execute this command, the basic knowledge of SNMP is required.

Privileges

To execute this command, `platadm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

`createaccess` Sets access to the MIB view of the specified group.

- `-r` *read_viewname* — Specifies the SNMP agent view.
- *groupname* — Specifies a valid group name.

`creategroup` Sets up the view access of the group of the specified user.

- `-u` *username* — Specifies a valid user name.
- *groupname* — Specifies a valid group name.

`createview`	Sets up the view of the exported MIB information regarding the SNMP agent. The view access to this agent is read only. The view is identified by the MIB OID subtree and you can limit a specific part of the subtree using the OID mask.	
	`-e`	Specifies the view to be excluded. The default is the view to be included.
	`-m` *OID_Mask*	Specifies a valid OID subtree mask. By default, the mask is `ff` (entire subtree).
	`-s` *OID_subtree*	Specifies the MIB OID subtree. In the entire MIB tree, the value begins with `.1`.
	viewname	Specifies a valid view name.
`deleteaccess`	Deletes the access entry.	
	groupname	Specifies a valid group name.
`deletegroup`	Deletes a group.	
	`-u` *username*	Specifies a valid user name.
	groupname	Specifies a valid group name.
`deleteview`	Deletes a view.	
	`-s` *OID_subtree*	Specifies the MIB OID subtree. In the entire MIB tree, the value begins with `.1`.
	viewname	Specifies a valid view name.

EXTENDED DESCRIPTION

More groups, views or accesses cannot be registered when the total number of characters in the entries, which are registered by executing the following three commands, exceed 8000.

- Registered trap hosts by `setsnmp`(8)
- Registered users by `setsnmpusm`(8)
- Registered groups, views and accesses by `setsnmpvacm`(8)

The present SNMP agent setting information can be confirmed by `showsnmp`(8), `showsnmpusm`(8) and `showsnmpvacm`(8).

EXAMPLES

EXAMPLE 1 Create a group of view access.

```
XSCF> setsnmpvacm creategroup -u jsmith admin
```

EXAMPLE 2 Create a view of the entire MIB.

```
XSCF> setsnmpvacm createview -s .1 all_view
```

EXAMPLE 3 Create a view excluding the subtree.

```
XSCF> setsnmpvacm createview -e -s .1.3.6.1.2.1.1 -m fe excl_view
```

EXAMPLE 4 Create access to the MIB view.

```
XSCF> setsnmpvacm createaccess -r all admin
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showsnmpvacm(8)

NAME

setsscp - Assigns the IP address of the SP to SP communication protocol (SSCP).

SYNOPSIS

setsscp

setsscp [`-x` *xbbox_num*] [`-n` *bb_num*] `-i` *address* [[`-m` *netmask*] `-N` *network_id*]

setsscp `-b` *bb_id* `-i` *address* `-N` *network_id*

setsscp `-c default`

setsscp `-r -b` *bb_id* [`-N` *network_id*]

setsscp `-h`

DESCRIPTION

`setsscp` is a command to assign an IP address to an SSCP link.

`setsscp` is designed to be used only for the purpose of the initial setting. When executing this command, do not turn on the power of the physical partition (PPAR).

For SPARC M12-2S/M10-4S (without crossbar boxes), there are three networks of SSCP links as shown in the following.

- Network between BB#00 and each SPARC M12-2S/M10-4S chassis (Network ID 0)
- Network between BB#01 and each SPARC M12-2S/M10-4S chassis (Network ID 1)
- Network between BB#00 and BB#01 (Network ID 2)

For SPARC M12-2S/M10-4S (with crossbar boxes), there are five networks as shown in the following.

- Network between XBBOX#80 and each SPARC M12-2S/M10-4S chassis (Network ID 0)
- Network between XBBOX#81 and each SPARC M12-2S/M10-4S chassis (Network ID 1)
- Network between XBBOX#80 and each crossbar box (Network ID 2)
- Network between XBBOX#81 and each crossbar box (Network ID 3)
- Network between XBBOX#80 and XBBOX#81 (Network ID 4)

Note – To use the specified IP address after changing the IP address of SSCP after using `setsscp`, it is necessary to execute `applynetwork`(8) and `rebootxscf`(8). For other than SPARC M12-1/M12-2/M10-1/M10-4, it is also necessary to set the IP address of the SSCP link for the crossbar box or SPARC M12-2S/M10-4S composing the system.

`setsscp` cannot be used for SPARC M12-1/M12-2/M10-1/M10-4.

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-b` *bb_id*
: Specifies the target BB-ID. For SPARC M12-2S/M10-4S (without crossbar boxes), you can specify an integer from 0 to 3. For SPARC M12-2S/M10-4S (with crossbar boxes), you can specify an integer from 0 to 15 as SPARC M12-2S/M10-4S, and 80 to 83 as crossbar box, respectively. It is specified by combination of the `-i` *address* and `-N` options or with the `-r` option.

`-c` *default*
: Restores the entire SSCP links to the default.

`-h`
: Displays the usage. Specifying this option with another option or operand causes an error.

`-i` *address*
: Specifies the IP address by dotted decimal notation of IPv4. Specifies four sets of integers from 0 to 255 placing periods (.) between them. However, Class D and E address (224.0.0.0 to 255.255.255.255) cannot be specified. The integer can be specified using zero suppression.

  - To specify this with the `-m` *netmask*, specify the network addresses of all SSCP links in the system.

    To specify this with `-b` *bb_id*, specify the IP addresses unique to individual SPARC M12-2S/M10-4S or crossbar boxes in each network used in SSCP.

`-m` *netmask*

Specifies the netmask addresses of all SSCP links in the system. It is specified with the `-i` *address* and `-N` options.

Specifies four sets of integers from 0 to 255 for netmask placing periods (.) between them. The integer can be specified using zero suppression.

If omitted, the following netmasks are set.

- For SPARC M12-2S/M10-4S (without crossbar box)
  - If the network ID specified by `-N` is 0 or 1

    A netmask value of 255.255.255.248 is set.
  - If the network ID specified by `-N` is 2

    A netmask value of 255.255.255.252 is set.
- For SPARC M12-2S/M10-4S (with crossbar box)
  - If the network ID specified by `-N` is 0 or 1

    A netmask value of 255.255.255.224 is set.
  - If the network ID specified by `-N` is 2 or 3

    A netmask value of 255.255.255.248 is set.
  - If the network ID specified by `-N` is 4

    A netmask value of 255.255.255.252 is set.

If `-N` is not specified, the specified netmask is automatically divided by the above-mentioned netmasks and assigned to each network in order.

`-n` *bb_num*

Specifies the number of SPARC M12-2S/M10-4S to be set. SPARC M12-2S/M10-4S (without crossbar box), you can specify a figure from 1 to 4. If not specified, the maximum value which can be specified is specified. For SPARC M12-2S/M10-4S (with crossbar box), you can specify a figure from 1 to 16. If not specified, 16 is specified.

`-N` *network_id*

Specifies the ID of the SSCP link network subject to setting. For *network_id*, specify a figure from 0 to 2 and 0 to 4 in the case of SPARC M12-2S/M10-4S (without crossbar box) and SPARC M12-2S/M10-4S (with crossbar box), respectively. If omitted, all networks are specified. If the `-b` option is specified without the `-r` option, it cannot be omitted.

`-r`

It is used with `-b` *bb_id*, and deletes the IP address of the specified SPARC M12-2S/M10-4S or crossbar box.

`-x` *xbbox_num* Specifies the number of crossbar boxes to be set. This cannot be specified for SPARC M12-2S/M10-4S (without crossbar box). For SPARC M12-2S/M10-4S (with crossbar box), you can specify 1, 2, or 4. If not specified, the maximum value which can be specified is specified.

EXTENDED DESCRIPTION

- If `setsscp` has never been executed, the default value is set as the IP address of the SSCP link. The default values are below.
  - For SPARC M12-2S/M10-4S (without crossbar box)

    - Network ID 0 (netmask: 255.255.255.248)

BB#00	169.254.1.1
BB#01	169.254.1.2
BB#02	169.254.1.3
BB#03	169.254.1.4

    - Network ID 1 (netmask: 255.255.255.248)

BB#00	169.254.1.9
BB#01	169.254.1.10
BB#02	169.254.1.11
BB#03	169.254.1.12

    - Network ID 2 (netmask: 255.255.255.252)

BB#00	169.254.1.17
BB#01	169.254.1.18

  - For SPARC M12-2S/M10-4S (with crossbar box)

    - Network ID 0 (netmask: 255.255.255.224)

XBBOX#80	169.254.1.1
BB#00	169.254.1.2
:	
BB#14	169.254.1.16
BB#15	169.254.1.17

- Network ID 1 (netmask: 255.255.255.224)

XBBOX#81	169.254.1.33
BB#00	169.254.1.34
:	
BB#14	169.254.1.48
BB#15	169.254.1.49

- Network ID 2 (netmask: 255.255.255.248)

XBBOX#80	169.254.1.65
XBBOX#81	169.254.1.66
XBBOX#82	169.254.1.67
XBBOX#83	169.254.1.68

- Network ID 3 (netmask: 255.255.255.248)

XBBOX#80	169.254.1.73
XBBOX#81	169.254.1.74
XBBOX#82	169.254.1.75
XBBOX#83	169.254.1.76

- Network ID 4 (netmask: 255.255.255.252)

XBBOX#80	169.254.1.81
XBBOX#81	169.254.1.82

- Executing `setsscp` with nothing specified starts the interactive mode and displays the prompt to enter the IP addresses of SSCPs in order.
- If SSCP has been set in the past, the current setting is displayed. If the displayed setting is appropriate, you can use it by pressing `[Enter]` key.
- The network address to be used for all SSCP links can be set by using the `-i` *address* and `-m` *netmask*. In this operation mode, the IP addresses used in each SSCP link unique to the crossbar box and SPARC M12-2S/M10-4S are automatically selected from the address range indicated by the network address. Assignment is performed in order from XBBOX#80. Collectively setting the

network addresses used for all SSCP links requires a netmask which can retain a host part equivalent to or larger than 255.255.255.224 and 255.255.255.128 for SPARC M12-2S/M10-4S (without and with crossbar boxes, respectively).

- For SPARC M12-2S/M10-4S (without crossbar box), up to 10 IP addresses in the following configuration are used as the address space of all SSCP link networks.

Network ID	Number of IPs required for the maximum configuration	Netmask required for the maximum configuration
0	4	255.255.255.248
1	4	255.255.255.248
2	2	255.255.255.252

For SPARC M12-2S/M10-4S (with crossbar box), up to 44 IP addresses in the following configuration are used.

Network ID	Number of IPs required for the maximum configuration	Netmask required for the maximum configuration
0	17	255.255.255.224
1	17	255.255.255.224
2	4	255.255.255.248
3	4	255.255.255.248
4	2	255.255.255.252

- To set the IP addresses of the links unique to individual crossbar boxes and SPARC M12-2S/M10-4S separately from all of the other SSCP address setting values, use the `-b` *bb_id*, `-N` *network_id*, and `-i` *address*.
- To change the setting value of netmask, it is necessary to execute the interactive mode or collective setting.
- If a value out of the range of network addresses set in advance is used for an SSCP link unique to a crossbar box or SPARC M12-2S/M10-4S, an error occurs.
- To add the crossbar boxes or SPARC M12-2S/M10-4S, it is necessary to assign the IP address of the SSCP link before executing `addfru`(8).
- If the assigned IP address overlaps with the IP address of another SSCP link, it causes an error of `applynetwork`(8).
- When deleting the IP address of the SSCP link of a crossbar box or SPARC M12-2S/M10-4S installed in the system, executing `applynetwork`(8) causes an error. `applynetwork`(8) determines whether the crossbar box or SPARC M12-2S/M10-4S to be deleted is included in the system.
- Setting a loopback address (127.0.0.0/8), broadcast address, or Class D or E address (224.0.0.0 to 255.255.255.25) in *address* causes an error.

- If the netmask value specified by `-m addr` does not match either of the following, it causes an error.
  - Only the most significant bit is 1.
  - 1 is placed in a row from the most significant bit.
- If the subnets of the SSCP network and another network overlap, the conditions in which executing `applynetwork`(8) causes an error are below.
  - Case that some of xbbox#80-lan#0, xbbox#80-lan#1, and the SSCP link have the same subnet
  - Case that some of xbbox#81-lan#0, xbbox#81-lan#1, and the SSCP link have the same subnet
  - Case that some of xbbox#80-lan#0, xbbox#81-lan#1, and the SSCP link have the same subnet
  - Case that some of xbbox#81-lan#0, xbbox#80-lan#1, and the SSCP link have the same subnet
  - Case that some of bb#00-lan#0, bb#00-lan#1, and the SSCP link have the same subnet
  - Case that some of bb#01-lan#0, bb#01-lan#1, and the SSCP link have the same subnet
  - Case that some of bb#00-lan#0, bb#01-lan#1, and the SSCP link have the same subnet
  - Case that some of bb#01-lan#0, bb#00-lan#1, and the SSCP link have the same subnet
- If the subnets of the IP address to be the destination of the routing information and subnet of the SSCP link are overlapping, executing `applynetwork`(8) causes an error.
- If the number of SPARC M12-2S/M10-4S or crossbar boxes under the maximum configuration quantity is set in the interactive mode, the IP addresses of the SPARC M12-2S/M10-4S or crossbar boxes not set, which have been set in the past, are deleted.
- If the number of SPARC M12-2S/M10-4S or crossbar boxes under the maximum configuration quantity is set by collective setting, the IP addresses of the SPARC M12-2S/M10-4S or crossbar boxes not set, which have been set in the past, are deleted.

  However, if the ID of the SSCP link network is also specified, only the IP addresses of the SPARC M12-2S/M10-4S or crossbar boxes of the corresponding SSCP link network, which have been set in the past, are deleted.
- When specifying `-N` *network_id*, `-b` *bb_id*, and `-n` *bb_num*, `-x` *xbbox_num* must be within the following range and otherwise it causes an error.

- For SPARC M12-2S/M10-4S (without crossbar box)

-N *network_id*	-b *bb_id* **range**	-n *bb_num* **range**	-x *xbbox_num* **range**
0	0 to 3	1 to 4	This cannot be specified.
1	0 to 3	1 to 4	This cannot be specified.
2	0 to 1	1 to 2	This cannot be specified.

- For SPARC M12-2S/M10-4S (with crossbar box)

-N *network_id*	-b *bb_id* **range**	-n *bb_num* **range**	-x *xbbox_num* **range**
0	0 to 15, 80	1 to 16	1
1	0 to 15, 81	1 to 16	1
2	80 to 83	This cannot be specified.	2,4
3	80 to 83	This cannot be specified.	2,4
4	80 to 81	This cannot be specified.	2

EXAMPLES

Note – The IP addresses shown in the following examples are samples. To specify the IP address of SSCP, specify an IP address not used on the Local Area Network (LAN). For details on the IP address of SSCP, see *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

EXAMPLE 1 Set the SSCP link using the interactive mode in a configuration composed of eight SPARC M10-4Ss.

```
XSCF> setsscp
How many XB-Box[4] > 2[Enter]
How many BB[16] > 8[Enter]
SSCP network ID:0 address [169.254.1.0    ] > 10.1.1.0[Enter]
SSCP network ID:0 netmask [255.255.255.224] > 255.255.255.0[Enter]
xbbox#80-if#0 address [10.1.1.1       ] > [Enter]
bb#00-if#0 address [10.1.1.2       ] > [Enter]
bb#01-if#0 address [10.1.1.3       ] > [Enter]
bb#02-if#0 address [10.1.1.4       ] > [Enter]
bb#03-if#0 address [10.1.1.5       ] > [Enter]
bb#04-if#0 address [10.1.1.6       ] > [Enter]
bb#05-if#0 address [10.1.1.7       ] > [Enter]
bb#06-if#0 address [10.1.1.8       ] > [Enter]
bb#07-if#0 address [10.1.1.9       ] > [Enter]

SSCP network ID:1 address [169.254.1.32   ] > 10.2.1.0[Enter]
SSCP network ID:1 netmask [255.255.255.224] > 255.255.255.0[Enter]
xbbox#81-if#1 address [10.2.1.1       ] > [Enter]
```

```
bb#00-if#1 address [10.2.1.2       ] > [Enter]
bb#01-if#1 address [10.2.1.3       ] > [Enter]
bb#02-if#1 address [10.2.1.4       ] > [Enter]
bb#03-if#1 address [10.2.1.5       ] > [Enter]
bb#04-if#1 address [10.2.1.6       ] > [Enter]
bb#05-if#1 address [10.2.1.7       ] > 10.2.1.20[Enter]
bb#06-if#1 address [10.2.1.8       ] > [Enter]
bb#07-if#1 address [10.2.1.9       ] > [Enter]

SSCP network ID:2 address [169.254.1.64   ] > 169.254.1.32[Enter]
SSCP network ID:2 netmask [255.255.255.248] > [Enter]
xbbox#80-if#2 address [169.254.1.33   ] > [Enter]
xbbox#81-if#2 address [169.254.1.34   ] > [Enter]

SSCP network ID:3 address [169.254.1.72   ] > 10.3.1.0[Enter]
SSCP network ID:3 netmask [255.255.255.248] > [Enter]
xbbox#80-if#3 address [10.3.1.1       ] > [Enter]
xbbox#81-if#3 address [10.3.1.2       ] > [Enter]

SSCP network ID:4 address [169.254.1.80   ] > [Enter]
SSCP network ID:4 netmask [255.255.255.252] > [Enter]
xbbox#80-if#4 address [169.254.1.81   ] > [Enter]
xbbox#81-if#4 address [169.254.1.82   ] > [Enter]
```

EXAMPLE 2 Assign an address to all SSCP links in a configuration composed of 16 SPARC M10-4Ss. (IP addresses from 192.168.1.1 to 192.168.1.82 are assigned.)

```
XSCF> setsscp -i 192.168.1.0 -x 4 -n 16
```

EXAMPLE 3 Assign an address to all SSCP links of network ID 1 in a configuration composed of 16 SPARC M10-4Ss.

```
XSCF> setsscp -m 255.255.255.0 -i 192.168.3.0 -x 1 -n 16 -N 1
```

EXAMPLE 4 Assign 192.168.1.20 to the IP address of network ID 0 of XBBOX#80 after assigning an IP address to all SSCP links of network ID 1 in a configuration composed of 16 SPARC M10-4Ss.

```
XSCF> setsscp -i 192.168.1.0 -x 4 -n 16
XSCF> setsscp -b 80 -N 0 -i 192.168.1.20
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addfru(8), **applynetwork**(8), **rebootxscf**(8), **setnetwork**(8), **setroute**(8), **showsscp**(8)

NAME

setssh - Sets Secure Shell (SSH) service used in the XSCF network.

SYNOPSIS

setssh [[-q] -{y|n}] -c {enable|disable}

setssh -c addpubkey [-u *user_name*]

setssh -c delpubkey {-a|-s *line*} [-u *user_name*]

setssh [[-q] -{y|n}] -c genhostkey [-b *bits*]

setssh -h

DESCRIPTION

setssh is a command to set SSH service used in the XSCF network.

In XSCF, only SSH2 is supported. In multi-XSCF configuration, the settings are automatically reflected in the standby XSCFs.

The following contents can be set.

- Start or halt of SSH service (default is "halt")
- Generation of the host keys required for the SSH service

  You can specify either of 2048 bits or 4096 bits. The size of the DSA host key is fixed to 4096 bits.
- Registration of the user public key

  The user public key can be registered for each user account. It is also allowed to register multiple user public keys for one user account. The maximum number of characters per user account including line feeds available for registration of user public keys is 8191.

Privileges

To execute this command, any of the following privileges is required.

- Start or halt of SSH service and generation of the host key:
  platadm
- Registration or deletion of user public keys of other user accounts:
  useradm
- Registration or deletion of user public keys of user accounts which are currently logging in:
  No privileges are required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a — Deletes all of the registered user public keys. It is specified with -c delpubkey.

`-b` *bits*	Specifies the size of the host key to be created. For *bits*, you can specify 2048 or 4096. If omitted, it is recognized as 2048 bits.
`-c addpubkey`	Registers user public keys.
`-c delpubkey`	Deletes user public keys.
`-c genhostkey`	Generates the host key.
`-c {enable|disable}`	Specifies the operation for SSH service. You can specify any of the following. Default is `disable`.
	`enable` Starts SSH service. `disable` Halts SSH service.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-n`	Automatically responds to prompt with "n" (no).
`-q`	Prevents display of messages, including prompt, for standard output.
`-s` *line*	Specifies the user public key number to be deleted. In *line*, the number displayed when executing `showssh -c pubkey` is specified. It is specified with `-c delpubkey`.
`-u` *user_name*	Specifies the user account name to register or delete user public keys. It is specified with `-c addpubkey` or `-c delpubkey`. If the `-u` option is omitted, the user public keys of the user account logging in currently are the targets.
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- Start of SSH service is reflected just after executing `setssh` and the service is started.
- Halt of SSH service is reflected just after executing setssh. If any, the SSH sessions opened at the time of halting the service are disconnected.
- Active Directory and LDAP over SSL users cannot register user public keys. Connect to and login SSH of XSCF not by authentication with the user public key but password authentication.
- When you generate the host key, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, enter "y." To cancel, enter "n."

- If a host key is generated when another one has already been generated, a prompt to ask whether to update it is displayed. To update, enter "y." To cancel, enter "n."
- `setssh` can register just one user public key at a time.
- Input of the user public key when executing `setssh` is finished by pressing [Enter] key and then [Ctrl] + [D] key (EOF).
- If the system has two or more XSCF units, the settings are automatically reflected in the standby XSCFs. A failure of the standby XSCFs causes an error and then the settings are reflected only in the active XSCF.
- You can confirm the contents of SSH service set currently by using `showssh`(8).

EXAMPLES

EXAMPLE 1 Start SSH service.

```
XSCF> setssh -c enable
Continue? [y|n] :y
```

EXAMPLE 2 Start SSH service. The prompt is automatically given a "y" response.

```
XSCF> setssh -y -c enable
Continue? [y|n] :y
```

EXAMPLE 3 Start SSH service. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> setssh -q -y -c enable
```

EXAMPLE 4 Halt SSH service.

```
XSCF> setssh -c disable
Continue? [y|n] :y
```

EXAMPLE 5 Generate the host key.

```
XSCF> setssh -c genhostkey
Host key create. Continue? [y|n] :y
```

EXAMPLE 6 Generate the host key. The prompt is automatically given a "y" response.

```
XSCF> setssh -c genhostkey -y
Host key create. Continue? [y|n] :y
```

EXAMPLE 7 Generate the host key. The confirmation message is hidden and the prompt is automatically given a "y" response.

```
XSCF> setssh -c genhostkey -q -y
```

EXAMPLE 8 Generate the host key of 4096 bits.

```
XSCF> setssh -c genhostkey -b 4096
Host key create. Continue? [y|n] :y
```

EXAMPLE 9 Register user public keys. Input of the public key is finished by pressing [Enter] key and then [Ctrl] + [D] key (EOF).

```
XSCF> setssh -c addpubkey
Please input a public key:
ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAIEAzFh95SohrDgpnN7zFCJCVNy+jaZPTjNDxcid
QGbihYDCBttI4151Y0Sv85FJwDpSNHNKoVLMYLjtBmUMPbGgGVB61qskSv/
FeV44hefNCZMiXGItIIpK
P0nBK4XJpCFoFbPXNUHDw1rTD9icD5U/wRFGSRRxFI+Ub5oLRxN8+A8=
abcd@example.com
[Enter]
[Ctrl]+[D]
```

EXAMPLE 10 Register a user public key specifying the user name. Input of the public key is finished by pressing [Enter] key and then [Ctrl] + [D] key (EOF).

```
XSCF> setssh -c addpubkey -u efgh
Please input a public key:
ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAIEAzFh95SohrDgpnN7zFCJCVNy+jaZPTjNDxcid
QGbihYDCBttI4151Y0Sv85FJwDpSNHNKoVLMYLjtBmUMPbGgGVB61qskSv/
FeV44hefNCZMiXGItIIpK
P0nBK4XJpCFoFbPXNUHDw1rTD9icD5U/wRFGSRRxFI+Ub5oLRxN8+A8=
efgh@example.com
[Enter]
[Ctrl]+[D]
```

EXAMPLE 11 Delete a user public key specifying the public key number.

```
XSCF> setssh -c delpubkey -s 1
 1  ssh-rsa
AAAAB3NzaC1yc2EAAAABIwAAAIEAzFh95SohrDgpnN7zFCJCVNy+jaZPTjNDxcid
QGbihYDCBttI4151Y0Sv85FJwDpSNHNKoVLMYLjtBmUMPbGgGVB61qskSv/
FeV44hefNCZMiXGItIIpK
P0nBK4XJpCFoFbPXNUHDw1rTD9icD5U/wRFGSRRxFI+Ub5oLRxN8+A8=
abcd@example.com
```

EXAMPLE 12 Delete all user public keys.

```
XSCF> setssh -c delpubkey -a
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showssh(8)

NAME

settelnet - Starts or halts Telnet service used in the XSCF network.

SYNOPSIS

settelnet **[** [-q] -{y|n}**]** -c {enable | disable}

settelnet -h

DESCRIPTION

settelnet is a command to start or halt Telnet service used in the XSCF network. The Telnet service is halted by default.

In multi-XSCF configuration, the settings are automatically reflected in the standby XSCFs.

Privileges

To execute this command, platadm privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c {enable|disable} Specifies whether to start or halt Telnet service. You can specify either of the following. Default is disable.

enable	Starts Telnet service.
disable	Halts Telnet service.

-h Displays the usage. Specifying this option with another option or operand causes an error.

-n Automatically responds to prompt with "n" (no).

-q Prevents display of messages, including prompt, for standard output.

EXTENDED DESCRIPTION

- When Telnet service is enabled, Telnet service is started immediately.
- Halt of Telnet service is reflected just after execution of settelnet. At this time, the Telnet sessions in operation are disconnected, if any.
- You can confirm the contents of Telnet service set currently by using showtelnet(8).

EXAMPLES

EXAMPLE 1 Start Telnet service.

```
XSCF> settelnet -c enable
Continue? [y|n] :y
```

EXAMPLE 2 Halt Telnet service.

```
XSCF> settelnet -c disable
Continue? [y|n] :y
```

EXAMPLE 3 Halt Telnet service. The prompt is automatically given a "y" response.

```
XSCF> settelnet -y -c disable
Continue? [y|n] :y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showtelnet(8)

NAME

settimezone - Sets the time zone and daylight saving time of XSCF.

SYNOPSIS

settimezone -c settz -s *timezone*

settimezone -c settz -a [-M]

settimezone -c adddst -b *std* -o *offset* -d *dst* [-p *offset*] -f *date* [*/time*] -t *date* [*/time*]

settimezone -c deldst -b *std* -o *offset*

settimezone -h

DESCRIPTION

settimezone is a command to set the time zone and daylight saving time of XSCF.

The time zone prepared as standard complies with the POSIX standard.

The default value of XSCF timezone is UTC (Coordinate Universal Time).

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the list of the settable time zones. It is specified with -c settz.
-b *std*	Specifies the abbreviation of the standard time of the time zone. *std* is specified in alphabet from 3 to 7 characters. This can be specified in a format compliant with RFC2822. It is specified with -c adddst or -c deldst.
-c adddst	Manually sets the time zone and daylight saving time. The daylight saving time is set based on the time zone information specified by the -b, -o, -d, -p, -f, and -t options. If the daylight saving time is set manually, the time zone information set by -c settz is ignored. Logging in XSCF again after executing settimezone reflects the contents of the settings.
-c deldst	Deletes the time zone and daylight saving time set manually. If the daylight saving time set manually is deleted, XSCF comes to operate in the time zone set by -c settz. Logging in XSCF again after executing settimezone reflects the contents of the settings.
-c settz	Sets a time zone compliant with the POSIX standard. The time zone is reflected just after executing settimezone.

`-d` *dst*
: Specifies the daylight saving time zone name. *dst* is specified in alphabet from 3 to 7 characters. This can be specified in a format compliant with RFC2822. It is specified with `-c adddst`.

`-f` *date* [*/time*]
: Specifies the start time of the daylight saving time. It is specified with `-c adddst`. It is specified in the same format as that of *date* of `-t` option. *date* can be specified in any of the following formats.

  `J`*n*

  `J`*n*: Specifies the date to start the daylight saving time. You can specify a figure from 1 to 365 with January 1 regarded as 1 for *n*. In leap years, February 29 is not counted. 365 indicates December 31 even in leap years.

  `M`*m.w.d*

  `M`*m*: Specifies the month to start the daylight saving time. You can specify a figure from 1 to 12 for *m*
  w: Specifies the week to start the daylight saving time. 1 indicates the first week and 5 indicates the last week. You can specify a figure from 1 to 5.
  d: Specifies the day of the week to start the daylight saving time. 0 indicates Sunday and 6 indicates Saturday. You can specify a figure from 0 to 6.

  n

  n: Specifies the date to start the daylight saving time. You can specify a figure from 1 to 365 with January 2 regarded as 1. In leap years, February 29 is counted.

  Specifies the time for *time*. This can be specified using the following format.

  hh:mm:ss
  : This is specified in the format of "hh:mm:ss." *hh* is from 0 to 23. *mm* is 0 to 59. ss is 0 to 59. If omitted, it is 02:00:00.

`-h`
: Displays the usage. Specifying this option with another option or operand causes an error.

`-M`
: Displays text one screen at a time.

`-o` *offset*

Specifies the offset between the time zone and Greenwich Mean Time (GMT). It is specified with `-c adddst` or `-c deldst`. *offset* can be specified using the following format.

`GMT`{`+` | `-`}*hh*[:*mm*[:*ss*]]

`GMT`	Greenwich Mean Time
{`+` | `-`}	To set a standard time earlier than GMT, specify -. (To set a local time on the east of Greenwich, the value of offset shall be - (minus).) To set a standard time later than GMT, specify +. (To set a local time on the west of Greenwich, the value of offset shall be + (plus).)
hh[:*mm*[:*ss*]]	Specifies the offset time. *hh* is from `0` to `23`. *mm* and *ss* are from `0` to `59`.

`-p` *offset*

Specifies the offset between the daylight saving time and Greenwich Mean Time (GMT). It is specified with `-c adddst`. If omitted, it becomes one hour earlier than the offset time specified by `-o` option. *offset* can be specified using the following format.

`GMT`{`+` | `-`}*hh*[:*mm*[:*ss*]]

`GMT`	Greenwich Mean Time
{`+` | `-`}	To set a standard time earlier than GMT, specify -. (To set a local time on the east of Greenwich, the value of offset shall be - (minus).) To set a standard time later than GMT, specify +. (To set a local time on the west of Greenwich, the value of offset shall be + (plus).)
hh[:*mm*[:*ss*]]	Specifies the offset time. *hh* is from `0` to `23`. *mm* and *ss* are from `0` to `59`.

`-s` *timezone*

Specifies the time zone. It is specified with `-c settz`. For *timezone*, you can specify any of the time zones displayed by the `-a` option.

`-t` *date* [*/time*] Specifies the time to finish the daylight saving time. It is specified with `-t adddst`. It is specified in the same format as that of *date* of `-f` option. *date* can be specified in any of the following formats.

`J`*n*

`J`*n*: Specifies the date to finish the daylight saving time. You can specify a figure from 1 to 365 with January 1 regarded as 1 for *n*. In leap years, February 29 is not counted. 365 indicates December 31 even in leap years.

`M`*m.w.d*

`M`*m*: Specifies the month to finish the daylight saving time. You can specify a figure from 1 to 12 for *m*
w: Specifies the week to finish the daylight saving time. 1 indicates the first week and 5 indicates the last week. You can specify a figure from 1 to 5.
d: Specifies the day of the week to finish the daylight saving time. 0 indicates Sunday and 6 indicates Saturday. You can specify a figure from 0 to 6.

n

n: Specifies the date to finish the daylight saving time. You can specify a figure from 1 to 365 with January 2 regarded as 1. In leap years, February 29 is counted.

Specifies the time for *time*. This can be specified using the following format.

hh:mm:ss This is specified in the format of "hh:mm:ss." *hh* is from 0 to 23. *mm* is 0 to 59. *ss* is 0 to 60. If omitted, it is 02:00:00.

EXTENDED DESCRIPTION

- You cannot specify an effective number of years for the time zone or daylight saving time. To change the daylight saving time every year, it is necessary to specify it again by `settimezone`.
- If the daylight saving time is not set, it is not affected by the time zone.
- To set the daylight saving time by `-c adddst`, specify the start and end in the same format.
- When setting the daylight saving time by `-c adddst`, the following cases cause an error.
  - Case that the period between the start and end is shorter than 14 days in `J`*n* or *n* format
  - Case that the start and end is in the same month and the period is shorter than two weeks in the M*m.w.d* format

- Case that an offset smaller than `-p` *offset* is specified in `-o` *offset*
- Case that the difference in the offsets of `-o` *offset* and `-p` *offset* is longer than 24 hours

- If the standard time set by `settimezone` is added to the offset time, it becomes GMT.
- You can confirm the time zone set currently by using `showtimezone`(8).
- To reflect the daylight saving time information changed by the `-c adddst` and `-c deldst` options, logout from XSCF and login again.

EXAMPLES

EXAMPLE 1 Set the time zone to "Asia/Tokyo."

```
XSCF> settimezone -c settz -s Asia/Tokyo
Asia/Tokyo
```

EXAMPLE 2 Display the list of the settable time zones.

```
XSCF> settimezone -c settz -a
Africa/Abidjan
Africa/Accra
Africa/Addis_Ababa
Africa/Algiers
Africa/Asmara
Africa/Asmera
Africa/Bamako
Africa/Bangui
 .
 .
```

EXAMPLE 3 Set the daylight saving time information with setting the time zone abbreviation to JST, offset from GMT to +9, daylight saving time zone name to JDT, daylight saving time to one hour earlier, and period to 2:00 on the last Sunday of March (JST) to 2:00 on the last Sunday of October (JDT).

```
XSCF> settimezone -c adddst -b JST -o GMT-9 -d JDT -f M3.5.0 -t
M10.5.0
JST-9JDT,M3.5.0,M10.5.0
```

EXAMPLE 4 Set the daylight saving time information with setting the time zone abbreviation to JST, offset from GMT to +9, daylight saving time zone name to JDT, offset from the daylight saving time of GMT to +10 hours, and period to 0:00 on the first Sunday of April (JST) to 0:00 on the first Sunday of September (JDT).

```
XSCF> settimezone -c adddst -b JST -o GMT-9 -d JDT -p GMT-10 -f
M4.1.0/00:00:00 -t M9.1.0/00:00:00
JST-9JDT-10,M4.1.0/00:00:00,M9.1.0/00:00:00
```

EXAMPLE 5 Delete the daylight saving time information set currently.

```
XSCF> settimezone -c deldst -b JST -o GMT-9
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setdate(8), **showdate**(8), **showtimezone**(8)

NAME

setupfru - Sets the hardware of devices.

SYNOPSIS

setupfru [[-q] -{y|n}] -c *function*= *mode device location*

setupfru [-m {y|n}] *device location*

setupfru -h

DESCRIPTION

setupfru is a command to set the hardware of the specified device.

You can specify a physical system board (PSB) as the device.

The following contents can be set for PSB to make PSB available for the system after addition.

Memory mirror mode — Sets whether to mirror the memory.

If you mirror the memory, the memory size under CPUs becomes half but the reliability of data is improved.

In order to set to memory mirror mode, the target PSB should be in either of the following two states:

- Not configured to a physical partition (PPAR).
- A PPAR configuring the PSB is not powered on.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c *function=mode* — Specifies the target for settings in *function*. You can specify any of the following. If sb is specified in *device*, the setting is reflected in all CPU chips under the specified PSB. If cpu is specified in *device*, the setting is reflected only in the specified CPU chips.

This option is available only for SPARC M12-1/M12-2/M12-2S.

mirror — Specifies whether to set up memory mirror mode. You can specify either of the following in *mode*. The default value is "no".
yes: Set memory mirror mode.
no: Clear memory mirror mode.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

`-m {y|n}` Specify whether to set up memory mirror mode for memory under CPUs. If memory mirror mode is to be set up, specify `y`, otherwise, specify `n`. If the `-m` option is omitted, the previous setting is taken over.

If `sb` is specified in *device*, the setting is reflected in all CPUs under the specified PSB. If `cpu` is specified in *device*, the setting is reflected only in the specified CPUs.

`-n` Automatically responds to prompts with "n" (no).

This option is available only for SPARC M12-1/M12-2/M12-2S.

`-q` Prevents display of messages, including prompts, for standard output.

This option is available only for SPARC M12-1/M12-2/M12-2S.

`-y` Automatically responds to prompts with "y" (yes).

This option is available only for SPARC M12-1/M12-2/M12-2S.

OPERANDS The following operands are supported.

device Specifies the device to be set. You can specify either of the following.

`sb` PSB

`cpu` CPU in PSB

location Specifies the location where the device is mounted.

`sb` is specified in the following format.

xx-y

xx Specifies the BB-ID which is an integer from `00` to `15`.

y It is fixed to `0`.

`cpu` is specified in the following format.

xx-y-z

xx Specifies the BB-ID which is an integer from `00` to `15`.

y It is fixed to `0`.

z Specify the CPU chip number.
For SPARC M12-1/M10-1, specify 0.
For SPARC M10-4/M10-4S, specify an integer from `0` to `3`.
For SPARC M12-2/M12-2S, specify `0` or `2`.

EXTENDED DESCRIPTION

You can confirm the contents regarding the hardware of the devices set currently by using showfru(8).

EXAMPLES

EXAMPLE 1 Set all CPUs under PSB 01-0 to the memory mirror mode.

```
XSCF> setupfru -m y sb 01-0
```

EXAMPLE 2 Set the CPU of PSB 02-0 CPU chip 1 to the memory mirror mode.

```
XSCF> setupfru -m y cpu 02-0-1
```

EXAMPLE 3 Set all CPUs under PSB 01-0 to the memory mirror mode on SPARC M12-2S.

```
XSCF> setupfru -c mirror=yes sb 01-0

Notice:
  - Logical domain config_name will be set to "factory-default".

Memory mirror mode setting will be changed, Continue? [y|n] :y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addboard(8), **deleteboard**(8), **setpcl**(8), **showboards**(8), **showpcl**(8), **showfru**(8)

NAME

setvbootconfig - Configures the Verified Boot policy of Oracle Solaris and enables/disables X.509 public key certificates used for performing Verified Boot.

SYNOPSIS

setvbootconfig `-p` *ppar_id* `-i` *index* [[`-q`] `-{y|n}`] `-c {enable|disable}`

setvbootconfig `-p` *ppar_id* [[`-q`] `-{y|n}`] `-s` *policy=value*

setvbootconfig `-h`

DESCRIPTION

The `setvbootconfig` command configures the Verified Boot policy of Oracle Solaris and enables/disables X.509 public key certificates used for performing Verified Boot.

The `setvbootconfig` command can only enable/disable the certificates that are added to the physical partition (PPAR) by users using the `addvbootcerts`(8), but not the pre-installed certificates in the system. Details of the configuration can be confirmed by the `showvbootconfig`(8).

Privileges

To execute this command, either of the following privileges is required.

`platadm`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-c {enable|disable}`	Specify `enable` if using X.509 public key certificates and `disable` if not.
`-i` *index*	Specifies the management number of the X.509 public key certificate whose configuration is to be changed. Management numbers from 1 through 5 can be allotted. Management numbers can be confirmed by the `showvbootcerts`(8).
`-n`	Automatically responds to prompt with "n" (no).
`-p` *ppar_id*	Specifies the PPAR-ID of the PPAR that is to be changed.
`-q`	Prevents display of messages, including prompt, for standard output.

`-s` *policy=value* Sets up Verified Boot policy. *policy* and *value* should be specified by separating them with an equal (=) sign. Spaces should not exist at both end of the equal (=) sign.

The possible values for *policy* are as follows:

`boot_policy` Sets up the boot verification policy of the unix and genunix modules.

`module_policy` Sets up the boot verification policy of kernel modules that needs to be loaded after genunix.

The possible values for *value* are as follows:

`none` Does not execute boot verification (default).

`warning` Boot verification is performed.
Verification is performed before the target of the verification is loaded. Even if the verification fails, the target of the verification is loaded and boot processing continues.
If verification of the boot block and unix fails, the failure of the verification is recorded in the system console. It is not recorded in the system log and XSCF error log.
If verification of genunix and other kernel modules fails, the failure of the verification is recorded in the system console and the system log. It is not recorded in the XSCF error log.

`enforce` Boot verification is performed.
Verification is performed before the target of the verification is loaded.
If verification of the boot block and unix fails, boot processing stops. At this time, the failure of the verification is recorded in the system console and the XSCF error log. It is not recorded in the system log.
If verification of genunix fails, boot processing stops. At this time, the failure of the verification is recorded in the system console. It is not recorded in the XSCF error log and the system log.
If verification of other kernel modules fails, the boot continues without loading the module. At this time, the failure of the verification is recorded in the system console and the system log. It is not recorded in the XSCF error log.

-y	Automatically responds to prompt with "y" (yes).
-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Enable the X.509 public key certificate that is registered to the PPAR-ID 0, with management number 1.

```
XSCF> setvbootconfig -p 0 -i 1 -c enable
Index 1, CUSTOM_CERT_1 on PPAR-ID 0 will be enabled,
Continue?[y|n]:
```

EXAMPLE 2 Disable the X.509 public key certificate that is registered to the PPAR-ID 15, with management number 2. Answer "y" to the confirmation message.

```
XSCF> setvbootconfig -p 15 -i 2 -y -c disable
Index 2, CUSTOM_CERT_2 on PPAR-ID 15 will be disabled,
Continue?[y|n]:y
```

EXAMPLE 3 Set the "boot verification policy of the UNIX and genunix modules" of PPAR-ID 2 to "warning".

```
XSCF> setvbootconfig -p 2 -s boot_policy=warning
PPAR-ID 2 policies for Verified Boot will be changed,
Continue?[y|n]:
```

EXAMPLE 4 Set the "boot verification policy of other kernel modules which are to be loaded after genunix" of PPAR-ID 4 to "enforce".

```
XSCF> setvbootconfig -p 4 -s module_policy=enforce
PPAR-ID 4 policies for Verified Boot will be changed,
Continue?[y|n]:
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addvbootcerts(8), **deletevbootcerts**(8), **showvbootcerts**(8), **showvbootconfig**(8)

NAME

showad - show Active Directory configuration and messages.

SYNOPSIS

showad

showad `cert` [`-v`] [`-i` *n*]

showad `log` [`-M`] [`-C`] [`-S` *start_record_number*] [`-E` *end_record_number*]

showad `log -f`

showad `group administrator` [`-i` *n*]

showad `group operator` [`-i` *n*]

showad `group custom` [`-i` *n*]

showad `userdomain` [`-i` *n*]

showad `dnslocatorquery` [`-i` *n*]

showad `defaultrole`

showad `server` [`-i` *n*]

showad `-h`

DESCRIPTION

`showad` displays Active Directory configuration and diagnostic messages.

Privileges

You must have `useradm` privileges to run this command.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following options are supported:

`-f`	Displays diagnostic messages in real time. When this option is used, the command does not terminate. Each diagnostic message is displayed when it is registered. To stop the real-time display, press [Ctrl]+[C] key.
`-h`	Displays usage statement. When used with other options or operands, an error occurs.

`-i` *n*	Sets an index marker, value 1 - 5. When executed without `-i` or without any value for `-i`, the system behaves in the following way, according to the assigned operand.
	
	`group`, `userdomain`, `dnslocatorquery`
	Successively searches index marker 1 to 5.
	
	`cert`
	Displays the server certificate of the primary Active Directory server.
	
	`server`
	Displays the configuration of the primary Active Directory server.

`-v`	Specifies verbose output. Used only with the cert operand to display the full certificate.
`-C`	Appends to end of output the number of records in the log.
`-E`	Specifies the last record number to display, where *end_record_number* can be any record number in the log. Use `-C` to obtain the number of records in the log.
`-M`	Displays text one screen at a time.
`-S`	Specifies the first record to display, where *start_record_number* can be any record number in the log. Use `-C` to obtain the number of records in the log.

OPERANDS

The following operands are supported:

`cert`	Display current server certificates. Displays the primary Active Directory server when `-i` is omitted. Displays the alternate Active Directory server when `-i` is specified.
`log`	Display diagnostic messages.
`group administrator`	Display current group configurations.
`group operator`	Display current group configurations.
`group custom`	Display current group configurations.
`userdomain`	Display current userdomain settings.

`dnslocatorquery`	Display current DNS locator query configuration.
`defaultrole`	Display current defaultrole setting.
`server`	Display current Active Directory server settings.
	Displays the primary Active Directory server when `-i` is omitted. Displays the alternate Active Directory server when `-i` is specified.

EXAMPLES

EXAMPLE 1 Displays the current state of the active directory.

```
XSCF> showad
dnslocatormode: disabled
expsearchmode: disabled
state: enabled
strictcertmode: disabled
timeout: 4
logdetail: none
```

EXAMPLE 2 Displays certificate information for the primary Active Directory server.

```
XSCF> showad cert
Primary Server:
certstatus = certificate present
issuer = C=US, ST=California, L=San Diego, O=aCompany,
OU=System Group, CN=John User serial number = 0 (00000000)
subject = C=US, ST=California, L=San Diego, O=aCompany,
OU=System Group, CN=John User serial number = 0 (00000000)
valid from = Apr 18 05:38:36 2013 GMT
valid until = Apr 16 05:38:36 2023 GMT
version = 3 (0x02)
```

EXAMPLE 3 Displays specified diagnostic messages.

```
XSCF> showad log -S 5 -E 10
Thu Sep 2 01:43 2013 (ActDir): -error- authentication status: auth-ERROR
Thu Sep 2 01:44 2013 (ActDir): -error- authentication status: auth-ERROR
Thu Sep 2 01:47 2013 (ActDir): -error- authentication status: auth-ERROR
Thu Sep 2 01:51 2013 (ActDir): -error- authentication status: auth-ERROR
Thu Sep 2 01:52 2013 (ActDir): -error- authentication status: auth-ERROR
Thu Sep 2 01:55 2013 (ActDir): -error- authentication status: auth-ERROR
```

EXAMPLE 4 Displays configuration for administrator group 3.

```
XSCF> showad group administrator -i 3
Administrator Group 3
name: CN=pSuperAdmin,OU=Groups,DC=sales,DC=company,DC=com
```

EXAMPLE 5 Displays alternate server 1 setting. A port number of 0 indicates that the default port for Active Directory is used.

```
XSCF> showad server -i 1
Alternate Server  1
address: (none)
port: 0
```

EXAMPLE 6 Displays the dnslocatorquery 1 configuration.

```
XSCF> showad dnslocatorquery -i 1
service 1: \ _ldap._tcp.gc._msdcs.<DOMAIN>.<PORT:3269>
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

setad(8)

NAME

showaltitude - Displays the altitude of the system.

SYNOPSIS

showaltitude

showaltitude -h

DESCRIPTION

showaltitude is a command to display the altitude of the system set currently.

If showaltitude is executed without specifying the option, the altitude of the device is displayed. The displayed altitude is the value set by setaltitude(8).

The altitude is displayed by 100 meters (m).

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

You can set the altitude of the system by using setaltitude(8).

EXAMPLES

EXAMPLE 1 Display the altitude of the system.

```
XSCF> showaltitude
1000m
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setaltitude(8)

NAME

showaudit - Displays the current status of the audit system.

SYNOPSIS

showaudit

showaudit [`all`]

showaudit [`-a` *users*] [`-c` { *classes* | `all`}] [`-e` { *events* | `all`}] [`-g`] [`-m`] [`-p`] [`-s`] [`-t`]

showaudit `-h`

DESCRIPTION

`showaudit` displays the current status of the system audit. If `showaudit` is executed without specifying the option, it is displayed whether writing of audit records is enabled or disabled.

Privileges

To execute this command, `auditadm` or `auditop` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` *users* — Displays the audit record generation policy of the specified user. *users* is the comma-separated list of the valid user names.

`-c` *classes* — Displays the audit record generation policy of the specified audit class. *classes* is a comma-separated list of audit classes. Classes can be specified with a number or name. The prefix of `ACS_` can be omitted. For example, the classes of audit-related events can be expressed as `ACS_AUDIT`, `AUDIT` or `2`.

The valid classes are below.

`all`	All classes
`ACS_SYSTEM(1)`	System-related event
`ACS_WRITE(2)`	Command that can change the status
`ACS_READ(4)`	Command to display the current status
`ACS_LOGIN(8)`	Login-related event
`ACS_AUDIT(16)`	Audit-related event
`ACS_PPAR(32)`	Physical partition (PPAR) administration-related event
`ACS_USER(64)`	User administration-related event
`ACS_PLATFORM(128)`	Platform administration-related event
`ACS_MODES(256)`	Mode-related event

`-e` *events* — Displays the audit record generation policy of the specified audit events. *events* is a comma-separated list of audit events. Events can be specified with a number or name. The prefix of `AEV_` can be omitted. For example, the event of `SSH` login can be expressed as `AEV_LOGIN_SSH`, `LOGIN_SSH`, or `4`.

For the list of valid events, see `showaudit -e all`.

`-g` — Displays the global audit record generation policy of the user.

`-h` — Displays the usage. Specifying this option with another option or operand causes an error.

`-m` — Displays the destination address of the e-mail to be sent if the usage of the local audit area reaches the threshold.

`-p` — Displays the policy to be followed if the audit trail reaches the full capacity.

`-s` — Displays the following audit statuses.

- Area used by the local audit record
- Free space left for the local audit record
- Number of the audit record deleted (after the previous boot) since the audit trail reaches the full capacity

`-t` — Displays the threshold to issue a warning for the usage of the local region.

OPERANDS

The following operands are supported.

`all` — Displays the following information.

- Whether writing of audit trail is set to `enable` or `disable`. This information is the same as that which is displayed when `showaudit` is executed without specifying any options.
- All information displayed when `showaudit` is executed specifying the `-a`, `-c all`, `-e all`, `-g`, `-m`, `-p`, `-s`, and `-t` options.

EXAMPLES

EXAMPLE 1 Display the audit status.

```
XSCF> showaudit
Auditing: enabled
```

EXAMPLE 2 Display all class information regarding login audit.

```
XSCF> showaudit -c LOGIN
Events:
AEV_LOGIN_BUI                   enabled
AEV_LOGIN_CONSOLE               enabled
AEV_LOGIN_SSH                   enabled
AEV_LOGIN_TELNET                enabled
AEV_LOGOUT                      enabled
AEV_AUTHENTICATE                enabled
```

EXAMPLE 3 Display all event information.

```
XSCF> showaudit -e all
Events:
AEV_AUDIT_START                 enabled
AEV_AUDIT_STOP                  enabled
AEV_ENTER_MODE                  enabled
AEV_EXIT_MODE                   enabled
AEV_LOGIN_BUI                   enabled
AEV_LOGIN_CONSOLE               enabled
AEV_LOGIN_SSH                   enabled
AEV_LOGIN_TELNET                enabled
AEV_LOGOUT                      enabled
AEV_AUTHENTICATE                enabled
AEV_addboard                    enabled
AEV_addfru                      enabled
[...]
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setaudit(8), **viewaudit**(8)

NAME

showautologout - Displays the session timeout time of the XSCF shell.

SYNOPSIS

showautologout

showautologout -h

DESCRIPTION

showautologout is a command to display the session timeout time set in the XSCF shell.

Displays the session timeout time by minutes. If the session timeout time is not set by setautologout(8), it is set to 10 minutes by default.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, auditadm, auditop, pparadm, pparmgr, pparop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the session timeout time of the login shell. (If set to 30 minutes)

```
XSCF> showautologout
30min
```

EXAMPLE 2 Display the session timeout time of the login shell. (In the default status)

```
XSCF> showautologout
10min
```

EXIT STATUS

The following exit values are returned.

0 — Indicates normal end.

>0 — Indicates error occurrence.

SEE ALSO

setautologout(8)

NAME

showbbstatus - Display the status of the SPARC M12/M10 systems chassis.

SYNOPSIS

showbbstatus

showbbstatus `-h`

DESCRIPTION

`showbbstatus` is a command to display the status of the currently-operated SPARC M12/M10 systems chassis.

Privileges

To execute this command, any of the following privileges is required.

`useradm`, `platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the SPARC M12/M10 systems status of its own device.

```
XSCF> showbbstatus
BB#01 (Standby)
```

EXAMPLE 2 Display the SPARC M12/M10 systems status of its own device (when the master XSCF and the standby XSCF cannot be synchronised).

```
XSCF> showbbstatus
BB#00 (Master)
Cannot communicate with Standby XSCF. Please check Standby XSCF's state.
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

NAME

showboards - Displays the information of the physical system board (PSB).

SYNOPSIS

showboards [-v] -a [-c sp]

showboards [-v] -p *ppar_id* [-c sp]

showboards [-v] *psb*

showboards -h

DESCRIPTION

showboards is a command to display the information of PSB.

A physical system board (PSB) means one building block (BB).

Displays the information of all PSBs currently incorporated into, assigned to, or mounted in the physical partition (PPAR). If PPAR is specified, only the information defined in the PPAR configuration information (PCL) is displayed.

The following information is displayed.

PSB — PSB number

This is displayed in the format below.

xx-y:

xx	BB-ID which is an integer from 00 to 15
y	It is fixed to 0

PPAR-ID — PPAR-ID

Any of the following is displayed.

00-15	PPAR-ID to which PSB is assigned
SP	PSB does not belong to PPAR and is in the system board pool status
Other	This is displayed if the PSB is set in the PCL of a PPAR to which access privilege has been granted, and at the same time, belongs to a PPAR to which no access privilege has been granted.

LSB — Logical System Board (LSB) number defined in PPAR

An integer from 00 to 15 is displayed.

`Assignment` Assignment status of PSB to PPAR

Any of the following is displayed.

`Unavailable`	PSB is in the system board pool status (not assigned to PPAR) and corresponds to any of "Undiagnosed," "Diagnosing," or "Abnormal diagnosis." Unimplemented PSB also becomes `Unavailable`.
`Available`	PSB is in the system board pool status and the diagnosis has been normally completed.
`Assigned`	PSB is assigned to PPAR.

`Pwr` PSB is turned on

Either of the following is displayed.

`n`	In the power-off status
`y`	In the power-on status

`Conn` PSB is connected to the PPAR configuration

Either of the following is displayed.

`n`	Not connected to the corresponding PPAR or in the system board pool status
`y`	Connected to the corresponding PPAR

`Conf` Operating status of Oracle Solaris

Either of the following is displayed.

`n`	PSB is not operating in Oracle Solaris.
`y`	PSB is operating in Oracle Solaris.

`Test` Status of the initial diagnosis of PSB

Any of the following is displayed.

`Unmount`	Recognition is impossible because it is not mounted or a failure occurred
`Unknown`	Not diagnosed
`Testing`	The initial diagnosis is in progress.
`Passed`	The initial diagnosis is normally completed.
`Failed`	An abnormality occurred in the initial diagnosis. PSB cannot be used or are degraded.

`Fault` Degradation status of PSB

Any of the following is displayed.

`Normal`	Normal status
`Degraded`	There is a degraded part. PSB can be operated.
`Faulted`	PSB cannot be operated due to an abnormality or cannot be controlled due to a communication abnormally.

If it is specified with the `-v` option, the following information is displayed as the detailed status of PSB.

`R` Dynamic Reconfiguration (DR) reservation status of PSB for PPAR

`*`	DR processing is reserved. If PPAR is restarted, the PPAR configuration is changed by incorporation or release of PSB.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`	Enables execution for all PPARs and PSBs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Displays the statuses of all PSBs incorporated into, assigned to, or mounted in PPAR.
`-c sp`	Displays the PSB of the system board pool. System board pool means the status in which PSB does not belong to any PPARs.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-p` *ppar_id*	Specifies the PPAR-ID to display the status. Only the information defined in the PCL of the specified PPAR is displayed. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
`-v`	Displays the detailed information of PSB.

OPERANDS

The following operands are supported.

psb Specifies the PSB number to be displayed. The specification format is below.

xx-y

xx BB-ID which is an integer from `00` to `15`

y It is fixed to `0`

EXTENDED DESCRIPTION

- If PPAR is specified, only the PSB information defined in PCL is displayed.
- If XSCF is rebooted with the `rebootxscf`(8) when PPAR is not running, the diagnosis status is displayed as "Unknown", but if the PPAR is restarted, the status returns to "Passed".

EXAMPLES

EXAMPLE 1 Display the information of all PSBs mounted.

```
XSCF> showboards -a
PSB  PPAR-ID(LSB) Assignment  Pwr  Conn Conf Test    Fault
---- ------------ ----------- ---- ---- ---- ------- --------
00-0 00(00)       Assigned    y    y    y    Passed  Normal
01-0 SP           Unavailable n    n    n    Testing Normal
02-0 Other        Assigned    y    y    n    Passed  Degraded
03-0 SP           Unavailable n    n    n    Failed  Faulted
```

EXAMPLE 2 Display the detailed information of all PSBs mounted.

```
XSCF> showboards -v -a
PSB  R PPAR-ID(LSB) Assignment  Pwr  Conn Conf Test    Fault
---- - ------------ ----------- ---- ---- ---- ------- --------
00-0 * 00(00)       Assigned    y    y    y    Passed  Normal
01-0   SP           Unavailable n    n    n    Testing Normal
02-0   Other        Assigned    y    y    n    Passed  Degraded
03-0   SP           Unavailable n    n    n    Failed  Faulted
```

EXAMPLE 3 Display the information of PSB 00-0.

```
XSCF> showboards 00-0
PSB  PPAR-ID(LSB) Assignment  Pwr  Conn Conf Test    Fault
---- ------------ ----------- ---- ---- ---- ------- --------
00-0 00(00)       Assigned    y    y    y    Passed  Normal
```

EXAMPLE 4 Display the detailed information of PSB 00-0.

```
XSCF> showboards -v 00-0
PSB  R PPAR-ID(LSB) Assignment  Pwr  Conn Conf Test    Fault
---- - ------------ ----------- ---- ---- ---- ------- --------
00-0 * 00(00)       Assigned    y    y    y    Passed  Normal
```

EXAMPLE 5 Display the PSB of the system board pool.

```
XSCF> showboards -a -c sp
PSB  PPAR-ID(LSB) Assignment  Pwr  Conn Conf Test    Fault
---- ------------ ----------- ---- ---- ---- ------- --------
01-0 SP           Unavailable   n    n    n    Testing Normal
03-0 SP           Unavailable n    n    n    Failed  Faulted
```

EXAMPLE 6 Display the PSB defined in PPAR-ID 0 and in the system board pool status.

```
XSCF> showboards -P 0 -c sp
PSB  PPAR-ID(LSB) Assignment  Pwr  Conn Conf Test    Fault
---- ------------ ----------- ---- ---- ---- ------- --------
01-0 SP           Available   n    n    n    Passed  Normal
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addboard(8), **deleteboard**(8), **setpcl**(8), **setupfru**(8), **showfru**(8), **showpcl**(8)

NAME

showcod - Shows the registered and setup information of CPU Activations.

SYNOPSIS

showcod [-v] -s cpu

showcod [-v] -p *ppar_id*

showcod [-v] [-M]

showcod -h

DESCRIPTION

showcod is the command to show the registered and setup information of CPU Activations. The registered and setup information of CPU Activations includes the number of CPU Activations that is registered to SPARC M12/M10 systems with addcodactivation(8) and also the number of CPU Activations that is registered to physical partitions (PPAR) with setcod(8).

If showcod is executed without specifying -p *ppar_id*, the CPU Activation information of all PPARs is displayed.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-p *ppar_id*	Specifies PPAR-ID. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
-s cpu	Displays the CPU Activation information.
-v	Displays detailed information. It the -v option is specified, the breakdown of keys is displayed.

EXTENDED DESCRIPTION

The following parameters are displayed as the types of resource.

PROC	CPU core resource

EXAMPLES

EXAMPLE 1 Display all CPU Activations information in detail (in the case that the plat-

adm or platop privilege is owned).

```
XSCF>  showcod -v -s cpu
PROC Permits installed : 8 cores
PROC Permits assigned for PPAR 0 : 4 [Permanent 4cores]
PROC Permits assigned for PPAR 1 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 2 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 3 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 4 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 5 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 6 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 7 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 8 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 9 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 10 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 11 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 12 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 13 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 14 : 0 [Permanent 0cores]
PROC Permits assigned for PPAR 15 : 0 [Permanent 0cores]
```

EXAMPLE 2 Display all CPU Activations information (in the case that the pparadm, pparmgr, or pparop privilege is owned for PPAR-ID 1).

```
XSCF>  showcod
PROC Permits reserved for PPAR 1: 0
```

EXAMPLE 3 Display all CPU Activations information in detail (in the case that the pparadm, pparmgr, or pparop privilege is owned for PPAR-ID 1).

```
XSCF>  showcod -v
PROC Permits assigned for PPAR 1: 0 [Permanent 0cores]
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **setcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8), **showcodusage**(8)

NAME

showcodactivation - Displays the current CPU Activation key information added to the system.

SYNOPSIS

showcodactivation [`-r` | `-v`] [`-i` *key-index*] [`-M`]

showcodactivation `-h`

DESCRIPTION

`showcodactivation` is a command to display the CPU Activation key information added to the system.

If `showcodactivation` is executed with nothing specified, the current CPU Activation key information is displayed.

Note – For details on the CPU Activation key, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Privileges

To execute this command, `platadm` or `platop` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-i` *key-index*	Displays the CPU Activation key information of the administration number specified in *Key-index*.
`-M`	Displays text one screen at a time.
`-r`	Displays information on CPU Activation key along with the index information (management number) that is saved in XSCF.
`-v`	Displays detailed information. The CPU Activation key information is displayed in both of the table format and raw data format.

EXTENDED DESCRIPTION

If `showcodactivation` is used, the following information is displayed.

`Index`	Administration number in the XSCF of the CPU Activation key.
`Description`	Type of resources (processor). For CPU Activation, `PROC` is displayed.
`Count`	Number of the CPU Activations given to resources.

EXAMPLES

EXAMPLE 1 Display the CPU Activation key information on SPARC M10-1.

```
XSCF> showcodactivation
Index   Description Count
------- ----------- ------
      1 PROC            2
      2 PROC            2
```

EXAMPLE 2 Display the CPU Activation key information of the administration number 2 in the raw data format on SPARC M10-1.

```
XSCF> showcodactivation -r -i 2
*Index2
Product: SPARC M10-1
SequenceNumber: 116
Cpu noExpiration 2
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
```

EXAMPLE 3 Display the CPU Activation key information of the administration number 2 in the raw data format on SPARC M12-2S.

```
XSCF> showcodactivation -r -i 2
*Index2
Product: SPARC M12-2S
SequenceNumber: 116
Cpu noExpiration 1
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
```

EXAMPLE 4 Display the CPU Activation key information in the raw data format on SPARC M10-1.

```
XSCF> showcodactivation -r
Permanent Keys:
*Index1
Product: SPARC M10-1
SequenceNumber: 116
Cpu noExpiration 2
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
```

```
*Index2
  :
  :
```

EXAMPLE 5 Display the CPU Activation key information in the raw data format on SPARC M12-2S.

```
XSCF> showcodactivation -r
Permanent Keys:
*Index1
Product: SPARC M12-2S
SequenceNumber: 116
Cpu noExpiration 1
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
*Index2
  :
  :
```

EXAMPLE 6 Display the detailed CPU Activation key information on SPARC M10-1.

```
XSCF> showcodactivation -v
Index   Description Count
------- ----------- ------
      1 PROC              2
Product: SPARC M10-1
SequenceNumber: 116
Cpu noExpiration 2
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
------- ----------- ------
      2 PROC              2
Product: SPARC M10-1
SequenceNumber: 116
Cpu noExpiration 2
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
```

EXAMPLE 7 Display the detailed CPU Activation key information on SPARC M12-2S.

```
XSCF> showcodactivation -v
Index   Description Count
------- ----------- ------
```

```
      1 PROC             1
Product: SPARC M12-2S
SequenceNumber: 116
Cpu noExpiration 1
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
------- ----------- ------
      2 PROC             1
Product: SPARC M12-2S
SequenceNumber: 117
Cpu noExpiration 1
Text-Signature-SHA256-RSA2048:
SBxYBSmB32E1ctOidgWV09nGFnWKNtCJ5N3WSlowbRUYlVVySvjncfOrDNteFLzo
  :
  :
1TSgrjnee9FyEYITT+ddJQ==
  :
  :
```

EXAMPLE 8 Display the CPU Activation key information of the administration number 2 on SPARC M10-1.

```
XSCF> showcodactivation -i 2
Index   Description Count
------- ----------- ------
      2 PROC             2
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **setcod**(8), **showcod**(8), **showcodactivationhistory**(8), **showcodusage**(8)

NAME

showcodactivationhistory - Displays the logs to add and delete the CPU Activation keys (Capacity on Demand (CoD) logs).

SYNOPSIS

showcodactivationhistory [-M]

showcodactivationhistory [-V] -m *mail_address*

showcodactivationhistory [-V] [-u *user*] [-p *proxy* [-t *proxy_type*]] *target_url*

showcodactivationhistory -h

DESCRIPTION

showcodactivationhistory is a command to display the records regarding addition and deletion of CPU Activations keys in the CoD logs.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-m *mail_address*	Specifies the email address to which the CoD log is to be sent.
-p *proxy*	Specifies the proxy server to be used for transfers. The default transfer type is http, unless modified using the -t *proxy_type*. The value for proxy must be in the format *servername*[:*port*].
-t *proxy_type*	Use with the -p to specify proxy type as http, socks4, or socks5. The default is http.
-u *user*	Specifies the user name when logging in to a remote ftp or http server that requires authentication. Prompts for a password.
-V	Displays details of network activity, which might be helpful in diagnosing network or server problems.

OPERANDS

The following operands are supported.

target_url	Specifies the URL to be the output destination of the CoD logs. The following types of format are supported. http://*server*[:*port*]/*path*/*file* https://*server*[:*port*]/*path*/*file* ftp://*server*[:*port*]/*path*/*file* file:///media/usb_msd/*path*/*file*

EXAMPLES

EXAMPLE 1 Output the CoD logs.

```
XSCF> showcodactivationhistory
11/30/2012 01:42:41PM PST: Report Generated SPARC M10-1 SN: 843a996d
10/02/2012 02:08:49PM PST: Activation history initialized: PROC 0 cores
10/15/2012 01:36:13PM PST: Capacity added: PROC 2 cores
10/15/2012 01:46:13PM PST: Capacity added: PROC 2 cores
11/07/2012 01:36:23PM PST: Capacity deleted: PROC 2 cores
11/27/2012 01:46:23PM PST: Configuration backup created: PROC 2 cores
11/27/2012 21:26:22PM PST: Configuration restored: PROC 2 cores
11/28/2012 01:37:12PM PST: Capacity added: PROC 2 cores
11/28/2012 01:47:12PM PST: Capacity added: PROC 2 cores
11/30/2012 01:37:19PM PST: Capacity added: PROC 2 cores
11/30/2012 01:41:19PM PST: Capacity added: PROC 2 cores
11/30/2012 01:42:41PM PST: Summary: PROC 10 cores
Signature: yU27yb0oth41UL7hleA2vHL7S1aX4pmkBTIxesD1XEs
```

EXAMPLE 2 Sending the CoD logs to the specified user via email.

```
XSCF> showcodactivationhistory -m sysadmin@comany.com
XSCF>
```

EXAMPLE 3 Sending the CoD logs to the specified URL via FTP.

```
XSCF> showcodactivationhistory -u admin ftp://somehost/tmp/
history.txt
Password:
file transfer complete
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **setcod**(8), **setsmtp**(8), **showcod**(8), **showcodactivation**(8), **showcodusage**(8)

NAME

showcodusage - Display the usage information of CPU core resources.

SYNOPSIS

showcodusage [-v] [-M] [-p {resource|ppar|all}]

showcodusage -h

DESCRIPTION

showcodusage is a command to display the usage information of CPU core resource.

If showcodusage is executed with nothing specified, the overview of the CPU Activation in use and installed is displayed with the current status of CPU core resources.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng	Enables execution for all physical partitions (PPARs).
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-p all	Displays all usage information of CPU core resources.
-p ppar	It displays the usage information of CPU core resources for each PPAR. Number of CPU core resources used in the PPAR, the number of CPU core resources installed in the PPAR and the number of CPU core activations allotted to the PPAR are included in the displayed information.
-p resource	Usage information of CPU core resources is displayed according to the respective types.
-v	Displays detailed information.

EXTENDED DESCRIPTION

- If `showcodusage -p resource` is used, the usage information of CPU core resources regarding the system is displayed.

`Resource`	Type of usable CPU core resources (processor) The following parameters are displayed.	
	`PROC`	CPU core resources. The unit is cores.
`In Use`	Number of the CPU core resources currently used in the system If communication with Hypervisor cannot be established, the number of the CPU core resources currently used in the system becomes 0.	
`Installed`	Number of the CPU core resources installed to the system	
`COD Permitted`	Number of the CPU Activations which have been installed	
`Status`	Any of the following CoD statuses	
	`OK`	Indicates that there is enough number of CPU Activations for the CPU core resources in use. Moreover, the number of currently unused CPU Activations is also displayed.
	`VIOLATION`	There are some violation of CPU Activation. The number of the CPU core resources in use which exceeds the number of the CPU Activations available is displayed. May occur if the total number of used CPU core resources exceeds the total number of CPU Activations, that can be allotted to the whole system.

- If `showcodusage -p ppar` is used, the following usage information of CPU core resources regarding each PPAR is displayed.

`PPAR-ID/ Resource`	Each PPAR and type of CPU core resources The CPU core resources with `Unused` displayed are those not used in PPAR.
`In Use`	Number of the CPU core resources currently used in PPAR If connection cannot be established with the hypervisor, the number of CPU core resources that is presently used in the PPAR will be 0.
`Installed`	Number of the CPU core resources installed to PPAR

`Assigned`	Number of the CPU core resources assigned to PPAR
`Unused`	Number of currently unused CPU Activations in the system.

Note – The value of `In Use` that is displayed by `showcodusage` may not be the latest, depending on the timing of the XSCF update. It may take up to 20 minutes for the value of `In Use` to be updated to the latest one. If the value of `In Use` is different from what you expected, execute `showcodusage` again to check the value.

EXAMPLES

Users with privileges regarding the platform can display the overview of the usage information on both resources and PPAR. Users with privileges regarding PPAR can only display the overview of the key information for which they have the privilege and reports of the CPU core Activation not in use.

EXAMPLE 1 Display the usage information of CPU core resources for each resource type.

```
XSCF> showcodusage -p resource
Resource In Use Installed CoD Permitted Status
-------- ------ --------- ------------- ------
PROC          4        16            16 OK: 12 cores available

Note:
  Please confirm the value of the "In Use" by the ldm command of Oracle
   VM Server for SPARC.

  The XSCF may take up to 20 minutes to reflect the "In Use" of logical
   domains.
```

EXAMPLE 2 Display the usage information of CPU core resources for each PPAR in SPARC M10-4S.

```
XSCF> showcodusage -p ppar
PPAR-ID/Resource In Use Installed Assigned
---------------- ------ --------- --------------
0 - PROC              0        64        64 cores
1 - PROC              0         0        64 cores
2 - PROC              0         0         0 cores
3 - PROC              0         0         0 cores
4 - PROC              0         0         0 cores
5 - PROC              0         0         0 cores
6 - PROC              0         0         0 cores
7 - PROC              0         0         0 cores
8 - PROC              0         0         0 cores
9 - PROC              0         0         0 cores
10 - PROC             0         0         0 cores
11 - PROC             0         0         0 cores
12 - PROC             0         0         0 cores
13 - PROC             0         0         0 cores
14 - PROC             0         0         0 cores
15 - PROC             0         0         0 cores
```

```
Unused - PROC         0        64      128 cores

Note:
  Please confirm the value of the "In Use" by the ldm command of Oracle
   VM Server for SPARC.

  The XSCF may take up to 20 minutes to reflect the "In Use" of logical
   domains.
```

EXAMPLE 3 Display the usage information of CPU core resources for each resource and PPAR (In case the following command is executed by a user who holds platform privileges).

```
XSCF> showcodusage -p all
Resource In Use Installed CoD Permitted Status
-------- ------ --------- ------------ ------
PROC         63       160           160 OK: 97 cores available
PPAR-ID/Resource In Use Installed Assigned
---------------- ------ --------- --------------
0 - PROC             15        64       32 cores
1 - PROC             16        32       32 cores
2 - PROC             16        32       32 cores
3 - PROC             16        32       32 cores
4 - PROC              0         0        0 cores
5 - PROC              0         0        0 cores
6 - PROC              0         0        0 cores
7 - PROC              0         0        0 cores
8 - PROC              0         0        0 cores
9 - PROC              0         0        0 cores
10 - PROC             0         0        0 cores
11 - PROC             0         0        0 cores
12 - PROC             0         0        0 cores
13 - PROC             0         0        0 cores
14 - PROC             0         0        0 cores
15 - PROC             0         0        0 cores
Unused - PROC         0         0       32 cores

Note:
  Please confirm the value of the "In Use" by the ldm command of Oracle
   VM Server for SPARC.

  The XSCF may take up to 20 minutes to reflect the "In Use" of logical
   domains.
```

EXAMPLE 4 Display the usage information of CPU core resources for each resource and PPAR (In case of a CPU core activation violation on SPARC M10-4S).

```
XSCF> showcodusage -p all
Resource In Use Installed CoD Permitted Status
-------- ------ --------- ------------ ------
PROC         63       160            61 VIOLATION: 2 cores in excess
PPAR-ID/Resource In Use Installed Assigned
```

```
---------------- ------ --------- --------------
0 - PROC             15        64       15 cores
1 - PROC             16        32       16 cores
2 - PROC             16        32       15 cores
3 - PROC             16        32       15 cores
4 - PROC              0         0        0 cores
5 - PROC              0         0        0 cores
6 - PROC              0         0        0 cores
7 - PROC              0         0        0 cores
8 - PROC              0         0        0 cores
9 - PROC              0         0        0 cores
10 - PROC             0         0        0 cores
11 - PROC             0         0        0 cores
12 - PROC             0         0        0 cores
13 - PROC             0         0        0 cores
14 - PROC             0         0        0 cores
15 - PROC             0         0        0 cores
Unused - PROC         0         0       -2 cores

Note:
  Please confirm the value of the "In Use" by the ldm command of Oracle
   VM Server for SPARC.

  The XSCF may take up to 20 minutes to reflect the "In Use" of logical
   domains.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **setcod**(8), **showcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8)

NAME

showconsolepath - Displays the information of the domain console that is currently connected to the physical partition (PPAR).

SYNOPSIS

showconsolepath -a

showconsolepath -p *ppar_id*

showconsolepath -h

DESCRIPTION

showconsolepath is a command to display the information of the domain consoles currently connected to PPAR.

The following contents are displayed.

User	XSCF user accounts connected to the domain consoles
PPAR-ID	PPAR ID
RO/RW	Type of domain console
	ro Read-only console rw Writable console
escape	Escape sign set in console
Date	Date and time when XSCF connected to the domain console

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the information of the consoles connected to all accessible PPARs.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-p *ppar_id*	Specifies the PPAR-ID to display the information. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

EXTENDED DESCRIPTION

To one PPAR, just one writable console can be connected while multiple read-only consoles can be connected.

EXAMPLES

EXAMPLE 1 Display the information of the consoles connected to all accessible PPARs.

```
XSCF> showconsolepath -a
User            PPAR-ID  ro/rw  escape   Date
nakagawa        00       rw     @        Fri Jul 29 21:23:34
hana            00       ro     #        Fri Jul 29 09:49:12
k-okano         00       ro     #        Fri Jul 29 18:21:50
yuuki           01       rw     |        Fri Jul 29 10:19:18
uchida          01       ro     *        Fri Jul 29 13:30:41
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

console(8), **sendbreak**(8)

NAME

showdate - Displays the date and time of the XSCF clock.

SYNOPSIS

showdate [-u]

showdate -h

DESCRIPTION

showdate is a command to display the date and time of the XSCF clock.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, auditadm, auditop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-u	Specifies the time in the Universal Coordinated Time (UTC). If omitted, the local time is applicable.

EXTENDED DESCRIPTION

You can set the date and time of the XSCF clock by using setdate(8).

EXAMPLES

EXAMPLE 1 Display the current time in local time (JST).

```
XSCF> showdate
Sat Oct 20 14:53:00 JST 2012
```

EXAMPLE 2 Display the current time in UTC.

```
XSCF> showdate -u
Sat Oct 20 05:56:15 UTC 2012
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setdate(8), **settimezone**(8), **showtimezone**(8)

NAME

showdateinfo - Displays the dates and times of the XSCF and logical domains.

SYNOPSIS

showdateinfo -p *ppar_id* [-i *index*] [-M]

showdateinfo -h

DESCRIPTION

showdateinfo is a command to display the dates and times of the clocks of the XSCF and logical domains. Execute this command before start of the PPAR to check whether the dates and times of logical domains are correct. After start of the PPAR, this command displays only the date and time of the XSCF, and does not display the dates and times of logical domains.

PPAR-ID	PPAR ID
config_name	Logical domain configuration name
Date	Displays the dates and times of the XSCF and logical domains.

Dates and times are displayed in the time of the XSCF time zone.

When the date and time of the XSCF have reverted back to the initial values (year 2001 or earlier) due to maintenance replacement, "*" is displayed at the beginning of the line. Check the XSCF time and NTP setting.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, pparadm, pparmgr, pparop, fieldeng

OPTIONS

The following options are supported.

-p *ppar_id*	Specifies the PPAR-ID for which the dates and times of logical domains are displayed. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
-i *index*	Specifies the management number of the logical domain configuration. You can confirm the management number by showdomainconfig(8). You can specify an integer from 1 to 8.
-M	Displays text one screen at a time.
-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

If the -i *index* option is omitted, the dates and times of the logical domain to be started at the next PPAR start are displayed. You can confirm the logical domain configuration to be used at the next PPAR start by showdomainconfig(8).

EXAMPLES

EXAMPLE 1 Display the dates and times of the logical domains of PPAR-ID 0 to be started

next time and the date and time of the XSCF.

```
XSCF> showdateinfo -p 0
PPAR-ID     : 0
config_name : 4guest_config

XSCF information:
-----------------
  XSCF
    Date    : Aug 03 19:56:16 JST 2017

Logical domains information:
----------------------------
  primary
    Date    : Aug 03 19:56:17 JST 2017
  guest_0
    Date    : Aug 03 19:57:27 JST 2017
  guest_1
    Date    : Aug 03 19:57:27 JST 2017
  guest_2
    Date    : Aug 03 19:57:27 JST 2017
XSCF>
```

EXAMPLE 2 Display the factory-default date and time of PPAR-ID 0.

```
XSCF> showdateinfo -p 0 -i 1
PPAR-ID     : 0
config_name : factory-default

XSCF information:
-----------------
  XSCF
    Date    : Aug 03 19:57:44 JST 2017

Logical domains information:
----------------------------
  primary
    Date    : Aug 03 19:57:45 JST 2017
XSCF>
```

EXAMPLE 3 Only the date and time of XSCF is displayed because the PPAR has already been started.

```
XSCF> showdateinfo -p 0
PPAR-ID     : 0
config_name : 4guest_config

XSCF information:
-----------------
  XSCF
    Date    : Aug 03 19:56:16 JST 2017

Logical domains information:
```

```
---------------------------
This PPAR is powered on.
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showdomainconfig(8)

NAME

showdateoffset - Displays the difference between the system time and the time of each physical partition (PPAR).

SYNOPSIS

showdateoffset -p *ppar_id*

showdateoffset [-a]

showdateoffset -h

DESCRIPTION

showdateoffset is a command to display the difference between the system time managed by the XSCF clock and the time managed by each PPAR clock, by seconds.

In XSCF, the difference between the system time and the time of each PPAR is stored. If system time has been changed either by setdate(8) or by synchronization with an NTP server, the difference between the time of each PPAR and the changed system time is updated.

The difference of the time is retained even if PPAR or the system is restarted.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the differences form the times of all PPARs. Even if the option is omitted, the difference from the times of all PPARs as in the case that the -a option is specified.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-p *ppar_id*	Specifies the PPAR-ID to display the difference from the system time. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

EXAMPLES

EXAMPLE 1 Display the difference between the system time and the time of PPAR-ID 1.

```
XSCF> showdateoffset -p 1
PPAR-ID        Domain Date Offset
01             0 sec
```

EXAMPLE 2 Display the differences between the system time and the times of all PPARs.

```
XSCF> showdateoffset -a
PPAR-ID         Domain Date Offset
00              0 sec
01              0 sec
02              0 sec
03              0 sec
04              0 sec
05              0 sec
06              0 sec
07              0 sec
08              0 sec
09              0 sec
10              0 sec
11              0 sec
12              0 sec
13              0 sec
14              0 sec
15              0 sec
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

resetdateoffset(8)

NAME

showdomainconfig - Displays the configuration information of the logical domain of the specified physical partition (PPAR).

SYNOPSIS

showdomainconfig -p *ppar_id* [-M]

showdomainconfig -h

DESCRIPTION

showdomainconfig is a command to display the logical domain configuration information.

The following setting values are displayed.

Index	Administration number in the XSCF of logical domain configuration
PPAR-ID	PPAR ID
Booting config (Current)	Logical domain configuration name used in the PPAR currently in operation
Booting config(Next)	Logical domain configuration name used next time when PPAR is started
config_name	Logical domain configuration name
date_created	Date and time to create logical domain configuration
domains	Number of the logical domains included in logical domain configuration **Note –** The number of logical domains, which were in the bound or active state when you used the ldm add-spconfig command to save the logical domain configuration information to the XSCF, is displayed.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, fieldeng, pparadm, pparmgr, pparop

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.
`-p` *ppar_id*	Specifies the PPAR-ID to display the logical domain configuration information.Depending on the system configuration, you can specify only one integer from 0 to 15 for *ppar_id*.

EXTENDED DESCRIPTION

If the logical domain configuration information has been recovered by the recovery mode of Oracle VM Server for SPARC, the `[degraded]` keyword is added at the end of logical domain configuration information name, displayed by `Booting config (Current)`.

EXAMPLES

EXAMPLE 1 Display the logical domain configuration information set in PPAR-ID 0.

```
XSCF> showdomainconfig -p 0
PPAR-ID     :0
Booting config
 (Current)  :ldm-set1
 (Next)     :ldm-set2
--------------------------------------------------------------------------------
Index       :1
config_name :factory-default
domains     :1
date_created:-
--------------------------------------------------------------------------------
Index       :2
config_name :ldm-set1
domains     :8
date_created:'2012-08-08 11:34:56'
--------------------------------------------------------------------------------
Index       :3
config_name :ldm-set2
domains     :20
date_created:'2012-08-09 12:43:56'
--------------------------------------------------------------------------------
Index       :4
config_name :initial
domains     :256
date_created:'2012-08-08 11:34:56'
XSCF>
```

EXAMPLE 2 The following is an example of the logical domain configuration information

that is recovered by the Oracle VM Server for SPARC recovery mode.

```
XSCF> showdomainconfig -p 0
PPAR-ID     :0
Booting config
 (Current)  :recovery-resource [degraded]
 (Next)     :recovery-resource
--------------------------------------------------------------------------------
Index       :1
config_name :factory-default
domains     :1
date_created:-
--------------------------------------------------------------------------------
Index       :2
config_name :recovery-resource
domains     :4
date_created:'2014-06-19 14:53:38'
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setdomainconfig(8)

NAME

showdomainstatus - Displays the status of the current logical domain.

SYNOPSIS

showdomainstatus `-p` *ppar_id* [`-v`] [`-M`] [`-g` *domainname*]

showdomainstatus `-h`

DESCRIPTION

`showdomainstatus` is a command to display the status of the current logical domain.

The statuses to be displayed are below.

- `Logical Domain Name`

  Host name of logical domain. If the number of characters in the host name exceeds 21, the characters after the 21st characters are not displayed. If the logical domain has not been started, "`-`" is displayed.

- `Status`

  Operating status of the current logical domain. The following statuses are displayed.

`Host Stopped`	The logical domain is stopped
`Solaris booting`	In the status in which the Oracle Solaris of the logical domain is booting
`Solaris running`	In the status in which the Oracle Solaris of the logical domain is running
`Solaris halting`	In the status in which the Oracle Solaris of the logical domain is executing the shutdown processing
`Solaris suspended`	In the status in which the Oracle Solaris of the logical domain is suspended
`Solaris powering down`	In the status in which the Oracle Solaris of the logical domain is executing the power-off processing
`Solaris rebooting`	In the status in which the Oracle Solaris of the logical domain is being reset
`Solaris panicking`	In the status in which a panic is occurring in the Oracle Solaris of the logical domain
`Solaris debugging`	In the status in which the kmdb prompt of the logical domain is stopped
	In the status in which Kernel Debug is running
`OpenBoot initializing`	In the status in which the OpenBoot PROM of the logical domain is executing the initialization processing

OpenBoot Running	In the status in which the OpenBoot PROM of the logical domain has completed initialization or the operation is stopped by the ok prompt
OpenBoot Primary Boot Loader	In the status in which the Oracle Solaris of the logical domain is loading
OpenBoot Running OS Boot	In the status in which the Oracle Solaris of the logical domain is in transition
OS Started. No state support	In the status in which the Oracle Solaris of the logical domain has been transited
OpenBoot Running Host Halted	In the status in which the Oracle Solaris of the logical domain is executing init 0
OpenBoot Exited	In the status in which the ok prompt of the logical domain is executing reset-all
OpenBoot Host Received Break	In the status in which the Oracle Solaris of the logical domain called enter service
OpenBoot Failed	In the status in which an error occurred in the initialization of the logical domain by OpenBoot PROM
Unknown	In the status in which the host name matching that of the logical domain specified by the option by the user is not found and unknown Includes the state when add-spconfig had not been executed by Logical Domains (LDoms) Manager and the case when add-spconfig had been executed by Logical Domains (LDoms) Manager while the logical domain was in the unbind state.
-	In the status in which no physical partition (PPAR) is defined

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-g` *domainname* — Specifies the host name of the logical domain to be displayed. If the -g option is omitted, the information of all logical domains under the PPAR to be displayed is displayed.

Up to 255 characters can be used to specify *domainname*. To include "#" in *domainname*, specify a backslash (\) just before it like "\#". To include ";", specify a backslash (\) just before it like "\;". To include "(", specify a backslash (\) just before it like "\(". To include ")", specify a backslash (\) just before it like "\)". To include a symbol, specify it by enclosing the entire value in single quotation marks (') or double quotation marks ("). (e.g. 'guest01').

`-h` — Displays the usage. Specifying this option with another option or operand causes an error.

`-M` — Displays text one screen at a time.

`-p` *ppar_id* — Specifies the PPAR-ID to display the status. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

`-v` — Displays detailed information. The ID of the logical domain (hexadecimal notation) will also be displayed.

EXTENDED DESCRIPTION

When changing the configuration of logical domains, render the state of all logical domains to either "active" or "bound" and then execute the `ldm add-spconfig` command on the control domain to store the latest configuration information in XSCF.

In case there is even one logical domain which was not in either "active" or "bound" state when configuration information was stored in XSCF, if that logical domain was specified with the `-g` option, any of the following symptoms will occur:

- The state of the logical domain will be "Unknown".
- A wrong logical domain name will be displayed.

EXAMPLES

EXAMPLE 1 Display the statuses of all logical domains on PPAR-ID 0.

```
XSCF> showdomainstatus -p 0
Logical Domain Name   Status
primary               Solaris running
guest00               Solaris running
guest01               Solaris booting
guest02               Solaris powering down
guest03               Solaris panicking
```

```
guest04              Shutdown Started
guest05              OpenBoot initializing
guest06              OpenBoot Primary Boot Loader
```

EXAMPLE 2 Display the statuses of the logical domain whose name is guest01 on PPAR-ID 0.

```
XSCF> showdomainstatus -p 0 -g guest01
Logical Domain Name   Status
guest01               Solaris powering down
```

EXAMPLE 3 Display detailed information of the logical domain guest01, which is located on PPAR-ID 0.

```
XSCF> showdomainstatus -p 0 -v -g guest01
GID      Logical Domain Name   Status
00000002 guest01               Solaris powering down
```

EXAMPLE 4 Displays the status of the logical domain named as guest01 on PPAR-ID 0 (no PSB is assigned to PPAR).

```
XSCF> showdomainstatus -p 0 -g guest01
Logical Domain Name   Status
-                     -
PPAR 0 is not configured.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showpparstatus(8)

NAME

showdualpowerfeed - Displays the status of the dual power feed mode.

SYNOPSIS

showdualpowerfeed

showdualpowerfeed `-h`

DESCRIPTION

`showdualpowerfeed` is a command to display the status of the dual power feed mode.

Note – The SPARC M10 system and the SPARC M12-1 each have two mounted power supply units. Even when the dual power feed function is set to enabled/disabled, the setting will not make any changes to the system behavior in the redundant configuration. The function for setting dual power feed is used as a "memo" for the system administrator to check the current status.
The SPARC M12-2/M12-2S has four mounted power supply units. In cases of dual power feed, each power feed system consists of two power supply units. For details, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

The dual power feed mode can be set by `setdualpowerfeed`(8).

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 On the SPARC M10-1, displays the current setting of dual power feed mode.

```
XSCF> showdualpowerfeed
BB#00: Dual power feed is enabled.
```

EXAMPLE 2 On the SPARC M10-4S (with crossbar boxes), displays the current setting of dual power feed mode.

```
XSCF> showdualpowerfeed
BB#00:Dual power feed is disabled.
BB#01:Dual power feed is disabled.
BB#02:Dual power feed is disabled.
BB#03:Dual power feed is disabled.
BB#04:Dual power feed is disabled.
BB#05:Dual power feed is disabled.
BB#06:Dual power feed is disabled.
BB#07:Dual power feed is disabled.
```

```
BB#08:Dual power feed is disabled.
BB#09:Dual power feed is disabled.
BB#10:Dual power feed is disabled.
BB#11:Dual power feed is disabled.
BB#12:Dual power feed is disabled.
BB#13:Dual power feed is disabled.
BB#14:Dual power feed is disabled.
BB#15:Dual power feed is disabled.
XBBOX#80:Dual power feed is disabled.
XBBOX#81:Dual power feed is disabled.
XBBOX#82:Dual power feed is disabled.
XBBOX#83:Dual power feed is disabled.
```

EXAMPLE 3 On the SPARC M10-4S (without crossbar boxes), displays the current setting of dual power feed mode.

```
XSCF> showdualpowerfeed
BB#00:Dual power feed is enabled.
BB#01:Dual power feed is enabled.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setdualpowerfeed(8)

NAME

showemailreport - Displays the settings data of the e-mail report.

SYNOPSIS

showemailreport [-v]

showemailreport -h

DESCRIPTION

showemailreport is a command to display the settings data of the e-mail report.

If it is used without specifying any options, the settings data of the current e-mail report is displayed.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-v	Displays detailed information.

EXAMPLES

EXAMPLE 1 Display the settings of the e-mail report.

```
XSCF>  showemailreport
EMail Reporting: enabled
Email Recipient Address: admin@company.com, adm2@company.com
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setemailreport(8)

NAME

showenvironment - Displays the intake-air temperature, temperature sensor information, voltage sensor information, and fan rotation information of the system.

SYNOPSIS

showenvironment [-M] [temp|volt|Fan|power|air]

showenvironment -h

DESCRIPTION

showenvironment is a command to display the following information.

The following information is displayed.

Environment information	Intake-air temperature of the SPARC M12/M10 system
Temperature information	Intake-air temperature of the SPARC M12/M10 system and air temperature information of each component You can confirm the air temperature information of the following components. SPARC M10-1 Mother board unit (MBU), CPU, DIMM, SW, SAS SPARC M10-4/M10-4S (without crossbar box) CMUU, CMUL, CPU, DIMM, SW, SAS, XBChip (BB) SPARC M10-4S (with crossbar box) CMUU, CMUL, CPU, DIMM, SW, SAS, XBChip (BB), XBChip (XB-Box) SPARC M12-1 Mother board unit (MBU), CPU, DIMM, SW, SAS, GIGALAN SPARC M12-2/M12-2S (without crossbar box) CMUU, CMUL, CPU, DIMM, SW, SAS, GIGALAN, SAS-EXP, XBChip (BB) SPARC M12-2S (with crossbar box) CMUU, CMUL, CPU, DIMM, SW, SAS, GIGALAN, SAS-EXP, XBChip (BB), XBChip (XB-Box)
Voltage information	Voltage sensor value Displays the margin settings information if voltage margin is set.
Fan rotation information	Rotation status and rotation speed of fan
Power monitor	Power consumption information
Air flow	Exhaust-air amount of the SPARC M12/M10 system

Privileges

To execute this command, any of the following privileges is required.

`useradm`, `platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.

OPERANDS

The following operands are supported.

`temp|volt|Fan|power|air`	Specifies the type of the information to be displayed. Any of the following types can be specified. If omitted, the information of the intake-air temperature of the SPARC M12/M10 system is displayed.

`temp`	Displays the temperature information.
`volt`	Displays the voltage information.
`Fan`	Displays the rotation information of fan.
`power`	Displays the power consumption information.
`air`	Displays the exhaust-air amount of the system.

EXTENDED DESCRIPTION

The information displayed by the `power` and `air` operands does not include the information of the PCI Expansion Unit or the peripheral I/O devices.

EXAMPLES

EXAMPLE 1 Display the intake-air temperature of the system.

```
XSCF> showenvironment
BB#00
    Temperature:30.71C
BB#01
    Temperature:29.97C
```

EXAMPLE 2 Display the temperature information of the system and each component in SPARC M10-4S (with crossbar box).

```
XSCF> showenvironment temp
BB#00
    Temperature:30.71C
    CMUU
        CPU#0
            CPU#0:45.21C
```

```
            CPU#0:45.42C
            CPU#0:43.24C
            CPU#0:47.11C
        CPU#1
            CPU#1:45.21C
            CPU#1:45.42C
            CPU#1:43.24C
            CPU#1:47.11C
        MEM#00A:30.75C
        MEM#01A:31.25C
        MEM#02A:31.50C
        MEM#03A:31.50C
        MEM#04A:31.25C
        MEM#05A:31.00C
        MEM#06A:31.75C
        MEM#07A:31.25C
        MEM#10A:30.62C
        MEM#11A:30.50C
        MEM#12A:29.75C
        MEM#13A:30.12C
        MEM#14A:30.50C
        MEM#15A:30.38C
        MEM#16A:30.00C
        MEM#17A:30.25C
    CMUL
        CPU#0
            CPU#0:45.21C
            CPU#0:45.42C
            CPU#0:43.24C
            CPU#0:47.11C
        CPU#1
            CPU#1:45.21C
            CPU#1:45.42C
            CPU#1:43.24C
            CPU#1:47.11C
        MEM#00A:30.75C
        MEM#01A:31.25C
        MEM#02A:31.50C
        MEM#03A:31.50C
        MEM#04A:31.25C
        MEM#05A:31.00C
        MEM#06A:31.75C
        MEM#07A:31.25C
        MEM#10A:30.62C
        MEM#11A:30.50C
        MEM#12A:29.75C
        MEM#13A:30.12C
        MEM#14A:30.50C
        MEM#15A:30.38C
        MEM#16A:30.00C
        MEM#17A:30.25C
        SW#0:45.55C
        SW#1:45.55C
        SW#2:45.55C
```

```
            SW#3:45.55C
            SAS#0:52.23C
        XBU#0
            XB#0
                XB#0:52.12C
                XB#0:52.12C
        XBU#1
            XB#0
                XB#0:52.12C
                XB#0:52.12C
    BB#01
        Temperature:30.71C
        CMUU
            CPU#0
                CPU#0:45.21C
                CPU#0:45.42C
                CPU#0:43.24C
                CPU#0:47.11C
            CPU#1
                CPU#1:45.21C
                CPU#1:45.42C
                CPU#1:43.24C
                CPU#1:47.11C
            MEM#00A:30.75C
            MEM#01A:31.25C
            MEM#02A:31.50C
            MEM#03A:31.50C
            MEM#04A:31.25C
            MEM#05A:31.00C
            MEM#06A:31.75C
            MEM#07A:31.25C
            MEM#10A:30.62C
            MEM#11A:30.50C
            MEM#12A:29.75C
            MEM#13A:30.12C
            MEM#14A:30.50C
            MEM#15A:30.38C
            MEM#16A:30.00C
            MEM#17A:30.25C
        CMUL
            CPU#0
                CPU#0:45.21C
                CPU#0:45.42C
                CPU#0:43.24C
                CPU#0:47.11C
            CPU#1
                CPU#1:45.21C
                CPU#1:45.42C
                CPU#1:43.24C
                CPU#1:47.11C
            MEM#00A:41.00C
            MEM#01A:40.50C
            MEM#02A:40.50C
            MEM#03A:40.50C
```

```
            MEM#04A:40.50C
            MEM#05A:39.25C
            MEM#06A:40.75C
            MEM#07A:41.25C
            MEM#10A:39.50C
            MEM#12A:39.75C
            MEM#13A:40.25C
            MEM#14A:40.75C
            MEM#15A:40.25C
            MEM#16A:39.75C
            MEM#17A:38.50C
            SW#0:45.55C
            SW#1:45.55C
            SW#2:45.55C
            SW#3:45.55C
            SAS#0:52.23C
        XBU#0
            XB#0
                XB#0:52.12C
                XB#0:52.12C
        XBU#1
            XB#0
                XB#0:52.12C
                XB#0:52.12C
    XBBOX#80
        Temperature:30.71C
        XBU#0
            XB#0
                XB#0:52.12C
                XB#0:52.12C
            XB#1
                XB#1:52.12C
                XB#1:52.12C
    XBBOX#81
        Temperature:30.71C
        XBU#0
            XB#0
                XB#0:52.12C
                XB#0:52.12C
            XB#1
                XB#1:52.12C
                XB#1:52.12C
    XSCF>
```

EXAMPLE 3 Display the temperature information of the system and each component in SPARC M12-2S (with crossbar box).

```
XSCF> showenvironment temp
BB#00
    Temperature:28.56C
    CMUU
        CPU#0
            CPU#0:42.75C
```

```
            CPU#0:45.00C
            CPU#0:47.50C
            CPU#0:43.25C
        MEM#00A:36.12C
        MEM#01A:35.62C
        MEM#02A:36.44C
        MEM#03A:36.38C
        MEM#04A:36.00C
        MEM#05A:34.31C
        MEM#06A:36.69C
        MEM#07A:34.62C
    CMUL
        CPU#0
            CPU#0:48.50C
            CPU#0:48.75C
            CPU#0:40.75C
            CPU#0:46.25C
        MEM#00A:37.00C
        MEM#01A:36.75C
        MEM#02A:37.75C
        MEM#03A:37.50C
        MEM#04A:36.25C
        MEM#05A:34.00C
        MEM#06A:37.25C
        MEM#07A:36.75C
        SAS#0:35.75C
        SAS#1:35.25C
        GIGALAN#0:35.62C
        GIGALAN#1:35.44C
        SW#0:36.81C
        SW#1:35.00C
        SW#2:33.81C
        SW#3:34.25C
        SASEXP:35.88C
    XBU#0
        XB#0
            XB#0:37.52C
            XB#0:38.35C
    XBU#1
        XB#0
            XB#0:35.94C
            XB#0:37.18C
BB#01
    Temperature:29.12C
    CMUU
        CPU#0
            CPU#0:42.75C
            CPU#0:44.00C
            CPU#0:47.00C
            CPU#0:43.00C
        MEM#00A:32.56C
        MEM#01A:31.94C
        MEM#02A:32.75C
        MEM#03A:32.62C
```

```
            MEM#04A:32.19C
            MEM#05A:30.56C
            MEM#06A:32.75C
            MEM#07A:30.75C
        CMUL
            CPU#0
                CPU#0:48.00C
                CPU#0:48.50C
                CPU#0:40.50C
                CPU#0:46.25C
            MEM#00A:33.75C
            MEM#01A:33.50C
            MEM#02A:34.50C
            MEM#03A:34.25C
            MEM#04A:33.00C
            MEM#05A:30.25C
            MEM#06A:33.50C
            MEM#07A:32.69C
            SAS#0:34.44C
            SAS#1:33.62C
            GIGALAN#0:33.81C
            GIGALAN#1:33.44C
            SW#0:35.31C
            SW#1:33.44C
            SW#2:31.62C
            SW#3:32.00C
            SASEXP:34.19C
        XBU#0
            XB#0
                XB#0:35.59C
                XB#0:36.42C
        XBU#1
            XB#0
                XB#0:33.87C
                XB#0:35.04C
    XBBOX#80
        Temperature:27.06C
        XBU#0
            XB#0
                XB#0:26.28C
                XB#0:26.28C
            XB#1
                XB#1:26.46C
                XB#1:26.02C
        XBU#1
            XB#0
                XB#0:26.81C
                XB#0:26.63C
            XB#1
                XB#1:26.54C
                XB#1:26.37C
    XBBOX#81
        Temperature:26.94C
        XBU#0
```

```
            XB#0
                XB#0:26.28C
                XB#0:25.85C
            XB#1
                XB#1:26.11C
                XB#1:26.28C
        XBU#1
            XB#0
                XB#0:26.54C
                XB#0:26.46C
            XB#1
                XB#1:26.72C
                XB#1:26.54C
XSCF>
```

EXAMPLE 4 Display the voltage information of the system and each component in SPARC M10-1.

```
XSCF> showenvironment volt
MBU
    0.89V Power Supply Group:0.891V
    0.90V#0 Power Supply Group:0.898V
    0.90V#1 Power Supply Group:0.894V
    0.90V#2 Power Supply Group:1.023V
    0.90V#3 Power Supply Group:1.024V
    1.0V#0 Power Supply Group:1.038V
    1.0V#1 Power Supply Group:1.041V
    1.35V#0 Power Supply Group:1.346V
    1.35V#1 Power Supply Group:1.348V
    1.5V#0 Power Supply Group:1.539V
    1.5V#1 Power Supply Group:1.506V
    1.8V#0 Power Supply Group:1.804V
PSUBP
    3.3V Power Supply Group:3.300V
    5.0V Power Supply Group:5.000V
XSCF>
```

EXAMPLE 5 Display the voltage information of the system and each component in SPARC M10-4S (with crossbar box).

```
XSCF> showenvironment volt
BB#00
    CMUU
        0.89V-0 Power Supply Group:0.892V
        0.89V-1 Power Supply Group:0.892V
        0.90V#0-0 Power Supply Group:0.930V
        0.90V#0-1 Power Supply Group:0.929V
        0.90V#1-0 Power Supply Group:0.898V
        0.90V#1-1 Power Supply Group:0.899V
        0.90V#2-0 Power Supply Group:0.912V
        0.90V#2-1 Power Supply Group:0.926V
        0.90V#3-0 Power Supply Group:0.914V
```

```
        0.90V#3-1 Power Supply Group:0.924V
        1.35V#0-0 Power Supply Group:1.349V
        1.35V#0-1 Power Supply Group:1.349V
        1.35V#1-0 Power Supply Group:1.349V
        1.35V#1-1 Power Supply Group:1.349V
        1.5V-0 Power Supply Group:1.639V
        1.5V-1 Power Supply Group:1.632V
        5.0V#0 Power Supply Group:5.002V
        5.0V#1 Power Supply Group:4.972V
        5.0V#2 Power Supply Group:4.975V
        5.0V#3 Power Supply Group:4.967V
    CMUL
        0.89V-0 Power Supply Group:0.893V
        0.89V-1 Power Supply Group:0.892V
        0.90V#0-0 Power Supply Group:0.929V
        0.90V#0-1 Power Supply Group:0.930V
        0.90V#1-0 Power Supply Group:0.897V
        0.90V#1-1 Power Supply Group:0.899V
        0.90V#2-0 Power Supply Group:0.933V
        0.90V#2-1 Power Supply Group:0.943V
        0.90V#3-0 Power Supply Group:0.931V
        0.90V#3-1 Power Supply Group:0.943V
        0.9V#0 Power Supply Group:0.895V
        0.9V#1 Power Supply Group:0.894V
        1.0V#0 Power Supply Group:1.038V
        1.0V#1 Power Supply Group:1.039V
        1.35V#0-0 Power Supply Group:1.348V
        1.35V#0-1 Power Supply Group:1.348V
        1.35V#1-0 Power Supply Group:1.348V
        1.35V#1-1 Power Supply Group:1.346V
        1.5V-0 Power Supply Group:1.634V
        1.5V-1 Power Supply Group:1.632V
        1.5V Power Supply Group:1.497V
        1.8V#0 Power Supply Group:1.816V
        1.8V#1 Power Supply Group:1.814V
        3.3V#0 Power Supply Group:3.380V
        3.3V#1 Power Supply Group:3.390V
        5.0V#0 Power Supply Group:4.972V
        5.0V#1 Power Supply Group:4.982V
        5.0V#2 Power Supply Group:4.960V
        5.0V#3 Power Supply Group:4.960V
        5V_USB Power Supply Group:5.017V
    XBU#0
        0.85V Power Supply Group:0.852V
        0.9V Power Supply Group:0.945V
        1.5V Power Supply Group:1.587V
        3.3V Power Supply Group:3.328V
    XBU#1
        0.85V Power Supply Group:0.849V
        0.9V Power Supply Group:0.946V
        1.5V Power Supply Group:1.596V
        3.3V Power Supply Group:3.344V
    PSUBP
        5.0V Power Supply Group:5.037V
```

```
BB#01
    CMUU
        0.89V-0 Power Supply Group:0.892V
        0.89V-1 Power Supply Group:0.892V
        0.90V#0-0 Power Supply Group:0.930V
        0.90V#0-1 Power Supply Group:0.929V
        0.90V#1-0 Power Supply Group:0.898V
        0.90V#1-1 Power Supply Group:0.899V
        0.90V#2-0 Power Supply Group:0.912V
        0.90V#2-1 Power Supply Group:0.926V
        0.90V#3-0 Power Supply Group:0.914V
        0.90V#3-1 Power Supply Group:0.924V
        1.35V#0-0 Power Supply Group:1.349V
        1.35V#0-1 Power Supply Group:1.349V
        1.35V#1-0 Power Supply Group:1.349V
        1.35V#1-1 Power Supply Group:1.349V
        1.5V-0 Power Supply Group:1.639V
        1.5V-1 Power Supply Group:1.632V
        5.0V#0 Power Supply Group:5.002V
        5.0V#1 Power Supply Group:4.972V
        5.0V#2 Power Supply Group:4.975V
        5.0V#3 Power Supply Group:4.967V
    CMUL
        0.89V-0 Power Supply Group:0.893V
        0.89V-1 Power Supply Group:0.892V
        0.90V#0-0 Power Supply Group:0.929V
        0.90V#0-1 Power Supply Group:0.930V
        0.90V#1-0 Power Supply Group:0.897V
        0.90V#1-1 Power Supply Group:0.899V
        0.90V#2-0 Power Supply Group:0.933V
        0.90V#2-1 Power Supply Group:0.943V
        0.90V#3-0 Power Supply Group:0.931V
        0.90V#3-1 Power Supply Group:0.943V
        0.9V#0 Power Supply Group:0.895V
        0.9V#1 Power Supply Group:0.894V
        1.0V#0 Power Supply Group:1.038V
        1.0V#1 Power Supply Group:1.039V
        1.35V#0-0 Power Supply Group:1.348V
        1.35V#0-1 Power Supply Group:1.348V
        1.35V#1-0 Power Supply Group:1.348V
        1.35V#1-1 Power Supply Group:1.346V
        1.5V-0 Power Supply Group:1.634V
        1.5V-1 Power Supply Group:1.632V
        1.5V Power Supply Group:1.497V
        1.8V#0 Power Supply Group:1.816V
        1.8V#1 Power Supply Group:1.814V
        3.3V#0 Power Supply Group:3.380V
        3.3V#1 Power Supply Group:3.390V
        5.0V#0 Power Supply Group:4.972V
        5.0V#1 Power Supply Group:4.982V
        5.0V#2 Power Supply Group:4.960V
        5.0V#3 Power Supply Group:4.960V
        5V_USB Power Supply Group:5.017V
    PSUBP
```

```
        5.0V Power Supply Group:5.000V
    XBU
        0.85V Power Supply Group:0.850V
        0.9V Power Supply Group:0.900V
        1.5V Power Supply Group:1.500V
        3.3V Power Supply Group:3.300V
XBBOX#80
    XBU#0
        0.85V#0 Power Supply Group:0.850V
        0.85V#0 Power Supply Group:0.850V
        0.9V#0 Power Supply Group:0.900V
        0.9V#1 Power Supply Group:0.900V
        1.5V Power Supply Group:1.500V
        3.3V Power Supply Group:3.300V
XBBOX#81
    XBU#0
        0.85V#0 Power Supply Group:0.850V
        0.85V#0 Power Supply Group:0.850V
        0.9V#0 Power Supply Group:0.900V
        0.9V#1 Power Supply Group:0.900V
        1.5V Power Supply Group:1.500V
        3.3V Power Supply Group:3.300V
XSCF>
```

EXAMPLE 6 Display the voltage information of the system and each component in SPARC M12-2S (with crossbar box).

```
XSCF> showenvironment volt
BB#00
    CMUU
        0.9V#0 Power Supply Group:0.895V
        0.9V#1 Power Supply Group:0.911V
        1.0V#0 Power Supply Group:1.080V
        1.0V#1 Power Supply Group:1.080V
        1.0V#2 Power Supply Group:1.080V
        1.0V#3 Power Supply Group:1.079V
        1.0V#4 Power Supply Group:1.081V
        1.0V#5 Power Supply Group:0.993V
        1.0V#6 Power Supply Group:1.069V
        1.0V#7 Power Supply Group:1.011V
        1.2V#0 Power Supply Group:1.196V
        1.2V#1 Power Supply Group:1.196V
        1.5V#0 Power Supply Group:1.491V
        1.5V#1 Power Supply Group:1.498V
        2.5V#0 Power Supply Group:2.503V
    CMUL
        0.67V Power Supply Group:0.673V
        0.8V Power Supply Group:0.804V
        0.9V#0 Power Supply Group:0.896V
        0.9V#1 Power Supply Group:0.909V
        0.9V#2 Power Supply Group:0.925V
        0.9V#3 Power Supply Group:0.924V
        1.0V#0 Power Supply Group:1.080V
```

```
        1.0V#1 Power Supply Group:1.079V
        1.0V#2 Power Supply Group:1.079V
        1.0V#3 Power Supply Group:1.079V
        1.0V#4 Power Supply Group:1.081V
        1.0V#5 Power Supply Group:0.993V
        1.0V#6 Power Supply Group:1.069V
        1.0V#7 Power Supply Group:1.010V
        1.0V#8 Power Supply Group:1.025V
        1.0V#9 Power Supply Group:1.041V
        1.0V#10 Power Supply Group:1.044V
        1.05V Power Supply Group:1.048V
        1.2V#0 Power Supply Group:1.195V
        1.2V#1 Power Supply Group:1.195V
        1.2V#2 Power Supply Group:1.202V
        1.2V#3 Power Supply Group:1.204V
        1.5V#0 Power Supply Group:1.489V
        1.5V#1 Power Supply Group:1.496V
        1.8V#0 Power Supply Group:1.796V
        1.8V#1 Power Supply Group:1.795V
        2.5V#0 Power Supply Group:2.504V
        2.5V#1 Power Supply Group:2.505V
        3.3V#0 Power Supply Group:3.354V
        3.3V#1 Power Supply Group:3.371V
        3.3V#2 Power Supply Group:3.379V
        5.0V#0 Power Supply Group:5.075V
        5.0V#1 Power Supply Group:5.040V
        5V_MEDIA Power Supply Group:4.958V
        12V_MEDIA Power Supply Group:11.975V
    XBU#0
        0.85V Power Supply Group:0.846V
        0.9V Power Supply Group:0.946V
        1.5V Power Supply Group:1.612V
        3.3V Power Supply Group:3.338V
    XBU#1
        0.85V Power Supply Group:0.846V
        0.9V Power Supply Group:0.945V
        1.5V Power Supply Group:1.606V
        3.3V Power Supply Group:3.368V
```

EXAMPLE 7 Display the fan rotation information of the system in SPARC M10-4S (with crossbar box).

```
XSCF> showenvironment Fan
BB#00
    FANU#0: High speed (Level-4)
        FAN#0: 7510rpm
        FAN#1: 8571rpm
    FANU#1: High speed (Level-4)
        FAN#0: 7520rpm
        FAN#1: 8490rpm
    FANU#2: High speed (Level-4)
        FAN#0: 7489rpm
        FAN#1: 8411rpm
```

```
    FANU#3: High speed (Level-4)
        FAN#0: 7479rpm
        FAN#1: 8450rpm
    FANU#4: High speed (Level-4)
        FAN#0: 7397rpm
        FAN#1: 8437rpm
BB#01
    FANU#0: Middle speed (Level-3)
        FAN#0: 6390rpm
        FAN#1: 7468rpm
    FANU#1: Middle speed (Level-3)
        FAN#0: 6467rpm
        FAN#1: 7307rpm
    FANU#2: Middle speed (Level-3)
        FAN#0: 6221rpm
        FAN#1: 7105rpm
    FANU#3: Middle speed (Level-3)
        FAN#0: 6398rpm
        FAN#1: 7346rpm
    FANU#4: Middle speed (Level-3)
        FAN#0: 6443rpm
        FAN#1: 7190rpm
XBBOX#80
    FANU#0: Middle speed (Level-3)
        FAN#0: 8294rpm
        FAN#1: 9677rpm
    FANU#1: Middle speed (Level-3)
        FAN#0: 8206rpm
        FAN#1: 9694rpm
    FANU#2: Middle speed (Level-3)
        FAN#0: 8169rpm
        FAN#1: 9747rpm
    FANU#3: Middle speed (Level-3)
        FAN#0: 8320rpm
        FAN#1: 9574rpm
XBBOX#81
    FANU#0: Low speed (Level-2)
        FAN#0: 7327rpm
        FAN#1: 8585rpm
    FANU#1: Low speed (Level-2)
        FAN#0: 7346rpm
        FAN#1: 8598rpm
    FANU#2: Low speed (Level-2)
        FAN#0: 7366rpm
        FAN#1: 8695rpm
    FANU#3: Low speed (Level-2)
        FAN#0: 7458rpm
        FAN#1: 8517rpm
```

EXAMPLE 8 Display the fan rotation information of the system in SPARC M12-2S (with

crossbar box).

```
XSCF> showenvironment Fan
BB#00
    FANU#0: Middle speed (Level-3)
        FAN#0: 8059rpm
        FAN#1: 9457rpm
    FANU#1: Middle speed (Level-3)
        FAN#0: 8083rpm
        FAN#1: 9424rpm
    FANU#2: Middle speed (Level-3)
        FAN#0: 8095rpm
        FAN#1: 9507rpm
    FANU#3: Middle speed (Level-3)
        FAN#0: 8000rpm
        FAN#1: 9490rpm
    FANU#4: Middle speed (Level-3)
        FAN#0: 7906rpm
        FAN#1: 9507rpm
    FANU#5: Middle speed (Level-3)
        FAN#0: 7883rpm
        FAN#1: 9473rpm
    FANU#6: Middle speed (Level-3)
        FAN#0: 8059rpm
        FAN#1: 9608rpm
    FANU#7: Middle speed (Level-3)
        FAN#0: 7952rpm
        FAN#1: 9457rpm
BB#01
    FANU#0: High speed (Level-4)
        FAN#0: 8940rpm
        FAN#1: 10887rpm
    FANU#1: High speed (Level-4)
        FAN#0: 8925rpm
        FAN#1: 10609rpm
    FANU#2: High speed (Level-4)
        FAN#0: 9060rpm
        FAN#1: 10843rpm
    FANU#3: High speed (Level-4)
        FAN#0: 8910rpm
        FAN#1: 10714rpm
    FANU#4: High speed (Level-4)
        FAN#0: 9090rpm
        FAN#1: 10693rpm
    FANU#5: High speed (Level-4)
        FAN#0: 8794rpm
        FAN#1: 10505rpm
    FANU#6: High speed (Level-4)
        FAN#0: 9030rpm
        FAN#1: 10778rpm
    FANU#7: High speed (Level-4)
        FAN#0: 8794rpm
        FAN#1: 10714rpm
XBBOX#80
```

```
      FANU#0: Middle speed (Level-3)
          FAN#0: 8157rpm
          FAN#1: 9694rpm
      FANU#1: Middle speed (Level-3)
          FAN#0: 8320rpm
          FAN#1: 9642rpm
      FANU#2: Middle speed (Level-3)
          FAN#0: 8320rpm
          FAN#1: 9694rpm
      FANU#3: Middle speed (Level-3)
          FAN#0: 8181rpm
          FAN#1: 9729rpm
  XBBOX#81
      FANU#0: Middle speed (Level-3)
          FAN#0: 8120rpm
          FAN#1: 9625rpm
      FANU#1: Middle speed (Level-3)
          FAN#0: 8307rpm
          FAN#1: 9677rpm
      FANU#2: Middle speed (Level-3)
          FAN#0: 8320rpm
          FAN#1: 9557rpm
      FANU#3: Middle speed (Level-3)
          FAN#0: 8256rpm
          FAN#1: 9642rpm
```

EXAMPLE 9 Display the power consumption information of the system.

```
XSCF> showenvironment power
Power Supply Maximum      :1000W
Installed Hardware Minimum:718W
Peak Permitted            :3725W
BB#00
    Permitted AC power consumption:1000W
    Actual AC power consumption   :38W
BB#01
    Permitted AC power consumption:470W
    Actual AC power consumption:430W
```

EXAMPLE 10 Display the exhaust-air amount of the system.

```
XSCF> showenvironment air
BB#00
    Air Flow:53CMH
BB#01
    Air Flow:53CMH
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO **setpowercapping**(8), **showpowercapping**(8)

NAME

showfru - Displays the contents of settings regarding the hardware devices.

SYNOPSIS

showfru *device location*

showfru -a [-M]

showfru -h

DESCRIPTION

showfru is a command to display the contents set in the hardware of the devices by setupfru(8).

The contents of the specified device or all devices can be displayed. You can specify a physical system board (PSB) as the device.

The following contents are displayed.

Device — Device name

Any of the following values is displayed.

sb	PSB
cpu	CPU in PSB

Location — Position where the device is mounted

This is displayed in the format below.

- If Device is sb

xx-y:

xx	BB-ID which is an integer from 00 to 15
y	It is fixed to 0.

- If Device is cpu

xx-y-z:

xx	BB-ID which is an integer from 00 to 15
y	It is fixed to 0.
z	CPU chip number For SPARC M12-1/M10-1: 0 For SPARC M10-4/M10-4S: integer from 0 to 3 For SPARC M12-2/M12-2S: 0 or 2

Memory Mirror Mode — Mirror mode of the memory set in PSB

Either of the following values is displayed.

yes	Memory mirror mode
no	Not in the memory mirror mode

Privileges

To execute this command, `platadm` or `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Displays the contents of all devices.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.

OPERANDS

The following operands are supported.

device — Specifies the device to be displayed. The following devices can be specified.

`sb`	PSB
`cpu`	CPU in PSB

location — Specifies the location where the *device* is mounted.

This is specified using the following format.

- If *device* is `sb`

xx-y:

xx	BB-ID which is an integer from `00` to `15`
y	It is fixed to `0`.

- If *device* is `cpu`

xx-y-z:

xx	BB-ID which is an integer from `00` to `15`
y	It is fixed to `0`.
z	CPU chip number For SPARC M12-1/M10-1: `0` For SPARC M10-4/M10-4S: integer from `0` to `3` For SPARC M12-2/M12-2S: `0` or `2`

EXTENDED DESCRIPTION

You can set the hardware of the devices by using `setupfru`(8).

EXAMPLES

EXAMPLE 1 Display the information set in all devices.

```
XSCF> showfru -a
Device    Location     Memory Mirror Mode
sb        00-0
    cpu   00-0-0       yes
    cpu   00-0-1       yes
    cpu   00-0-2       yes
    cpu   00-0-3       yes
sb        01-0
    cpu   01-0-0       yes
    cpu   01-0-1       yes
    cpu   01-0-2       yes
    cpu   01-0-3       yes
sb        02-0
    cpu   02-0-0       no
    cpu   02-0-1       no
    cpu   02-0-2       no
    cpu   02-0-3       no
sb        03-0
    cpu   03-0-0       yes
    cpu   03-0-1       yes
    cpu   03-0-2       no
    cpu   03-0-3       no
.
.
XSCF>
```

EXAMPLE 2 Display the information set in the specified device (PSB).

```
XSCF> showfru sb 01-0
Device    Location     Memory Mirror Mode
sb        01-0
    cpu   01-0-0       yes
    cpu   01-0-1       yes
    cpu   01-0-2       yes
    cpu   01-0-3       yes
XSCF>
```

EXAMPLE 3 Display the information set in the specified device (CPU).

```
XSCF> showfru cpu 01-0-3
Device    Location     Memory Mirror Mode
sb        01-0
    cpu   01-0-3       yes
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO **addboard**(8), **deleteboard**(8), **setpcl**(8), **setupfru**(8), **showboards**(8), **showpcl**(8)

NAME

showhardconf - Displays the information of the Field Replaceable Unit (FRU) mounted on the server.

SYNOPSIS

showhardconf [-u] [-M]

showhardconf -h

DESCRIPTION

showhardconf is a command to display the information of each FRU.

The information to be displayed is below.

- Current configuration and status
- Number of the mounted units
- Physical partition (PPAR) information
- PCI Expansion Unit information
- PCI card information

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-u	Displays the number of each mounted FRU. In addition, the operation frequency is displayed for the CPU module. The DIMM type and size are displayed for the memory. If omitted, the current configuration and status information and PPAR information of each FRU are displayed.

EXTENDED DESCRIPTION

- If the configuration, status information, and PPAR information of FRU is displayed, an asterisk (*) indicating an abnormality and any of the following statuses are displayed for the units in which a failure or degradation occurred.

Status	Contents
Faulted	In the status in which the unit is not in operation due to a failure.
Degraded	A part of the unit has failed or degraded, but the unit is running.
Deconfigured	Due to the failure or degradation of another unit, the target unit and components of its underlying layer has been degraded, though there is no problem in them.
Maintenance	Maintenance work is in progress. addfru(8), replacefru(8), or initbb(8) is operating.
Normal	In the status in which the unit is in normal operation.

- For SPARC M12-2S/M10-4S, if the mode switches on the operator panels of the master chassis and chassis whose XSCFs are standby do not match, an asterisk (*) is displayed on the operator panel units of the master chassis and chassis whose XSCFs are standby.
- The PCI Express (PCIe) card information for a guest domain is applied after Oracle Solaris starts on the guest domain.

PCI card information and PCI expansion unit information are displayed under the conditions below.

- FRU in the factory-default configuration
  The condition is that the power of the PPAR is on and OpenBoot PROM or Oracle Solaris has started.
- FRU in a logical domain configuration and not assigned to a logical domain
  I/O resources not recognized by the logical domain are not displayed.
  In order for the showhardconf command to display I/O resources that were added, the I/O resources may need to be added on the control domain.
- FRU in a logical domain configuration and already assigned to a logical domain
  The condition is that Oracle Solaris on this logical domain has started.

EXAMPLES

EXAMPLE 1 Display the FRU information of SPARC M10-1.

```
XSCF> showhardconf
SPARC M10-1;
    + Serial:2101151008A; Operator_Panel_Switch:Locked;
    + System_Power:Off; System_Phase:Cabinet Power Off;
    Partition#0 PPAR_Status:Powered Off;
    MBU Status:Normal; Ver:2004h; Serial:USDA-P00007 ;
        + FRU-Part-Number:CA20366-B10X 002AB/LGA-MBU -01          ;
        + Power_Supply_System: Dual ;
```

```
          + Memory_Size:32 GB; Type: B ;
          CPU#0 Status:Normal; Ver:4142h; Serial: 00010448;
             + Freq:3.200 GHz; Type:0x20;
             + Core:16; Strand:2;
          MEM#00A Status:Normal;
             + Code:ce8002M393B5270DH0-YH9  0000-85A8EFD9;
             + Type:01; Size:4 GB;
          MEM#01A Status:Normal;
             + Code:ce8002M393B5270DH0-YH9  0000-85A8EF57;
             + Type:01; Size:4 GB;
  .
  .
  .
          MEM#12A Status:Normal;
             + Code:ce8002M393B5270DH0-YH9  0000-85A8EEAD;
             + Type:01; Size:4 GB;
          MEM#13A Status:Normal;
             + Code:ce8002M393B5270DH0-YH9  0000-85A8EEB5;
             + Type:01; Size:4 GB;
          PCI#0 Name_Property:fibre-channel;
             + Vendor-ID:14e4; Device-ID:1648;
             + Subsystem_Vendor-ID:10cf; Subsystem-ID:13a0;
             + Model: LPe1250-F8-FJ;
          PCI#1 Status:Normal; Name_Property:;
             + Vendor-ID:14e4; Device-ID:1648;
             + Subsystem_Vendor-ID:10cf; Subsystem-ID:13a0;
             + Model: LPe1250-F8-FJ;
             + Connection:PCIBOX#X0DF;
*            PCIBOX#X0DF; Status:Faulted; Ver:0512 Serial:XCX0DF;
                 + FRU-Part-Number:CF00541-0314 05   /501-6937-05;
                 IOB Status:Normal; Serial:XX00KA; Type:PCI-X;
                     + FRU-Part-Number:CF00541-0316 03   /501-6938-05;
                 LINKBOARD Status:Faulted; Ver:0512 Serial:XCX0DF;
                     + FRU-Part-Number:CF00541-0314 05   /501-6937-05;
                 PCI#0 Name_Property:fibre-channel;
                     + Vendor-ID:14e4; Device-ID:1648;
                     + Subsystem_Vendor-ID:10cf; Subsystem-ID:13a0;
                     + Model: LPe1250-F8-FJ;
                 FANBP Status:Normal; Serial:7867000297;
                     + FRU-Part-Number:CA20393-B50X A2 ;
                 PSU#0; Status:Normal; Serial:LL0807;
                     + FRU-Part-Number:CF00300-2001 02   /300-2001-02;
                 PSU#1; Status:Normal; Serial:LL0381;
                     + FRU-Part-Number:CF00300-2001 02   /300-2001-02;
                 FAN#0; Status:Normal;
                 FAN#1; Status:Normal;
                 FAN#2; Status:Normal;
          OPNL Status:Normal; Ver:0102; Serial:PP0629L068
             + FRU-Part-Number:CA20393-B50X A2 ;
          PSUBP Status:Normal; Ver:0102; Serial:PP0629L068
             + FRU-Part-Number:CA20393-B50X A2 ;
          PSU#0 Status:Normal; Ver:0102; Serial:0000000-ASTECB18 ;
             + FRU-Part-Number:CF00300-1898 0002 /300-1898-00-02;
             + Power_Status:ON; AC:200 V;
```

```
        PSU#1 Status:Normal; Ver:0102; Serial:0000000-ASTECB18 ;
            + FRU-Part-Number:CF00300-1898 0002 /300-1898-00-02;
            + Power_Status:ON; AC:200 V;
        FANU#0 Status:Normal; Type: B ;
        FANU#1 Status:Normal; Type: B ;
        FANU#2 Status:Normal; Type: B ;
        FANU#3 Status:Normal; Type: B ;
        FANU#4 Status:Normal; Type: B ;
```

EXAMPLE 2 Display the number of FRUs mounted in SPARC M10-1.

```
XSCF> showhardconf -u
SPARC M10-1; Memory_Size:32 GB;
 +-----------------------------------+------------+
 |              FRU                  |  Quantity  |
 +-----------------------------------+------------+
 | MBU                               |        1   |
 |     Type:B                        |   (    1)  |
 |     CPU                           |        1   |
 |         Freq:3.200 GHz;           |   (    1)  |
 |     MEM                           |        8   |
 |         Type:01; Size:4 GB;       |   (    8)  |
 | PCICARD                           |        0   |
 | LINKCARD                          |        0   |
 | PCIBOX                            |        0   |
 |     IOB                           |        0   |
 |     LINKBOARD                     |        0   |
 |     PCI                           |        0   |
 |     FANBP                         |        0   |
 |     PSU                           |        0   |
 |     FAN                           |        0   |
 | OPNL                              |        1   |
 | PSUBP                             |        1   |
 |     PSU                           |        2   |
 |     FANU                          |        4   |
 +-----------------------------------+------------+
```

EXAMPLE 3 Display the FRU information of SPARC M10-4S (with crossbar box).

```
XSCF> showhardconf
SPARC M10-4S;
    + Serial:2081230011; Operator_Panel_Switch:Locked;
    + System_Power:On; System_Phase:Cabinet Power On;
      Partition#0 PPAR_Status:Powered Off;
      Partition#1 PPAR_Status:Initialization Phase;
    BB#00 Status:Normal; Role:Slave; Ver:2003h; Serial:2081231002;
        + FRU-Part-Number:CA07361-D202 A1                        ;
        + Power_Supply_System:Single;
        + Memory_Size:256 GB;
        CMUL Status:Normal; Ver:0101h; Serial:PP123002Z4  ;
            + FRU-Part-Number:CA07361-D941 A8                          ;
            + Memory_Size:128 GB; Type: B ;
            CPU#0 Status:Normal; Ver:4142h; Serial:00010448;
```

```
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            CPU#1 Status:Normal; Ver:4142h; Serial:00010418;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            MEM#00A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0AD54;
                + Type:01; Size:4 GB;
            MEM#01A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0AD67;
                + Type:01; Size:4 GB;
.
.
.
            MEM#16B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D37530;
                + Type:01; Size:4 GB;
            MEM#17B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D3752D;
                + Type:01; Size:4 GB;
        CMUU Status:Normal; Ver:0101h; Serial:PP123002ZB  ;
            + FRU-Part-Number:CA07361-D951 A4                          ;
            + Memory_Size:128 GB; Type: B ;
            CPU#0 Status:Normal; Ver:4142h; Serial:00010478;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            CPU#1 Status:Normal; Ver:4142h; Serial:00010505;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            MEM#00A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0AFA1;
                + Type:01; Size:4 GB;
            MEM#01A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0B057;
                + Type:01; Size:4 GB;
.
.
.
            MEM#16B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D37652;
                + Type:01; Size:4 GB;
            MEM#17B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D37520;
                + Type:01; Size:4 GB;
        PCI#0 Name_Property:fibre-channel;
            + Vendor-ID:14e4; Device-ID:1648;
            + Subsystem_Vendor-ID:10cf; Subsystem-ID:13a0;
            + Model: LPe1250-F8-FJ;
        XBU#0 Status:Normal; Ver:0101h; Serial:PP123002ZQ  ;
            + FRU-Part-Number:CA07361-D102 A1                          ;
            + Type: B  ;
            CBL#0L Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
```

```
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
        CBL#0R Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
        CBL#1L Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
        CBL#1R Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:0020h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3020h;
                + Type:Optic;   Length: 2;
    XBU#1 Status:Normal; Ver:0101h; Serial:PP123002ZN  ;
        + FRU-Part-Number:CA07361-D102 A1                        ;
        + Type: B  ;
        CBL#0L Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
        CBL#0R Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
        CBL#1L Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3820h;
                + Type:Optic;   Length: 2;
        CBL#1R Status:Normal;
            + FRU-Part-Number:2123628-2       ; Ver:0020h;
                + Type:Optic;   Length: 2;
            + FRU-Part-Number:2123628-2       ; Ver:3020h;
                + Type:Optic;   Length: 2;
    OPNL Status:Normal; Ver:0101h; Serial:PP1230020A  ;
        + FRU-Part-Number:CA07361-D012 A1                        ;
    PSUBP Status:Normal; Ver:0101h; Serial:PP123002ZS  ;
        + FRU-Part-Number:CA07361-D202 A1                        ;
        + Type: B  ;
    PSU#0 Status:Normal; Ver:303443h; Serial:MD12190452    ;
        + FRU-Part-Number:CA01022-0761  /          ;
        + Power_Status:ON; AC:200 V; Type: B ;
    PSU#1 Status:Normal; Ver:303443h; Serial:MD12190454    ;
        + FRU-Part-Number:CA01022-0761  /          ;
        + Power_Status:ON; AC:200 V; Type: B ;
    FANU#0 Status:Normal; Type: B ;
    FANU#1 Status:Normal; Type: B ;
    FANU#2 Status:Normal; Type: B ;
```

```
        FANU#3 Status:Normal; Type: B ;
        FANU#4 Status:Normal; Type: B ;
    BB#01 Status:Normal; Role:Slave; Ver:0101h; Serial:7867000297;
        + FRU-Part-Number:CA20393-B50X A2 ;
        + Power_Supply_System:Single;
        + Memory_Size:256 GB;
        CMUL Status:Normal; Ver:0101h; Serial:PP123002Z4  ;
            + FRU-Part-Number:CA07361-D941 A8                          ;
            + Memory_Size:128 GB; Type: B ;
            CPU#0 Status:Normal; Ver:4142h; Serial:00010448;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            CPU#1 Status:Normal; Ver:4142h; Serial:00010418;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            MEM#00A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0AD54;
                + Type:01; Size:4 GB;
            MEM#01A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0AD67;
                + Type:01; Size:4 GB;
.
.
.
            MEM#16B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D37530;
                + Type:01; Size:4 GB;
            MEM#17B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D3752D;
                + Type:01; Size:4 GB;
        CMUU Status:Normal; Ver:0101h; Serial:PP123002ZB  ;
            + FRU-Part-Number:CA07361-D951 A4                          ;
            + Memory_Size:128 GB; Type: B ;
            CPU#0 Status:Normal; Ver:4142h; Serial:00010478;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            CPU#1 Status:Normal; Ver:4142h; Serial:00010505;
                + Freq:3.700 GHz; Type:0x20;
                + Core:16; Strand:2;
            MEM#00A Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-85D0AFA1;
                + Type:01; Size:4 GB;
.
.
.
            MEM#17B Status:Normal;
                + Code:ce8002M393B5270DH0-YK0  0000-87D37520;
                + Type:01; Size:4 GB;
        PCI#0 Status:Normal; Name_Property:;
            + Vendor-ID:14e4; Device-ID:1648;
            + Subsystem_Vendor-ID:10cf; Subsystem-ID:13a0;
            + Model: LPe1250-F8-FJ;
        PCI#1 Status:Normal; Name_Property:;
            + Vendor-ID:14e4; Device-ID:1648;
```

```
            + Subsystem_Vendor-ID:10cf; Subsystem-ID:13a0;
            + Model: LPe1250-F8-FJ;
        XBU#0 Status:Normal; Ver:0101h; Serial:PP123002ZQ  ;
            + FRU-Part-Number:CA07361-D102 A1                          ;
            + Type: B ;
*           CBL#0L Status:Degraded;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#0R Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#1L Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#1R Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:0020h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3020h;
                    + Type:Optic;   Length: 2;
        XBU#1 Status:Normal; Ver:0101h; Serial:PP123002ZN  ;
            + FRU-Part-Number:CA07361-D102 A1                          ;
            + Type: B ;
            CBL#0L Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#0R Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#1L Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#1R Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:0020h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3020h;
                    + Type:Optic;   Length: 2;
        OPNL Status:Normal; Ver:0101h; Serial:PP1230020A  ;
            + FRU-Part-Number:CA07361-D012 A1                          ;
        PSUBP Status:Normal; Ver:0101h; Serial:PP123002ZS  ;
            + FRU-Part-Number:CA07361-D202 A1                          ;
            + Type: B ;
        PSU#0 Status:Normal; Ver:303443h; Serial:MD12190452    ;
```

```
            + FRU-Part-Number:CA01022-0761  /           ;
            + Power_Status:ON; AC:200 V; Type: B ;
        PSU#1 Status:Normal; Ver:303443h; Serial:MD12190454    ;
            + FRU-Part-Number:CA01022-0761  /           ;
            + Power_Status:ON; AC:200 V; Type: B ;
        FANU#0 Status:Normal; Type: B ;
        FANU#1 Status:Normal; Type: B ;
        FANU#2 Status:Normal; Type: B ;
        FANU#3 Status:Normal; Type: B ;
        FANU#4 Status:Normal; Type: B ;
    XBBOX#80 Status:Normal; Role:Master; Ver:0101h; Serial:7867000297;
        + FRU-Part-Number:CA07361-D011 A0   /NOT-FIXD-01          ;
        + Power_Supply_System:Single;
        XBU#0 Status:Normal; Serial:PP0629L068
            + FRU-Part-Number:CA20393-B50X A2 ;
            + Type: A ;
            CBL#L0 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 3;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 3;
            CBL#L1 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#R0 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#R1 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
        XSCFU Status:Normal; Ver:0101h; Serial:7867000262  ;
            + FRU-Part-Number:CA20393-B56X A0
        XBBPU Status:Normal; Serial:PP0629L068
            + FRU-Part-Number:CA20393-B50X A2 ;
            + Type: A ;
        XSCFIFU Status:Normal; Ver:0101h; Serial:PP12040198 ;
            + FRU-Part-Number:CA20365-B52X 001AA/NOT-FIXD-01 ; Type: A ;
        OPNL Status:Normal; Serial:PP0629L068
            + FRU-Part-Number:CA20393-B50X A2 ;
        PSU#0 Status:Normal; Ver:0201 Serial:0000000-ASTECB18 ;
            + FRU-Part-Number:CF00300-1898 0002 /300-1898-00-02;
            + Power_Status:ON; AC:200 V;
        PSU#1 Status:Normal; Ver:0201 Serial:0000000-ASTECB18 ;
            + FRU-Part-Number:CF00300-1898 0002 /300-1898-00-02;
            + Power_Status:ON; AC:200 V;
        FANU#0 Status:Normal;
        FANU#1 Status:Normal;
        FANU#2 Status:Normal;
```

```
        FANU#3 Status:Normal;
    XBBOX#81 Status:Normal; Role:Standby; Ver:0101h; Serial:7867000297;
        + FRU-Part-Number:CA07361-D011 A0   /NOT-FIXD-01          ;
        + Power_Supply_System:Single;
        XBU#0 Status:Normal; Ver:0201 Serial:PP0629L068
            + FRU-Part-Number:CA20393-B50X A2 ;
            + Type: A ;
            CBL#L0 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#L1 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#R0 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
            CBL#R1 Status:Normal;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
                + FRU-Part-Number:2123628-2       ; Ver:3820h;
                    + Type:Optic;   Length: 2;
        XSCFU Status:Normal; Ver:0101h; Serial:7867000262  ;
            + FRU-Part-Number:CA20393-B56X A0
        XBBPU Status:Normal; Ver:0201 Serial:PP0629L068
            + FRU-Part-Number:CA20393-B50X A2 ;
            + Type: A ;
        XSCFIFU Status:Normal; Ver:0101h; Serial:PP12040198 ;
            + FRU-Part-Number:CA20365-B52X 001AA/NOT-FIXD-01 ; Type: A ;
        OPNL Status:Normal; Ver:0201 Serial:PP0629L068
            + FRU-Part-Number:CA20393-B50X A2 ;
        PSU#0 Status:Normal; Ver:0201 Serial:0000000-ASTECB18 ;
            + FRU-Part-Number:CF00300-1898 0002 /300-1898-00-02;
            + Power_Status:ON; AC:200 V;
        PSU#1 Status:Normal; Ver:0201 Serial:0000000-ASTECB18 ;
            + FRU-Part-Number:CF00300-1898 0002 /300-1898-00-02;
            + Power_Status:ON; AC:200 V;
        FANU#0 Status:Normal;
        FANU#1 Status:Normal;
        FANU#2 Status:Normal;
        FANU#3 Status:Normal;
```

EXAMPLE 4 Display the FRU information of SPARC M12-2S (without crossbar box).

```
XSCF> showhardconf
SPARC M12-2S;
    + Serial:PZ51552003; Operator_Panel_Switch:Locked;
    + System_Power:On; System_Phase:Cabinet Power On;
```

```
Partition#0 PPAR_Status:Running;
BB#00 Status:Normal; Role:Master; Ver:3009h; Serial:PZ51552003;
    + FRU-Part-Number:CA20369-B17X 003AB/9999999             ;
    + Power_Supply_System: ;
    + Memory_Size:64 GB;
    CMUL Status:Normal; Ver:1101h; Serial:PP155100VD  ;
        + FRU-Part-Number:CA07855-D291 A1   /9999999              ;
        + Memory_Size:64 GB; Type: C;
        CPU#0 Status:Normal; Ver:4241h; Serial:00040006;
            + Freq:4.250 GHz; Type:0x30;
            + Core:12; Strand:8;
        MEM#00A Status:Normal;
            + Code:ce8001M393A1G40EB1-CRC    00-02EBB91D;
            + Type:81; Size:8 GB;
                .
                .
        MEM#07A Status:Normal;
            + Code:ce8001M393A1G40EB1-CRC    00-02EBB960;
            + Type:81; Size:8 GB;
    CMUU Status:Normal; Ver:1101h; Serial:PP155100VK  ;
        + FRU-Part-Number:CA07855-D491 A1   /9999999              ;
        + Memory_Size:64 GB; Type: C ;
        CPU#0 Status:Normal; Ver:4241h; Serial:00000030;
            + Freq:4.250 GHz; Type:0x30;
            + Core:12; Strand:8;
        MEM#00A Status:Normal;
            + Code:ce8001M393A1G40EB1-CRC    00-02EBB915;
            + Type:81; Size:8 GB;
                .
                .
        MEM#07A Status:Normal;
            + Code:2c800f18ASF1G72PZ-2G3A3   33-10735AD4;
            + Type:81; Size:8 GB;
    XBU#0 Status:Normal; Ver:1101h; Serial:PP155002PB  ;
        + FRU-Part-Number:CA20369-B18X 001AA/9999999              ;
        + Type: C ;
        CBL#0L Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
        CBL#0R Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
    XBU#1 Status:Normal; Ver:1101h; Serial:PP155002PA  ;
        + FRU-Part-Number:CA20369-B18X 001AA/9999999              ;
        + Type: C ;
        CBL#0L Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
```

```
            CBL#0R Status:Normal;
                + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                    + Type:Optic;   Length: 2;
                + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                    + Type:Optic;   Length: 2;
        XSCFU Status:Normal; Ver:0101h; Serial:PP154903GH  ;
            + FRU-Part-Number:CA20369-B08X 001AA/9999999              ;
            + Type: A ;
        OPNL Status:Normal; Ver:0101h; Serial:PP15500CFC  ;
            + FRU-Part-Number:CA20365-B35X 005AC/7060922              ;
            + Type: A ;
        PSUBP Status:Normal; Ver:1101h; Serial:PP154901EP  ;
            + FRU-Part-Number:CA20369-B17X 003AB/9999999              ;
            + Type: C ;
        PSU#0 Status:Normal; Ver:303141h; Serial:HWCD1549000009;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        PSU#1 Status:Normal; Ver:303141h; Serial:HWCD1549000021;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        PSU#2 Status:Normal; Ver:303141h; Serial:HWCD1549000084;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        PSU#3 Status:Normal; Ver:303141h; Serial:HWCD1549000070;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        FANU#0 Status:Normal; Type: C ;
          .
          .
        FANU#7 Status:Normal; Type: C ;
        HDDBP Status:Normal; Type: A ;
    BB#01 Status:Normal; Role:Standby; Ver:3009h; Serial:PZ51552006;
        + FRU-Part-Number:CA20369-B17X 003AB/9999999             ;
        + Power_Supply_System: ;
        + Memory_Size:128 GB;
        CMUL Status:Normal; Ver:1101h; Serial:PP155100VE  ;
            + FRU-Part-Number:CA07855-D291 A1   /9999999              ;
            + Memory_Size:64 GB; Type: C ;
            CPU#0 Status:Normal; Ver:4241h; Serial:00040023;
                + Freq:4.250 GHz; Type:0x30;
                + Core:12; Strand:8;
            MEM#00A Status:Normal;
                + Code:ce8001M393A1G40EB1-CRC    00-02EBB8F4;
                + Type:81; Size:8 GB;
                    .
                    .
            MEM#07A Status:Normal;
                + Code:2c800f18ASF1G72PZ-2G3A3   33-1011A476;
                + Type:81; Size:8 GB;
        CMUU Status:Normal; Ver:1101h; Serial:PP15500DZ0  ;
            + FRU-Part-Number:CA07855-D491 A1   /9999999              ;
            + Memory_Size:64 GB; Type: C ;
            CPU#0 Status:Normal; Ver:4241h; Serial:00040019;
                + Freq:4.250 GHz; Type:0x30;
```

```
            + Core:12; Strand:8;
        MEM#00A Status:Normal;
            + Code:2c800f18ASF1G72PZ-2G3A3   33-10735E7F;
            + Type:81; Size:8 GB;
                .
                .
        MEM#07A Status:Normal;
            + Code:2c800f18ASF1G72PZ-2G3A3   33-107359F1;
            + Type:81; Size:8 GB;
    PCI#2 Status:Normal; Name_Property:pci;
        + Vendor-ID:108e; Device-ID:9020;
        + Subsystem_Vendor-ID:10b5; Subsystem-ID:8716;
        + Model:;
        + Connection:2001;
        PCIBOX#2001; Status:Normal; Ver:5220h; Serial:2121212001;
            + FRU-Part-Number:;
            IOB Status:Normal; Serial:PP122300JW  ;
                + FRU-Part-Number:CA20365-B66X 007AF              ;
            LINKBOARD Status:Normal; Serial:PP123300TR  ;
                + FRU-Part-Number:CA20365-B60X 001AA              ;
            FANBP Status:Normal; Serial:PP120904SY  ;
                + FRU-Part-Number:CA20365-B68X 004AC              ;
            PSU#1; Status:Normal; Serial:FEJD1201000169;
                + FRU-Part-Number:CA01022-0750-D/          ;
            FAN#0; Status:Normal;
            FAN#1; Status:Normal;
            FAN#2; Status:Normal;
    XBU#0 Status:Normal; Ver:1101h; Serial:PP155002PP  ;
        + FRU-Part-Number:CA20369-B18X 001AA/9999999              ;
        + Type: C ;
        CBL#0L Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
        CBL#0R Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
    XBU#1 Status:Normal; Ver:1101h; Serial:PP155002PN  ;
        + FRU-Part-Number:CA20369-B18X 001AA/9999999              ;
        + Type: C ;
        CBL#0L Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
        CBL#0R Status:Normal;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
            + Vendor-ID:FCBN414QB1C02   ; Ver:4120h;
                + Type:Optic;   Length: 2;
    XSCFU Status:Normal; Ver:0101h; Serial:PP154903GP  ;
```

```
            + FRU-Part-Number:CA20369-B08X 001AA/9999999              ;
            + Type: A ;
        OPNL Status:Normal; Ver:0101h; Serial:PP15500CFH  ;
            + FRU-Part-Number:CA20365-B35X 005AC/7060922              ;
            + Type: A ;
        PSUBP Status:Normal; Ver:1101h; Serial:PP154901ET  ;
            + FRU-Part-Number:CA20369-B17X 003AB/9999999              ;
            + Type: C ;
        PSU#0 Status:Normal; Ver:303141h; Serial:HWCD1549000036;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        PSU#1 Status:Normal; Ver:303141h; Serial:HWCD1549000039;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        PSU#2 Status:Normal; Ver:303141h; Serial:HWCD1549000092;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        PSU#3 Status:Normal; Ver:303141h; Serial:HWCD1549000057;
            + FRU-Part-Number:CA01022-0850/7           ;
            + Power_Status:ON; AC:200 V; Type: C ;
        FANU#0 Status:Normal; Type: C ;
          .
          .
        FANU#7 Status:Normal; Type: C ;
        HDDBP Status:Normal; Type: A ;
```

EXAMPLE 5 Display the number of FRUs mounted in SPARC M10-4S (with crossbar box).

```
XSCF> showhardconf -u
SPARC M10-4S; Memory_Size:720 GB;
 +----------------------------------+------------+
 |              FRU                 |  Quantity  |
 +----------------------------------+------------+
 | BB                               |       2    |
 |     CMUL                         |       2    |
 |         Type:A                   |   (   1)   |
 |         Type:B                   |   (   1)   |
 |         CPU                      |       4    |
 |             Freq:3.000 GHz;      |   (   2)   |
 |             Freq:3.700 GHz;      |   (   2)   |
 |         MEM                      |      64    |
 |             Type:01; Size:4 GB;  |   (  64)   |
 |     CMUU                         |       2    |
 |         Type:A                   |   (   1)   |
 |         Type:B                   |   (   1)   |
 |         CPU                      |       4    |
 |             Freq:3.000 GHz;      |   (   2)   |
 |             Freq:3.700 GHz;      |   (   2)   |
 |         MEM                      |      64    |
 |             Type:01; Size:4 GB;  |   (  64)   |
 |     PCICARD                      |       3    |
 |     LINKCARD                     |       0    |
 |     PCIBOX                       |       0    |
```

```
|         IOB                        |        0    |
|         LINKBOARD                  |        0    |
|         PCI                        |        0    |
|         FANBP                      |        0    |
|         PSU                        |        0    |
|         FAN                        |        0    |
|     XBU                            |        4    |
|         Type:A                     |    (   2)   |
|         Type:B                     |    (   2)   |
|     OPNL                           |        2    |
|     PSUBP                          |        2    |
|         Type:A                     |    (   1)   |
|         Type:B                     |    (   1)   |
|         PSU                        |        4    |
|              Type:A                |    (   2)   |
|              Type:B                |    (   2)   |
|         FANU                       |       10    |
| XBBOX                              |        2    |
|     XBU                            |        2    |
|         Type:A                     |    (   1)   |
|         Type:B                     |    (   1)   |
|     XSCFU                          |        2    |
|     OPNL                           |        2    |
|     XBBPU                          |        2    |
|         Type:A                     |    (   1)   |
|         Type:B                     |    (   1)   |
|         XSCFIFU                    |        2    |
|         PSU                        |        4    |
|         FANU                       |        8    |
+------------------------------------+-------------+
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

showhostname - Displays the host names set in the master chassis and chassis whose XSCF is standby.

SYNOPSIS

showhostname {`-a` | *xscfu*}

showhostname `-h`

DESCRIPTION

`showhostname` is a command to display the host names set currently in the master chassis and chassis whose XSCF is standby.

The host name is displayed in the Fully Qualified Domain Name (FQDN) format.

Privileges

No privileges are required to execute this command.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` Displays the host names set in the master chassis and chassis whose XSCF is standby. The chassis name specified with the `-a` option becomes invalid.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operands are supported.

xscfu Specifies the chassis name to be displayed. Depending on the system configuration, you can specify the following. If the chassis name is specified with the `-a` option, it becomes invalid.

- For configuration with SPARC M12-2S/M10-4S (with crossbar box)

  For XBBOX#80, specify "`xbbox#80`."

  For XBBOX#81, specify "`xbbox#81`."
- For configuration with SPARC M12-2S/M10-4S (without crossbar box)

  For BB#00, specify "`bb#00`."

  For BB#01, specify "`bb#01`."
- For configuration with SPARC M12-1/M12-2/M10-1/M10-4

  Specify "`bb#00`."

EXTENDED DESCRIPTION

By using the `sethostname`(8), you can set the host name of the master chassis and the chassis on which XSCF is in the standby status.

EXAMPLES

EXAMPLE 1 Display the host name which has been set to the master chassis and the chassis on which XSCF is in the standby status.

```
XSCF> showhostname -a
bb#00:scf0-hostname.example.com
bb#01:scf1-hostname.example.com
```

EXAMPLE 2 Display the host name set in XBBOX#80.

```
XSCF> showhostname xbbox#80
xbbox#80:scf0-hostname.example.com
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

sethostname(8)

NAME

showhsmode - Displays the setting of the high speed mode of the CPU.

SYNOPSIS

showhsmode

showhsmode -h

DESCRIPTION

showhsmode displays the setting of the high speed mode of the CPU.

The setting is enabled (on) or disabled (off). The default setting is disabled (off).

This command is not supported on SPARC M12-1/M12-2/M10-1/M10-4/M10-4S.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following option is supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the current setting of the high speed mode of the CPU.

```
XSCF> showhsmode
off
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

sethsmode(8)

NAME

showhttps - Displays the status of the HTTPS service set in the XSCF network.

SYNOPSIS

showhttps [-M]

showhttps -t [-M]

showhttps -h

DESCRIPTION

showhttps is a command to display the status of the HTTPS service set currently in the XSCF network.

You can confirm whether HTTPS service is in operation and the installation status of the information required for authentication. If it is installed, the date of installation is also displayed.

The following statuses are displayed.

HTTPS status	Whether HTTPS service is in operation
Server key	Whether the private key of the Web server is installed
CA key	Whether the private key of the certificate authority is installed
CA cert	Whether the certificate of the certificate authority is installed
CSR	Web server certificate request

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-t	Displays the set certificate.

EXTENDED DESCRIPTION

You can set the HTTPS service of the XSCF network by using sethttps(8).

EXAMPLES

EXAMPLE 1 Display the status of HTTPS service and the installation status of the key.

```
XSCF> showhttps
HTTPS status: enabled
Server key: installed in Apr 24 12:34:56 JST 2010
CA key: installed in Apr 24 12:00:34 JST 2010
CA cert: installed in Apr 24 12:00:34 JST 2010
CSR:
```

```
-----BEGIN CERTIFICATE REQUEST-----
MIIBwjCCASsCAQAwgYExCzAJBgNVBAYTAmpqMQ4wDAYDVQQIEwVzdGF0ZTERMA8G
A1UEBxMIbG9jYWxpdHkxFTATBgNVBAoTDG9yZ2FuaXphdGlvbjEPMA0GA1UECxMG
b3JnYW5pMQ8wDQYDVQQDEwZjb21tb24xFjAUBgkqhkiG9w0BCQEWB2VlLm1haWww
gZ8wDQYJKoZIhvcNAQEBBQADgY0AMIGJAoGBAJ5D57X/k42LcipTWBWzv2GrxaVM
5GEyx3bdBW8/7WZhnd3uiZ9+ANlvRAuw/YYy7I/pAD+NQJesBcBjuyj9x+IiJl9F
MrI5fR8pOIywVOdbMPCar09rrU45bVeZhTyi+uQOdWLoX/Dhq0fm2BpYuh9WukT5
pTEg+2dABg8UdHmNAgMBAAGgADANBgkqhkiG9w0BAQQFAAOBgQAux1jH3dyB6Xho
PgBuVIakDzIKEPipK9qQfC57YI43uRBGRubu0AHEcLVue5yTu6G5SxHTCq07tV5g
38UHSg5Kqy9QuWHWMri/hxm0kQ4gBpApjNb6F/B+ngBE3j/thGbEuvJb+0wbycvu
5jrhB/ZV9k8X/MbDOxSx/U5nF+Zuyw==
-----END CERTIFICATE REQUEST-----
```

EXAMPLE 2 Display the set certificate.

```
XSCF> showhttps -t
Certificate:
    Data:
        Version: 3 (0x2)
        Serial Number:
            cb:92:cc:ee:79:6c:d3:09
        Signature Algorithm: sha256WithRSAEncryption
        Issuer: C=JP, ST=Kanagawa, O=Kawasaki, OU=luna2, CN=luna2
ization Validation CA
        Validity
            Not Before: May 24 07:15:17 2017 GMT
            Not After : May 22 07:15:17 2027 GMT
        Subject: C=JP, ST=Kanagawa, O=Fujitsu, OU=Fujitsu, CN=XSCF/
emailAddress=hoge@hoge
        Subject Public Key Info:
            Public Key Algorithm: rsaEncryption
                Public-Key: (2048 bit)
                Modulus:
                    00:c7:5f:f1:61:ad:ba:4b:64:25:7e:49:ba:7a:6c:
                    d4:5c:b1:8c:2d:15:9f:8a:2f:70:c8:cc:4a:3d:2c:
                    bd:0a:b7:f8:1d:4a:12:93:ea:22:d5:be:85:69:d7:
                    0b:31:a8:1a:ae:34:c6:f6:e8:a1:c8:cc:02:08:be:
                    bc:2b:e9:34:8f:f2:ee:4a:93:26:a0:47:93:7e:b7:
                    f8:3f:73:24:55:45:02:14:f7:c2:d8:56:f7:a1:cf:
                    2f:2d:3e:d4:ff:05:1a:82:25:34:1f:f2:1a:83:91:
                    a7:35:98:7d:2a:92:53:6b:19:75:91:86:b5:2e:ef:
                    e9:79:ec:a0:5c:bc:88:1c:7b:53:2f:ab:a2:18:77:
                    84:42:1e:4c:80:c4:91:28:fe:0a:35:8d:27:f9:90:
                    46:22:70:71:10:0d:03:cb:2e:5c:e9:27:20:b3:d5:
                    bd:15:39:16:c1:18:7a:a7:13:8f:40:e8:1e:5d:39:
                    71:bc:ca:4b:ac:c3:74:9f:03:5e:b3:3c:1c:c8:2e:
                    1b:bf:31:c4:4b:33:9a:07:d4:28:e3:f2:6d:19:37:
                    10:33:4f:04:85:3b:40:ce:b2:be:f4:16:c1:7c:a9:
                    6a:5e:fc:c0:ae:a1:e8:49:a5:b4:ac:37:e3:3f:ca:
                    cf:c1:5d:fa:00:8e:d3:33:1f:13:7d:76:b1:ad:ce:
                    e4:27
                Exponent: 65537 (0x10001)
        X509v3 extensions:
```

```
            X509v3 Basic Constraints:
                CA:FALSE
            Netscape Cert Type:
                SSL Server
            Netscape Comment:
                OpenSSL Generated Certificate
            X509v3 Subject Key Identifier:
                DE:71:13:37:5D:74:7E:D5:B8:C0:96:F8:AF:A7:FB:AB:EA:B9:DB
:07
            X509v3 Authority Key Identifier:
                keyid:BE:0D:11:61:59:98:0B:2F:29:42:88:6F:94:38:7C:D0:6A
:FC:EB:4B

    Signature Algorithm: sha1WithRSAEncryption
        b9:6d:06:3a:b5:71:51:9d:15:b6:55:08:64:76:9e:13:69:1b:
        ce:6b:b4:be:aa:48:49:55:29:c3:6f:9e:b1:ca:0c:6f:96:c3:
        e9:f7:fd:91:03:ce:a3:b5:d8:27:58:a4:a3:81:f1:60:81:3a:
        fb:75:5e:36:a6:5d:05:3d:bd:cf:6b:34:13:41:c2:68:94:51:
        f2:4b:1a:02:50:e6:bc:8c:48:d2:87:84:cf:12:8b:de:2d:da:
        10:b5:1b:41:94:b6:c4:83:1e:1c:ae:0d:0c:dc:01:21:91:49:
        8c:44:4c:1d:2f:52:3a:b0:19:da:ed:5b:6a:aa:b2:05:bc:76:
        3c:f4:90:35:97:81:5c:bf:64:cb:a4:5d:ed:78:cf:97:b1:8a:
        43:7b:4b:82:4f:21:83:60:28:18:b1:87:ba:4f:a9:7c:f4:ac:
        47:a2:81:ac:70:e7:50:b9:ec:52:ab:66:72:ef:c5:c9:98:89:
        4b:ae:3a:fe:d3:46:be:8b:b8:c8:7c:99:2a:8e:7f:8c:ec:10:
        b6:cb:60:8c:4b:b7:8f:c0:5d:4b:44:45:cb:48:35:69:b3:7c:
        37:c2:33:fe:dd:a4:9f:19:6d:a3:0e:cd:79:7c:05:6e:1b:44:
        d9:b6:21:76:6f:6a:1e:fc:0d:1f:7f:e9:61:9a:70:70:9f:f5:
        17:42:f7:b6
```

EXAMPLE 3 Display the set certificate (in the case that no certificate is set).

```
XSCF> showhttps -t
No certificate.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

sethttps(8)

NAME

showinterimpermit - Displays the status and information about CPU Activation Interim Permit.

SYNOPSIS

showinterimpermit [`-M`] [`-v`] [`-p` *ppar_id*]

showinterimpermit `-h`

DESCRIPTION

`showinterimpermit` is a command to display CPU Activation Interim Permit (hereafter "Interim Permit") status and information.

If "`-v`" is not specified, the command displays the current enabled or disabled status of Interim Permit, the number of days left before expiration, the expiration status, or whether the function can be enabled again.

If "`-v`" is specified, the command displays detailed information, including whether Interim Permit can be enabled again.

If no *ppar_id* is specified, the Interim Permit status and information for all PPARs are displayed.

Privileges

To execute this command, one of the following privileges is required.

`platadm`, `platop`, `fieldeng`	Enables execution for all physical partitions (PPARs).
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.
`-p` *ppar_id*	Specifies the PPAR-ID to be displayed.
`-v`	Displays whether Interim Permit can be enabled again.

EXTENDED DESCRIPTION

The status of nterim Permit is displayed in the following format for each PPAR.

`Interim Permit for PPAR` *X*`:` *status*

X ID of the PPAR

status Displays the Interim Permit status and information; one of the following:

`disabled`	Interim Permit is disabled. This also indicates that the function has never been used (Default), and can be enabled.

`enabled [...]`	Interim Permit is enabled.
	The content displayed in [ ] indicates the number of days left before expiration. The number of days left before expiration is a value from 29 to 1.
	Example 1:
	`enabled [25 days remaining]`
	Indicates that the number of days left before expiration is 25.
	Example 2:
	`enabled [less than 1 day remaining]`
	Indicates that the Interim Permit will expire today.

`expired`	Interim Permit has expired. In this state, available CPU core resources may be automatically reduced and/or logical domains in the system may be automatically stopped. To avoid automatic reduction of CPU core resources, immediately add sufficient purchased CPU Activations and assign them to the PPAR using `setcod`(8) or release CPU core resources from logical domains such that the total quantity of CPU core resources assigned to the logical domains is equal or lower than the quantity of purchased CPU Activations. Then disable Interim Permit. After Interim Permit is disabled, the *status* changes to "`cannot be enabled again`."

`cannot be enabled again`
: Interim Permit cannot be reused. This indicates that the Interim Permit has already been used and cannot be used again.
To reuse Interim Permit for a PPAR in this state, add purchased CPU Activation keys to the system using `addcodactivation`(8) and increase the number of CPU Activations assigned to the PPAR using `setcod`(8).
XCP 232*x* behaves differently. Please refer to the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide* for further information.

If the `-v` option is specified, the command displays whether Interim Permit for each PPAR can be enabled again.

`CPU Activation Information from the last time Interim Permit was enabled`

`Registered CPU Activation Keys (in units of cores)`
: Displays the quantity of purchased CPU Activation keys installed on the entire system in units of cores, recorded at the moment `setinterimpermit`(8) was last executed to enable Interim Permit. If Interim Permit has never been used, "-" is displayed.

`Purchased Cores Assigned to PPAR`
: Displays the quantity of CPU Activations (in units of cores) assigned to the PPAR, recorded at the moment `setinterimpermit`(8) was last executed to enable Interim Permit. If Interim Permit has never been used, "-" is displayed.

`Current CPU Activation Information`

`Registered CPU Activation Keys (in units of cores)`
: Displays the quantity of purchased CPU Activation keys currently installed on the entire system in units of cores.

`Purchased Cores Assigned to PPAR`
: Displays the quantity of CPU Activations (in units of cores) currently assigned to the PPAR. Does not include Interim Permit cores.

`Status` If Interim Permit is disabled and can be enabled, "Interim Permit is disabled (can be enabled)" is displayed.

If Interim Permit is currently enabled and valid, "Interim Permit is enabled [xx days remaining]" is displayed.

If Interim Permit is enabled and expired, "Interim Permit is expired" is displayed.

If Interim Permit is disabled and cannot be enabled, "Interim Permit cannot be enabled again (until more Purchased CPU Activations are installed and Purchased cores are assigned to the PPAR)" is displayed.

If Interim Permit has never been used, "-" is displayed.

When Status shows "Interim Permit is disabled (can be enabled)", Interim Permit can be enabled again for a PPAR using `setinterimpermit`(8).

When Status shows "Interim Permit is expired", to enable Interim Permit again, disable Interim Permit by executing "`setinterimpermit -p` *ppar_id* `-c disable`". Then, Status will show "Interim Permit is disabled (can be enabled)" or "Interim Permit cannot be enabled again (until more Purchased CPU Activations are installed and Purchased cores are assigned to the PPAR)".

The `showinterimpermit` command was introduced in XCP 2320, but with support for SPARC M10-1 and SPARC M10-4 models only. The ability to reuse Interim Permit was introduced in XCP 2330. When XCP 232*x* is used on the system, Interim Permit can be enabled only on SPARC M10-1 and M10-4 systems, and only once. Therefore, when XCP 232*x* is used, be careful not to enable Interim Permit by mistake.

When XCP 2330 or later is used on the system, Interim Permit can be re-enabled. But, to re-enable it the steps described below must be completed.

If Interim Permit was used with XCP 232*x* and then the firmware was updated to XCP 2330 or later, Interim Permit cannot be enabled again, even when the steps described below have been completed. In this case, please contact your local service provider for assistance.

To reuse Interim Permit, all of the following conditions must be met after the last time Interim Permit was used:

1. If currently enabled,Interim Permit must be disabled by `setinterimpermit`(8). Then the Status is changed to "Interim Permit cannot be enabled again (until more Purchased CPU Activations are installed and Purchased cores are assigned to the PPAR)".
2. Quantity of installed purchased CPU Activation keys for this system must be increased by `addcodactivation`(8). The quantity of "Registered CPU Activation Keys (in units of cores)" under "Current CPU Activation Information" must be greater than the quantity shown in "CPU Activation Information from the last time Interim Permit was enabled".
3. Quantity of CPU cores assigned to the PPAR (for SPARC M12-2S/M10-4S) / the system (for SPARC M12-1/M12-2/M10-1/M10-4) must be increased using `setcod`(8). The quantity of "Purchased Cores Assigned to PPAR" under "Current CPU Activation Information" must be greater than of the quantity shown in "CPU Activation Information from the last time Interim Permit was enabled".

When all 3 conditions are met, then the Status is changed from "Interim Permit cannot be enabled again (until more Purchased CPU Activations are installed and Purchased cores are assigned to the PPAR)" to "Interim Permit is disable (can be enabled)".

"Interim Permit is disabled (can be enabled)" shows that Interim Permit can now be used again.

EXAMPLES

EXAMPLE 1 Display Interim Permit information for PPAR-ID 0 (in this case Interim Permit is enabled and 25 days remain before expiration).

```
XSCF> showinterimpermit -p 0
Interim Permit for PPAR 0: enabled [25 days remaining]
```

EXAMPLE 2 Display Interim Permit information for PPAR-ID 0 (in this case Interim Permit is enabled and one day remains before expiration).

```
XSCF> showinterimpermit -p 0
Interim Permit for PPAR 0: enabled [1 day remaining]
```

EXAMPLE 3 Display Interim Permit information for PPAR-ID 0 (in this case Interim Permit is enabled and will expire today).

```
XSCF> showinterimpermit -p 0
Interim Permit for PPAR 0: enabled [less than 1 day remaining]
```

EXAMPLE 4 Display Interim Permit information for PPAR-ID 0 (in this case Interim Per-

mit is disabled and has never previously been enabled).

```
XSCF> showinterimpermit -p 0
Interim Permit for PPAR 0: disabled
```

EXAMPLE 5 Display Interim Permit information for PPAR-ID 0 (in this case Interim Permit was already enabled and cannot be used again).

```
XSCF> showinterimpermit -p 0
Interim Permit for PPAR 0: cannot be enabled again
```

EXAMPLE 6 Display Interim Permit information for PPAR-ID 0 (in this case Interim Permit has expired).

```
XSCF> showinterimpermit -p 0
Interim Permit for PPAR 0: expired
```

EXAMPLE 7 Display Interim Permit information for all PPARs (in this case for SPARC M12-1/M12-2/M10-1/M10-4).

```
XSCF> showinterimpermit
Interim Permit for PPAR 0: enabled [25 days remaining]
```

EXAMPLE 8 Display Interim Permit information for all PPARs (in this case the user has platform-related privileges on SPARC M12-2S/M10-4S).

```
XSCF> showinterimpermit
Interim Permit for PPAR 0: disabled
Interim Permit for PPAR 1: enabled [29 days remaining]
Interim Permit for PPAR 2: expired
Interim Permit for PPAR 3: cannot be enabled again
Interim Permit for PPAR 4: disabled
Interim Permit for PPAR 5: disabled
Interim Permit for PPAR 6: disabled
Interim Permit for PPAR 7: disabled
Interim Permit for PPAR 8: disabled
Interim Permit for PPAR 9: disabled
Interim Permit for PPAR 10: disabled
Interim Permit for PPAR 11: disabled
Interim Permit for PPAR 12: disabled
Interim Permit for PPAR 13: disabled
Interim Permit for PPAR 14: disabled
Interim Permit for PPAR 15: disabled
```

EXAMPLE 9 Display Interim Permit information for all PPARs (in this case the user has privileges for PPAR#0, #1, and #3 on SPARC M12-2S/M10-4S).

```
XSCF> showinterimpermit
Interim Permit for PPAR 0: disabled
Interim Permit for PPAR 1: enabled [29 days remaining]
Interim Permit for PPAR 3: cannot be enabled again
```

EXAMPLE 10 Display whether Interim Permit for PPAR-ID 0 can be enabled again.

```
XSCF> showinterimpermit -v -p 0
PPAR-ID: 0
  Status: Interim Permit is disabled (can be enabled)

  CPU Activation Information from the last time Interim Permit was enabled:
    Registered CPU Activation Keys (in units of cores):    16
    Purchased Cores Assigned to PPAR:                       8

  Current CPU Activation Information:
    Registered CPU Activation Keys (in units of cores):    32
    Purchased Cores Assigned to PPAR:                      16
```

EXAMPLE 11 Display whether Interim Permit for all PPARs can be enabled again (in the case of SPARC M12-1/M12-2/M10-1/M10-4).

```
XSCF> showinterimpermit -v
PPAR-ID: 0
  Status: Interim Permit is disabled (can be enabled)

  CPU Activation Information from the last time Interim Permit was enabled:
    Registered CPU Activation Keys (in units of cores):     2
    Purchased Cores Assigned to PPAR:                       4

  Current CPU Activation Information:
    Registered CPU Activation Keys (in units of cores):     4
    Purchased Cores Assigned to PPAR:                       8
```

EXAMPLE 12 Display whether Interim Permit for all PPARs can be enabled again (in the case of a user with platadm privilege on SPARC M12-2S/M10-4S).

```
XSCF> showinterimpermit -v
PPAR-ID: 0
  Status: Interim Permit is disabled (can be enabled)

  CPU Activation Information from the last time Interim Permit was enabled:
    Registered CPU Activation Keys (in units of cores):    24
    Purchased Cores Assigned to PPAR:                       8

  Current CPU Activation Information:
    Registered CPU Activation Keys (in units of cores):    40
    Purchased Cores Assigned to PPAR:                      16

PPAR-ID: 1
  Status: Interim Permit cannot be enabled again
  (until more Purchased CPU Activations are installed and Purchased cores
  are assigned to the PPAR)

  CPU Activation Information from the last time Interim Permit was enabled:
    Registered CPU Activation Keys (in units of cores):    24
    Purchased Cores Assigned to PPAR:                       8
```

```
    Current CPU Activation Information:
      Registered CPU Activation Keys (in units of cores):    40
      Purchased Cores Assigned to PPAR:                       8

  PPAR-ID: 2
    Status: Interim Permit is enabled [20 days remaining]

    CPU Activation Information from the last time Interim Permit was enabled:
      Registered CPU Activation Keys (in units of cores):    24
      Purchased Cores Assigned to PPAR:                       8

    Current CPU Activation Information:
      Registered CPU Activation Keys (in units of cores):    40
      Purchased Cores Assigned to PPAR:                       8

      :

  PPAR-ID: 15
    Status: -

    CPU Activation Information from the last time Interim Permit was enabled:
      Registered CPU Activation Keys (in units of cores):     -
      Purchased Cores Assigned to PPAR:                       -

    Current CPU Activation Information:
      Registered CPU Activation Keys (in units of cores):    40
      Purchased Cores Assigned to PPAR:                       0
```

EXAMPLE 13 Display whether Interim Permit for all PPARs can be enabled again (in the case of a user with pparadm privilege for PPAR#0, #1, and #3 on SPARC M12-2S/M10-4S).

```
XSCF> showinterimpermit -v
PPAR-ID: 0
  Status: Interim Permit is disabled (can be enabled)

  CPU Activation Information from the last time Interim Permit was enabled:
    Registered CPU Activation Keys (in units of cores):    24
    Purchased Cores Assigned to PPAR:                       8

  Current CPU Activation Information:
    Registered CPU Activation Keys (in units of cores):    40
    Purchased Cores Assigned to PPAR:                      16

PPAR-ID: 1
  Status: Interim Permit cannot be enabled again
  (until more Purchased CPU Activations are installed and Purchased cores
  are assigned to the PPAR)

  CPU Activation Information from the last time Interim Permit was enabled:
    Registered CPU Activation Keys (in units of cores):    24
    Purchased Cores Assigned to PPAR:                       8
```

```
    Current CPU Activation Information:
      Registered CPU Activation Keys (in units of cores):    40
      Purchased Cores Assigned to PPAR:                       8

  PPAR-ID: 3
    Status: -

    CPU Activation Information from the last time Interim Permit was enabled:
      Registered CPU Activation Keys (in units of cores):     -
      Purchased Cores Assigned to PPAR:                       -

    Current CPU Activation Information:
      Registered CPU Activation Keys (in units of cores):    40
      Purchased Cores Assigned to PPAR:                       0
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**(8), **setcod**(8), **setinterimpermit**(8), **showcod**(8), **showcodactivation**(8), **showcodactivationhistory**(8), **showcodusage**(8), **showinterimpermitusage**(8)

NAME

showinterimpermitusage - Displays information about CPU Activations and CPU core resources.

SYNOPSIS

showinterimpermitusage [`-M`] [`-p` *ppar_id*]

showinterimpermitusage `-h`

DESCRIPTION

`showinterimpermitusage` is a command to display CPU Activation Interim Permit (hereafter "Interim Permit") related information per PPAR. The information includes the quantity of CPU cores physically present in the PPAR, the quantity of CPU Activations assigned to the PPAR, the quantity of CPU core resources currently used by the PPAR, and the quantity of additional CPU Activations made available by Interim Permit.

If a user with the `platadm` or `platop` privilege executes `showinterimpermitusage`, the command displays the CPU Activation information of the entire system and CPU core resource usage per PPAR.

If a user with privileges only for the target PPAR executes `showinterimpermitusage`, the command displays the current CPU core resource usage of the target PPAR.

If no *ppar_id* is specified, the command displays the CPU Activation information of all PPARs and CPU core resource usage per PPAR.

Privileges

To execute this command, one of the following privileges is required.

`platadm`, `platop`, `fieldeng`	Enables execution for all physical partitions (PPARs).
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.
`-p` *ppar_id*	Specifies the PPAR-ID to be displayed.

EXTENDED DESCRIPTION

`Installed Cores`	Quantity of CPU cores physically present in the PPAR
`Purchased Cores Assigned to PPAR`	Quantity of CPU Activations (in units of cores) assigned to the PPAR
`Cores In Use by Ldoms`	Quantity of CPU resources (in units of cores) currently used by Oracle VM Server for SPARC logical domains
`Interim Assignable Cores`	Quantity of additional CPU Activations (in units of cores) made available by Interim Permit The displayed value is obtained by subtracting "Purchased Cores Assigned to PPAR" from "Installed Cores". If Interim Permit is disabled or has expired, "0" is displayed.
`In Use Interim Cores`	Quantity of Interim Permitted CPU core resources (cores temporarily available as a result of Interim Permit being enabled) currently used by Oracle VM Server for SPARC logical domains The displayed value is obtained by subtracting "Purchased Cores Assigned to PPAR" from "Cores In Use by Ldoms". If quantity shown by "Cores In Use by Ldoms" is less than, or equal to the quantity shown by "Purchased Cores Assigned to PPAR", "In Use Interim Cores" displays "0". If Interim Permit is disabled or has expired, "0" is displayed.

EXAMPLES

EXAMPLE 1 Display CPU Activation and CPU core resource information for the entire system (in this case the user has `platadm` privilege on SPARC M12-2S/M10-4S).

```
XSCF> showinterimpermitusage

PPAR-ID: 0
  Installed Cores:                     32
  Purchased Cores Assigned to PPAR:    16
  Cores In Use by Ldoms:               32
  Interim Assignable Cores:            16
  In Use Interim Cores:                16
```

```
PPAR-ID: 1
  Installed Cores:                      32
  Purchased Cores Assigned to PPAR:     16
  Cores In Use by Ldoms:                 8
  Interim Assignable Cores:              0
  In Use Interim Cores:                  0

PPAR-ID: 2
  Installed Cores:                      32
  Purchased Cores Assigned to PPAR:      4
  Cores In Use by Ldoms:                12
  Interim Assignable Cores:             28
  In Use Interim Cores:                  8

PPAR-ID: 3
  Installed Cores:                      32
  Purchased Cores Assigned to PPAR:     10
  Cores In Use by Ldoms:                 8
  Interim Assignable Cores:             22
  In Use Interim Cores:                  0

   :

PPAR-ID: 15
  Installed Cores:                       0
  Purchased Cores Assigned to PPAR:      0
  Cores In Use by Ldoms:                 0
  Interim Assignable Cores:              0
  In Use Interim Cores:                  0

Note:
  Please confirm the value of "Cores In Use by Ldoms" using the Oracle VM
  Server for SPARC ldm command.
  The XSCF may take up to 20 minutes to reflect the "Cores In Use by Ldoms"
  of logical domains.
```

EXAMPLE 2 Display CPU Activation and CPU core resource information for the entire system (in this case the user has `platadm` privilege on SPARC M12-1/M12-2/M10-1/M10-4).

```
XSCF> showinterimpermitusage

PPAR-ID: 0
  Installed Cores:                      16
  Purchased Cores Assigned to PPAR:      8
  Cores In Use by Ldoms:                12
  Interim Assignable Cores:              8
  In Use Interim Cores:                  4

Note:
  Please confirm the value of "Cores In Use by Ldoms" using the Oracle VM
```

```
  Server for SPARC ldm command.
  The XSCF may take up to 20 minutes to reflect the "Cores In Use by Ldoms"
  of logical domains.
```

EXAMPLE 3 Display CPU Activation and CPU core resource information for each PPAR (in this case the user has `pparadm` privilege for PPAR#0 and PPAR#2 on SPARC M12-2S/M10-4S).

```
XSCF> showinterimpermitusage

PPAR-ID: 0
  Installed Cores:                      32
  Purchased Cores Assigned to PPAR:     16
  Cores In Use by Ldoms:                32
  Interim Assignable Cores:             16
  In Use Interim Cores:                 16

PPAR-ID: 2
  Installed Cores:                      32
  Purchased Cores Assigned to PPAR:      4
  Cores In Use by Ldoms:                12
  Interim Assignable Cores:             28
  In Use Interim Cores:                  8

Note:
  Please confirm the value of "Cores In Use by Ldoms" using the Oracle VM
  Server for SPARC ldm command.
  The XSCF may take up to 20 minutes to reflect the "Cores In Use by Ldoms"
  of logical domains.
```

EXAMPLE 4 Display CPU Activation and CPU core resource information for PPAR#2.

```
XSCF> showinterimpermitusage -p 2

PPAR-ID: 2
  Installed Cores:                      32
  Purchased Cores Assigned to PPAR:      4
  Cores In Use by Ldoms:                12
  Interim Assignable Cores:             28
  In Use Interim Cores:                  8

Note:
  Please confirm the value of "Cores In Use by Ldoms" using the Oracle VM
  Server for SPARC ldm command.
  The XSCF may take up to 20 minutes to reflect the "Cores In Use by Ldoms"
  of logical domains.
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

addcodactivation(8), **deletecodactivation**`(8)`, **setcod**`(8)`, **setinterimpermit**`(8)`, **showcod**`(8)`, **showcodactivation**`(8)`, **showcodactivationhistory**`(8)`, **showcodusage**`(8)`

NAME

showldap - display the Lightweight Directory Access Protocol (LDAP) configuration for the XSCF.

SYNOPSIS

showldap

showldap [-c]

showldap -h

DESCRIPTION

showldap displays the LDAP configuration of XSCF. When invoked without options, showldap displays all LDAP configuration except for the server certificate and the password used when binding to the LDAP server.

Privileges

You must have useradm or fieldeng privileges to run this command.

Refer to setprivileges(8) for more information.

OPTIONS

The following options are supported:

-c Displays the LDAP server certification.

-h Displays usage statement.

When used with other options or operands, an error occurs.

EXAMPLES

EXAMPLE 1 Displaying All LDAP Configuration Data

```
XSCF> showldap
Bind Name: user
Base Distinguishing Name: ou=people,dc=company,dc=com
LDAP Search Timeout: 60
Bind password: Set
LDAP Servers: ldap://company.com:389
CERTS: None
```

EXAMPLE 2 Displaying LDAP Server Certification

```
XSCF> showldap -c
Certificate:
  Data:
    Version: 3 (0x2)
    Serial Number:
      fc:c1:32:c4:02:72:35:ea
    Signature Algorithm: sha256WithRSAEncryption
    Issuer: C=JP, ST=Kanagawa, L=Kawasaki, O=Fujitsu, OU=Fujitsu
    Validity
      Not Before: Jul 29 19:57:22 2013 GMT
      Not After : Jul 29 19:57:22 2014 GMT
    Subject: C=JP, ST=Kanagawa, L=Kawasaki, O=Fujitsu, OU=Fujitsu
    Subject Public Key Info:
      Public Key Algorithm: rsaEncryption
```

```
        RSA Public Key: (1024 bit)
          Modulus (1024 bit):
            00:db:dc:60:74:41:ab:a6:cf:3d:6c:43:ec:58:30:
            65:29:15:92:c7:e7:af:d9:4c:8b:69:63:f4:77:66:
            3a:27:db:4a:05:60:3a:39:d6:a8:e1:b1:9f:21:93:
            1f:a1:c0:24:66:f2:0c:4b:7c:0f:7f:44:45:ee:99:
            49:8f:48:f5:0f:b7:d5:c5:23:67:26:0c:b8:56:ea:
            02:2a:c3:06:e2:97:5c:cc:ca:82:2b:02:7f:f1:14:
            2a:7e:3c:0a:d2:af:ab:35:53:d6:55:df:6b:f5:91:
            53:95:21:4d:b0:e1:f4:d9:bc:9c:93:b0:72:0c:85:
            3f:0e:91:bc:72:e2:fe:c9:93
          Exponent: 65537 (0x10001)
      X509v3 extensions:
        X509v3 Subject Key Identifier:
          1D:23:C0:57:EB:AA:29:CF:BD:A0:40:61:AC:B9:0D:FE:09:27:50:45
        X509v3 Authority Key Identifier:
          keyid:1D:23:C0:57:EB:AA:29:CF:BD:A0:40:61:AC:B9:0D:FE:09:27:50:45
          DirName:/C=JP/ST=Kanagawa/L=Kawasaki/O=Fujitsu, Inc./OU=Fujitsu
          serial:FC:C1:32:C4:02:72:35:EA

        X509v3 Basic Constraints:
          CA:TRUE
    Signature Algorithm: sha256WithRSAEncryption
      90:56:fc:50:79:81:b1:59:ec:51:24:6f:d7:9c:e7:ac:63:09:
      7b:74:5f:3c:72:94:d7:91:be:f2:f3:9d:b6:65:76:a0:3f:03:
      b1:96:06:48:d3:55:f8:2c:4e:3d:17:ba:66:47:81:a5:54:7f:
      c3:01:47:c0:cb:8b:4a:0b:3f:fc:e6:45:28:4d:1b:8d:da:72:
      9f:8f:c5:5f:61:2b:96:e6:21:c3:55:3c:02:81:e2:cb:bd:ea:
      00:18:59:93:5f:36:60:be:73:64:1a:41:14:ac:da:8d:d5:18:
      e8:16:40:77:fd:3a:ce:a4:60:a8:fd:3c:11:0f:72:e4:23:2d:
      5c:d3
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

setldap(8)

NAME

showldapssl - show LDAP over SSL configuration and messages.

SYNOPSIS

showldapssl

showldapssl `cert` [`-v`] [`-i` *n*]

showldapssl `log` [`-M`] [`-C`] [`-S` *start_record_number*] [`-E` *end_record_number*]

showldapssl `log -f`

showldapssl `group administrator` [`-i` *n*]

showldapssl `group operator` [`-i` *n*]

showldapssl `group custom` [`-i` *n*]

showldapssl `userdomain` [`-i` *n*]

showldapssl `usermap`

showldapssl `defaultrole`

showldapssl `server` [`-i` *n*]

showldapssl `-h`

DESCRIPTION

`showldapssl` displays the LDAP over SSL configuration and diagnostic messages.

Privileges

You must have `useradm` privileges to run this command.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following options are supported:

`-f`	Displays diagnostic messages in real time. When this option is used, the command does not terminate. Each diagnostic message is displayed when it is registered. To stop the real-time display, press [Ctrl]+[C] key.
`-h`	Displays usage statement. When used with other options or operands, an error occurs.

`-i` *n*
: Sets an index marker, value 1 - 5. When executed without `-i` or without any value for `-i`, the system behaves in the following way, according to the assigned operand.

  `group`, `userdomain`
  : Successively searches index marker 1 to 5.

  `cert`
  : Displays the server certificate of the primary LDAP over SSL server.

  `server`
  : Displays the configuration of the primary LDAP over SSL server.

`-v`
: Specifies verbose output. Used only with the cert operand to display the full certificate.

`-C`
: Appends to end of output the number of records in the log.

`-E`
: Specifies the last record number to display, where *end_record_number* can be any record number in the log. Use `-C` to obtain the number of records in the log.

`-M`
: Displays text one screen at a time.

`-S`
: Specifies the first record to display, where *start_record_number* can be any record number in the log. Use `-C` to obtain the number of records in the log.

OPERANDS

The following operands are supported:

`cert`
: Display current server certificates.

  Displays the primary LDAP over SSL server when `-i` is omitted. Displays the alternate LDAP over SSL server when `-i` is specified.

`log`
: Display diagnostic messages.

`group administrator`
: Display current group configurations.

`group operator`
: Display current group configurations.

`group custom`
: Display current group configurations.

`userdomain`
: Display current userdomain settings.

`usermap`	Display current user mapping settings.
`defaultrole`	Display current defaultrole setting.
`server`	Display current LDAP over SSL server settings.
	Displays the primary LDAP over SSL server when `-i` is omitted. Displays the alternate LDAP over SSL server when `-i` is specified.

EXAMPLES

EXAMPLE 1 Displays the current state of LDAP over SSL.

```
XSCF> showldapssl
usermapmode: enabled
state: enabled
strictcertmode: enabled
timeout: 4
logdetail: none
```

EXAMPLE 2 Displays certificate information for the primary LDAP over SSL server.

```
XSCF> showldapssl cert
Primary Server:
certstatus = certificate present
issuer = C=US, ST=California, L=San Diego, O=aCompany,
OU=System Group, CN=John User serial number = 0 (00000000)
subject = C=US, ST=California, L=San Diego, O=aCompany,
OU=System Group, CN=John User serial number = 0 (00000000)
valid from = Apr 18 05:38:36 2013 GMT
valid until = Apr 16 05:38:36 2023 GMT
version = 3 (0x02)
```

EXAMPLE 3 Displays specified diagnostic messages.

```
XSCF> showldapssl log -S 5 -E 10
Thu Sep 2 01:43 2013 (LdapSSL): -error- authentication status: auth-ERROR
Thu Sep 2 01:44 2013 (LdapSSL): -error- authentication status: auth-ERROR
Thu Sep 2 01:47 2013 (LdapSSL): -error- authentication status: auth-ERROR
Thu Sep 2 01:51 2013 (LdapSSL): -error- authentication status: auth-ERROR
Thu Sep 2 01:52 2013 (LdapSSL): -error- authentication status: auth-ERROR
Thu Sep 2 01:55 2013 (LdapSSL): -error- authentication status: auth-ERROR
```

EXAMPLE 4 Displays configuration for administrator group 3.

```
XSCF> showldapssl group administrator -i 3
Administrator Group 3
name: CN=pSuperAdmin,OU=Groups,DC=sales,DC=company,DC=com
```

EXAMPLE 5 Displays alternate LDAP over SSL server 1 setting. A port number of 0 indicates that the default port for LDAP over SSL is used.

```
XSCF> showldapssl server -i 1
Alternate Server  1
address: (none)
port: 0
```

EXAMPLE 6 Displays the optional user mapping settings.

```
XSCF> showldapssl usermap
attributeInfo: (&(objectclass=person)(uid=<USERNAME>))
binddn: cn=Manager,dc=company,dc=com
bindpw: Set
searchbase: ou=people,dc=company,dc=com
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

setldapssl(8)

NAME

showlocator - Displays the status of the CHECK LED on the operation panel.

SYNOPSIS

showlocator [`-a`|`-b` *bb_id*]

showlocator `-h`

DESCRIPTION

`showlocator` is a command to display the blinking status of the CHECK LEDs of the operation panels mounted in SPARC M12/M10 Systems chassis and crossbar boxes (XBBOXs).

Any of the following statuses is displayed.

`Off` (Off)	Indicates that it is normal, the input power is being off, or the power fails.
`Blinking` (Blinking)	Indicates that it is a chassis subject to maintenance.
`On` (Lighted)	Indicates that an abnormality is detected.

Privileges

To execute this command, any of the following privileges is required.

`useradm`, `platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Displays the statuses of all CHECK LEDs connected currently.
`-b` *bb_id*	Displays the status of the CHECK LEDs of the SPARC M12/M10 systems chassis and crossbar boxes corresponding to the specified *bb_id*. If omitted, the status of the CHECK LED of the chassis itself is displayed.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

You can set the blinking status of CHECK LED by using `setlocator`(8).

EXAMPLES

EXAMPLE 1 Display the status of CHECK LED of BB-ID 10.

```
XSCF> showlocator -b 10
BB#10: Locator LED status: Blinking
```

EXAMPLE 2 Display the statuses of all CHECK LEDs.

```
XSCF> showlocator -a
XB-Box#80 : Locator LED status: Blinking
 :
BB#00 : Locator LED status: Blinking
BB#01 : Locator LED status: Off
BB#02 : Locator LED status: On
 :
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setlocator(8)

NAME

showloginlockout - Displays the time set in the lockout function of the user account.

SYNOPSIS

showloginlockout

showloginlockout `-h`

DESCRIPTION

`showloginlockout` is a command to display the time by minutes when login is prohibited after failing in login three times in a row.

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

The user can attempt login three times in a row. If the third attempt fails, login is prohibited for the time set by `setloginlockout`(8). `showloginlockout` displays the set lockout time by minutes.

If the set lockout time elapses, attempt to log in is allowed again.

EXAMPLES

EXAMPLE 1 Display the timeout time of lockout.

```
XSCF> showloginlockout
90 minutes
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

setloginlockout`(8)`

NAME

showlogs - Displays the specified log.

SYNOPSIS

showlogs [-t *time* [-T *time*]] [-v|-V|-S] [-r] [-M] error

showlogs [-t *time* [-T *time*]|-p *timestamp*] [-v] [-r] [-M] event

showlogs [-t *time* [-T *time*]] [-r] [-M] power

showlogs {-a|-b *bb_id*} [-t *time* [-T *time*]] [-r] [-M] env

showlogs [-r] [-M] monitor

showlogs -p *ppar_id* [-t *time* [-T *time*]] [-r] [-M] {console|ipl|panic}

showlogs -h

DESCRIPTION

showlogs is a command to display the specified log.

The logs are displayed in chronological order of time stamps by default. The following logs can be specified for each unit of collection.

- System unit
  - Error log (Scan logs may be included.)
  - Power log
  - Event log
  - Monitoring log
- SPARC M12/M10 systems chassis
  - Temperature history
- Physical partition (PPAR) unit
  - Console message log
  - Panic message log
  - IPL message log

Privileges

To execute this command, any of the following privileges is required.

- Error log, event log, temperature history, monitoring log

  platadm, platop, fieldeng
- Power log

platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr	Enables execution for PPARs for which you have administration privilege.

- Console message log, panic message log, IPL message log

`platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

- Scan log

  `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	All chassis on the system are subject. This can be specified for the temperature history.
`-b` *bb_id*	Specifies only one BB-ID to display the log. You can specify any of the following values for *bb_id*. For SPARC M12-1/M12-2/M10-1/M10-4: `0` For SPARC M12-2S/M10-4S: an integer from `0` to `15` For crossbar box: an integer from `80` to `83`
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.
`-p` *ppar_id*	Specifies a single PPAR-ID to display. This can be specified for the console message log, panic message log, and IPL message log. Depending on the system configuration, you can specify an integer from `0` to `15` for *ppar_id*.

`-P` *timestamp*
: If the log is displayed alone, specify the time stamp of the log. This can be specified for the error log and event log.

  timestamp is specified in any of the following formats.

  yyyy-mm-dd,hh:mm:ss
  : The value is specified in the year-month-day,hour:minute:second format.

  mm/dd/yy,hh:mm:ss
  : The value is specified in the month/day/year,hour:minute:second format.

  Monddhh:mm:ssyyyy
  : The value is specified in the month-name,day,hour:minute:second,year format.

`-r`
: Displays logs in reverse chronological order of time stamps. By default, logs are displayed in chronological order of time stamps.

`-S`
: Displays the scan log attached to an error log. Only the users with `fieldeng` privilege can specify it. It cannot be specified with the `-v` or `-V` option.

`-t` *time*

Specifies the starting date and time for specifying the display range of logs. Any of the following specification formats is applied.

yyyy-mm-dd,hh:mm
: The value is specified in the year-month-day,hour:minute format.

mm/dd/yy,hh:mm
: The value is specified in the month/day/year,hour:minute format.

Monddhh:mmyyyy
: The value is specified in the month-name,day,hour:minute,year format.

yyyy-mm-dd,hh:mm:ss
: The value is specified in the year-month-day,hour:minute:second format.

mm/dd/yy,hh:mm:ss
: The value is specified in the month/day/year,hour:minute:second format.

Monddhh:mm:ssyyyy
: The value is specified in the month-name,day,hour:minute:second,year format.

Even if it is specified with the `-r` option, the specifications of the `-t` and `-T` option will never be reversed. It cannot be used for monitoring logs.

`-T` *time*

Specifies the ending date and time for specifying the display range of logs. Any of the following specification formats is applied.

yyyy-mm-dd,hh:mm
: The value is specified in the year-month-day,hour:minute format.

mm/dd/yy,hh:mm
: The value is specified in the month/day/year,hour:minute format.

Monddhh:mmyyyy
: The value is specified in the month-name,day,hour:minute,year format.

yyyy-mm-dd,hh:mm:ss
: The value is specified in the year-month-day,hour:minute:second format.

mm/dd/yy,hh:mm:ss
: The value is specified in the month/day/year,hour:minute:second format.

Monddhh:mm:ssyyyy
: The value is specified in the month-name,day,hour:minute:second,year format.

Even if it is specified with the `-r` option, the specifications of the `-t` and `-T` option will never be reversed. It cannot be used for monitoring logs.

`-v`

Displays detailed information. In addition to normal display, the detailed diagnosis code (`Diagnostic Code`) is displayed. It cannot be specified with the `-V` or `-S` option. This can be specified for the error log and event log.

`-V`

Displays more detailed information. If the machine administration detail log information, the PCI card information, and the I/O error fault log information have been collected, those are displayed in addition to the information displayed by the `-v` option. They may not be collected depending on the type of error event. It cannot be specified with the `-v` or `-S` option. This can be specified for the error log.

OPERANDS

The following operands are supported.

`error`

Displays the error log. (Scan logs may be included.)

`event`

Displays the event log.

`power`

Displays the power log.

`env`	Displays the temperature history.
`monitor`	Displays the monitoring log.
`console`	Displays the console message log.
`ipl`	Displays the IPL message log.
`panic`	Displays the panic message log.

EXTENDED DESCRIPTION

The upper limit on the number of characters displayed for a log on a single line of the console message log (console) is 2,047 characters. The part exceeding this upper limit is not displayed.

Each log is displayed in the following format.

- Error log
  Default

```
Date: Oct 20 17:45:31 JST 2012
      Code: xxxxxxxx-xxxxxxxxxxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
      Status: Alarm                Occurred: Oct 20 17:45:31.000 JST 2012
      FRU: /BB#xx/PSU#x
      Msg: PSU failed
```

  If `-v` option is specified

```
Date: Oct 20 17:45:31 JST 2012
      Code: xxxxxxxx-xxxxxxxxxxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
      Status: Alarm                Occurred: Oct 20 17:45:31.000 JST 2012
      FRU: /BB#xx/PSU#x
      Msg: PSU failed
      Diagnostic Code:
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx
          xxxxxxxx xxxxxxxx xxxx
```

  If the `-V` option is specified

```
Date: Oct 20 17:45:31 JST 2012
      Code: xxxxxxxx-xxxxxxxxxxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
      Status: Alarm                Occurred: Oct 20 17:45:31.000 JST 2012
      FRU: /BB#xx/PSU#x
      Msg: PSU failed
      Diagnostic Code:
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx
```

```
            xxxxxxxx xxxxxxxx xxxx
        Diagnostic Messages
        :
```

If the -S option is specified

```
Date: Oct 20 17:45:31 JST 2012
      Code: xxxxxxxx-xxxxxxxxxxxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
      Status: Alarm                 Occurred: Oct 20 17:45:31.000 JST 2012
      FRU: /BB#xx/PSU#x
      Msg: PSU failed
      Diagnostic Code:
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxx
          xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx
          xxxxxxxx xxxxxxxx xxxx
      Detail log: SCAN MINOR RC 2K
      0000: xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx
      0010: xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx
      :
```

`Date`: Date log collected (month day hour:minute:second TimeZone year)
This is displayed in local time.

`Code`: Error code
This is displayed in 25 bytes.

`Status`: Error status
Any of the following is displayed.

`Warning`	Partial degradation or warning of the unit
`Alarm`	Failure or abnormality of the unit
`Information`	Notification
`Notice`	System status notification

`Occurred`: Error occurrence date (in the 'month day hour:minute:second time-zone year' format). This is displayed in local time.

`FRU`: Alleged unit

The first, second, and third alleged units are displayed separated by a comma (`,`). If the fourth alleged unit exists, asterisk (`*`) is displayed. It depends on the point of detection whether the units subsequent to the second one are displayed.

`Msg`: Contents of error

Diagnostic Code:	Detailed code of error This is displayed in hexadecimal.
Diagnostic Messages:	Detailed message This is displayed if the log has a detailed message.
Detail log:	Scan log code This is displayed if the log has a scan log.

- Power log

```
Date                          Event              Cause             ID  Switch
Oct 20 17:25:31 JST 2012      Cabinet Power On   Operator          00  Service
Oct 20 17:35:31 JST 2012      PPAR Power On      Operator          00  Locked
Oct 20 17:45:31 JST 2012      PPAR Power Off     Software Request  00  Locked
Oct 20 17:50:31 JST 2012      Cabinet Power Off  Self Reset        00  Service
      :
      :
```

Date:	Date log collected (month day hour:minute:second TimeZone year) This is displayed in local time.
Event:	Power status Any of the following statuses is displayed.

SCF Reset	In the status in which XSCF is rebooted
PPAR Power On	In the status in which the power of PPAR is on
PPAR Power Off	In the status in which the power of PPAR is off
PPAR Reset	In the status in which PPAR is restarted
Cabinet Power On	The chassis power is on
Cabinet Power Off	The chassis power is off
XIR	In the status in which eXtended Internal Reset is executed

Cause:	Cause of Event Any of the following is displayed. CoD, Self Reset, Power On, System Reset, Panel, Scheduled, IPMI, Power Recover, Power Capping, Operator, Software Request, Alarm, Fatal
ID:	PPAR-ID or BB-ID In the case of Event for all SPARC M10 Systems chassis or PPARs, "--" is displayed. If Event is Cabinet Power On or Cabinet Power Off, BB-ID is displayed. An integer from 00 to 15 or 80 to 83 is displayed for BB-ID. If Event is PPAR Power On or PPAR Power Off, or PPAR Reset, PPAR-ID is displayed. An integer from 00 to 15 is displayed for PPAR-ID.
Switch:	Status of the mode switch of the operator panel Any of the following statuses is displayed. Locked — Mode during normal operation Service — Service mode

- Event log
  Default

```
Date                            Message
Oct 20 17:45:31 JST 2012        System power on
Oct 20 17:55:31 JST 2012        System power off
   :
   :
```

If -v option is specified

```
Date                            Message
Oct 20 17:45:31 JST 2012        System power on
Switch= Service
Code=xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
     xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
     xxxx xxxx
```

`Date`: Date log collected (month day hour:minute:second TimeZone year)
This is displayed in local time.

`Message`: Event message

`Switch`: Status of the mode switch of the operator panel
Any of the following statuses is displayed.

`Locked`	Mode during normal operation
`Service`	Service mode

`Code`: Detailed event information
This is displayed in hexadecimal.

■ Temperature history

```
BB#00
Date                          Temperature  Power
Oct 20 17:45:31 JST 2012       32.56(C)    System Power On
Oct 20 17:55:31 JST 2012       32.56(C)    System Power Off
   :
```

`BB#`*xx*: BB-ID is displayed by an integer from 0 to 15, or from 80 to 83, depending on the system configuration.

`Date`: Date log collected (month day hour:minute:second TimeZone year)
This is displayed in local time.

`Temperature`: Intake-air temperature
This is displayed to two decimal places. The unit is Celsius (degrees C).

`Power`: Power status of the system
Either of the following statuses is displayed.

`Cabinet Power On`	In the status in which the power of the chassis is on
`Cabinet Power OFF`	In the status in which the power of the chassis is off

■ Monitoring log

```
Oct 20 17:45:31 JST 2012      monitor message
Oct 20 17:55:31 JST 2012      monitor message
      :
```

The date and monitoring message are displayed by one message with one line.

For the date, the date the log was collected is displayed in local time (month day hour:minute:second TimeZone year).

- Console message log

```
PPAR-ID: 00
Oct 20 17:45:31 JST 2012      console message
Oct 20 17:55:31 JST 2012      console message
      :
      :
```

[First line]

PPAR-ID: PPAR ID
Depending on the system configuration, an integer from 00 to 15 is displayed.

[Second and subsequent lines]

The date and console message are displayed by one message with one line.

For the date, the date the log was collected is displayed in local time (month day hour:minute:second TimeZone year).

- Panic message log

```
<<panic>>
Date: Oct 20 18:45:31 JST 2012      PPAR-ID: 00
Oct 20 17:45:31 JST 2012      panic message
Oct 20 17:55:31 JST 2012      panic message
      :
```

[Second line]

Date: Date panic occurred (month day hour:minute:second TimeZone year)
This is displayed in local time.

PPAR-ID: PPAR ID
Depending on the system configuration, an integer from 00 to 15 is displayed.

[Third and subsequent lines]

The date and panic message are displayed by one message with one line.

For the date, the date the log was collected is displayed in local time (month day hour:minute:second TimeZone year).

■ IPL message log

```
<<ipl>>
Date: Oct 20 18:45:31 JST 2012      PPAR-ID: 00
Oct 20 17:45:31 JST 2012      ipl message
Oct 20 17:55:31 JST 2012      ipl message
      :
```

[Second line]

`Date`: Date IPL occurred (month day hour:minute:second TimeZone year)
This is displayed in local time.

`PPAR-ID`: PPAR ID
Depending on the system configuration, an integer from `00` to `15` is displayed.

[Third and subsequent lines]

The date and IPL message are displayed by one message with one line.

For the date, the date the log was collected is displayed in local time (month day hour:minute:second TimeZone year).

EXAMPLES

EXAMPLE 1 Display the error log.

```
XSCF> showlogs error
Date: Oct 20 12:45:31 JST 2012
    Code: 00112233-445566778899aabbcc-8899aabbcceeff0011223344
    Status: Alarm                 Occurred: Oct 20 12:45:31.000 JST 2012
    FRU: /BB#0/PSU#0
    Msg: PSU failed
Date: Oct 20 15:45:31 JST 2012
    Code: 00112233-445566778899aabbcc-8899aabbcceeff0011223344
    Status: Alarm                 Occurred: Oct 20 12:45:31.000 JST 2012
    FRU: /BB#1/PSU#1
    Msg: PSU Input voltage too high
```

Example 2 Display the error log of the specified time stamp in detail (`-v`).

```
XSCF> showlogs error -P Oct2012:45:312012 -v
Date: Oct 20 12:45:31 JST 2012
    Code: 00112233-445566778899aabbcc-8899aabbcceeff0011223344
    Status: Alarm                 Occurred: Oct 20 12:45:31.000 JST 2012
    FRU: IOU#0/PCI#3
    Msg: offline(vendor=FUJITSU, product=MAJ3182MC)
    Diagnostic Code:
        00112233 44556677 8899
        00112233 44556677 8899
```

```
        00112233 44556677 8899
        00112233 44556677 8899aabb ccddeeff
        00112233 44556677 8899
```

Example 3 Display the error log of the specified time stamp in more detail (-V).

```
XSCF> showlogs error -P Oct2012:45:312012 -V
Date: Oct 20 12:45:31 JST 2012
    Code: 00112233-445566778899aabbcc-8899aabbcceeff0011223344
    Status: Alarm                 Occurred: Oct 20 12:45:31.000 JST 2012
    FRU: IOU#0/PCI#3
    Msg: offline(vendor=FUJITSU, product=MAJ3182MC)
    Diagnostic Code:
        00112233 44556677 8899
        00112233 44556677 8899
        00112233 44556677 8899
        00112233 44556677 8899aabb ccddeeff
        00112233 44556677 8899
    Diagnostic Messages
        Jul 11 16:17:42 plato10 root: [ID 702911 user.error] WARNING: /
pci@83,4000/scsi@2/sd@0,0 (sd47):
        Jul 11 16:17:42 plato10 root: [ID 702911 user.error]    incomplete
write- givin up
```

Example 4 Display the power log.

```
XSCF> showlogs power
Date                          Event             Cause             ID  Switch
Oct 20 17:25:31 JST 2012      Cabinet Power On  Operator          00  Service
Oct 20 17:35:31 JST 2012      PPAR Power On     Operator          00  Locked
Oct 20 17:45:31 JST 2012      PPAR Power Off    Software Request  00  Locked
Oct 20 17:50:31 JST 2012      Cabinet Power Off Self Reset        00  Service
```

Example 5 Display power logs in reverse chronological order of time stamps.

```
XSCF> showlogs power -r
Date                          Event             Cause             ID  Switch
Oct 20 17:50:31 JST 2012      Cabinet Power On  Operator          00  Service
Oct 20 17:45:31 JST 2012      PPAR Power On     Operator          00  Locked
Oct 20 17:35:31 JST 2012      PPAR Power Off    Software Request  00  Locked
Oct 20 17:25:31 JST 2012      Cabinet Power Off Self Reset        00  Service
```

Example 6 Display the power logs within the specified range.

```
XSCF> showlogs power -t Oct2017:302012 -T Oct2017:492012
Date                          Event             Cause             ID  Switch
Oct 20 17:35:31 JST 2012      PPAR Power Off    Software Request  00  Locked
Oct 20 17:45:31 JST 2012      PPAR Power On     Operator          00  Locked
```

Example 7 Display the power logs within the specified range. Display them in reverse

chronological order of time stamps.

```
XSCF> showlogs power -t Oct2017:302012 -T Oct2017:492012 -r
Date                          Event              Cause             ID  Switch
Oct 20 17:45:31 JST 2012      PPAR Power On      Operator          00  Locked
Oct 20 17:35:31 JST 2012      PPAR Power Off     Software Request  00  Locked
```

Example 8 Display power logs specifying the starting date and time for display.

```
XSCF> showlogs power -t Oct2017:302012
Date                          Event              Cause             ID  Switch
Oct 20 17:35:31 JST 2012      PPAR Power On      Operator          00  Locked
Oct 20 17:45:31 JST 2012      PPAR Power Off     Software Request  00  Locked
Oct 20 17:50:31 JST 2012      Cabinet Power Off  Self Reset        00  Service
```

Example 9 Display the console message log of the specified PPAR-ID.

```
XSCF> showlogs console -p 00
PPAR-ID: 00
Oct 20 17:45:31 JST 2012      Executing last command: boot
Oct 20 17:55:31 JST 2012      Boot device: /pci@83,4000/FJSV,ulsa@2,1/
disk@0,0:a File and args:
Oct 20 17:55:32 JST 2012      SunOS Release 5.10 Version Generic 64-bit
```

Example 10 Display the temperature history of the specified BB-ID.

```
XSCF> showlogs env -b 0
BB#00
   Date                          Temperature  Power
   Oct 20 17:45:31 JST 2012       32.56(C)    Cabinet Power On
   Oct 20 17:55:31 JST 2012       32.56(C)    Cabinet Power Off
```

Example 11 Display the temperature histories of all SPARC M10-4S chassiss

```
XSCF> showlogs env -a
BB#00
   Date                          Temperature  Power
   Oct 20 17:45:31 JST 2012       32.56(C)    Cabinet Power On
   Oct 20 17:55:31 JST 2012       32.56(C)    Cabinet Power Of
BB#01
   Date                          Temperature  Power
   Oct 20 17:45:31 JST 2012       32.56(C)    Cabinet Power On
   Oct 20 17:55:31 JST 2012       32.56(C)    Cabinet Power Off
.
.
.
XB-Box#83
   Date                          Temperature  Power
   Oct 20 17:45:31 JST 2012       32.56(C)    Cabinet Power On
   Oct 20 17:55:31 JST 2012       32.56(C)    Cabinet Power Off
```

Note – The displayed codes and messages may be different from the actual display.

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

NAME

showlookup - display the configuration for authentication and privileges lookup.

SYNOPSIS

showlookup

showlookup `-h`

DESCRIPTION

`showlookup` displays configuration settings for authentication and privileges.

Privileges

You must have `useradm` or `fieldeng` privileges to run this command.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following option is supported:

`-h` Displays usage statement.

EXAMPLES

EXAMPLE 1 Displaying Settings for Authentication and Privileges

```
XSCF> showlookup
Privileges lookup:Local only
Authentication lookup: Local and LDAP
```

EXIT STATUS

The following exit values are returned:

`0` Successful completion.

`>0` An error occurred.

SEE ALSO

setlookup`(8)`

NAME

showmonitorlog - Displays the contents of the monitoring message log in real time.

SYNOPSIS

showmonitorlog

showmonitorlog -h

DESCRIPTION

showmonitorlog is a command to display the contents of the monitoring message log in real time. It is similar to "tail -f."

If showmonitorlog is executed, the command is not terminated to display the monitoring message log and the XSCF shell is occupied. If a message is registered in a monitoring message log, the content is displayed. If the command is executed, nothing is displayed until a monitoring log is registered next time.

To terminate real-time display, press [Ctrl]+[C] key.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the contents of the monitoring message log in real time.

```
XSCF> showmonitorlog
Jun 23 12:17:18 PAPL-SERVER Warning: /BB#0/CMUL,/UNSPECIFIED:SCF:SCF SPI
FMEM access error
Jul 10 14:13:32 PAPL-SERVER Alarm: /BB#0/CMUU:SCF:Critical low voltage
error
Jul 11 13:40:20 PAPL-SERVER Information: /BB#0/XBU#0:ANALYZE:CPU-XB
interface correctable error
Jul 11 13:46:21 PAPL-SERVER Notice: /FIRMWARE,/BB#0/CMUL:SCF:SCF process
down detected
Jul 11 15:31:54 PAPL-SERVER Event: SCF:System powered on
  .
  .
```

EXIT STATUS

The following exit values are returned.

0 — Indicates normal end.

>0 — Indicates error occurrence.

NAME

shownameserver - Displays the name servers and search paths set in the XSCF network.

SYNOPSIS

shownameserver

shownameserver -h

DESCRIPTION

shownameserver is a command to display the list of the IP addresses of the name server and search paths set currently in the XSCF network.

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

You can set the name servers and search paths of the XSCF network by using setnameserver(8).

EXAMPLES

EXAMPLE 1 Display the name servers set currently in the XSCF network. We take as an example the case that three name servers and five search paths are set.

```
XSCF> shownameserver
nameserver 192.168.1.2
nameserver 10.18.108.10
nameserver 10.24.1.2
search     example1.com
search     example2.com
search     example3.com
search     example4.com
search     example5.com
```

EXAMPLE 2 Display the name servers set currently in the XSCF network. We take as an example the case that no name server or search path is set.

```
XSCF> shownameserver
nameserver ---
search     ---
```

EXIT STATUS

The following exit values are returned.

0 — Indicates normal end.

>0 — Indicates error occurrence.

SEE ALSO **setnameserver**(8)

NAME

shownetwork - Displays the information of the network interface set in the XSCF.

SYNOPSIS

shownetwork [-M] [-a | -i | *interface*]

shownetwork -h

DESCRIPTION

shownetwork is a command to display the information of the network interface set currently in the XSCF.

You can display the information of the specified network interface or all network interfaces. The following information is displayed.

xscf#*x*-*y*	XSCF network interface name
HWaddr	MAC address (Displayed in hexadecimal)
inet addr	IP address
Bcast	Broadcast
Mask	Netmask
UP/DOWN	Whether the network interface is valid

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the information set in all XSCF network interfaces.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-i	Displays the status of the current XSCF network.
-M	Displays text one screen at a time.

OPERANDS

The following operands are supported.

interface

Specifies the network interface to be displayed. You can specify any of the following depending on the system configuration. If it is specified with the `-a` option, it becomes invalid.

- For SPARC M12-2S/M10-4S (with crossbar box)

`xbbox#80-lan#0`	XBBOX#80-LAN#0
`xbbox#80-lan#1`	XBBOX#80-LAN#1
`lan#0`	Take-over IP address of XBBOX#80-LAN#0 and XBBOX#81-LAN#0
`xbbox#81-lan#0`	XBBOX#81-LAN#0
`xbbox#81-lan#1`	XBBOX#81-LAN#1
`lan#1`	Take-over IP addresses of XBBOX#80-LAN#1 and XBBOX#81-LAN#1

- For SPARC M12-2S/M10-4S (without crossbar box)

`bb#00-lan#0`	BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1
`lan#0`	Take-over IP addresses of BB#00-LAN#0 and BB#01-LAN#0
`bb#01-lan#0`	BB#01-LAN#0
`bb#01-lan#1`	BB#01-LAN#1
`lan#1`	Take-over IP addresses of BB#00-LAN#1 and BB#01-LAN#1

- For SPARC M12-1/M12-2/M10-1/M10-4

`bb#00-lan#0`	BB#00-LAN#0
`lan#0`	Abbreviated form of bb#00-lan#0
`bb#00-lan#1`	BB#00-LAN#1
`lan#1`	Abbreviated form of bb#00-lan#1

EXTENDED DESCRIPTION

- The take-over IP address means IP addresses which can be used without switch of XSCF recognized in multi-XSCF configuration. If each LAN port of an active XSCF unit is set in `lan#0` and `lan#1`, you can access them by the names, `lan#0` and `lan#1`.
- For SPARC M12-1/M12-2/M10-1/M10-4, `lan#0` is fixed to `bb#0-lan#0` and `lan#1` is fixed to `bb#0-lan#1`.
- For SPARC M12-2S/M10-4S, if the take-over IP address is disabled by `setnetwork`(8), nothing is displayed even with the take-over IP address specified by `shownetwork`.

- You can set the XSCF network interface by using `setnetwork`(8).

EXAMPLES

EXAMPLE 1 Display the information set in LAN#1 of XBBOX#80.

```
XSCF> shownetwork xbbox#80-lan#1
xbbox#80-lan#1
          Link encap:Ethernet  HWaddr 00:00:00:12:34:56
          inet addr:192.168.10.11  Bcast: 192.168.10.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:54424 errors:0 dropped:0 overruns:0 frame:0
          TX packets:14369 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:20241827 (19.3 MiB)  TX bytes:2089769 (1.9 MiB)
          Base address:0x1000
```

EXAMPLE 2 Display the information set in LAN#0 of XBBOX#80.

```
XSCF> shownetwork xbbox#80-lan#0
xbbox#80-lan#0
Link encap:Ethernet  HWaddr 00:00:00:12:34:56 E0:00:C4:00:8B
          inet addr: 192.168.11.10  Bcast: 192.168.11.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:54424 errors:0 dropped:0 overruns:0 frame:0
          TX packets:14369 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:12241827 (11.3 MiB)  TX bytes:1189769 (0.9 MiB)
          Base address:0x1000
```

EXAMPLE 3 Display the information set in the take-over IP address of LAN#0.

```
XSCF> shownetwork lan#0
lan#0     Link encap:Ethernet  HWaddr 00:00:00:12:34:56
          inet addr:192.168.1.10   Bcast:192.168.1.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          Base address:0xe000
```

EXAMPLE 4 Display the status of the XSCF network.

```
XSCF> shownetwork -i
Active Internet connections (without servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 xx.xx.xx.xx:telnet     xxxx:1617               ESTABLISHED
```

EXAMPLE 5 For SPARC M10-4S (without crossbar box), display the set information.

```
XSCF> shownetwork -a
bb#00-lan#0
          Link encap:Ethernet  HWaddr 00:00:00:12:34:56
```

```
          inet addr: 192.168.11.10  Bcast: 192.168.11.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:54424 errors:0 dropped:0 overruns:0 frame:0
          TX packets:14369 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:12241827 (11.3 MiB)  TX bytes:1189769 (0.9 MiB)
          Base address:0x1000

lan#0     Link encap:Ethernet  HWaddr 00:00:00:12:34:56
          inet addr:192.168.11.11   Bcast:192.168.11.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          Base address:0xe000

bb#00-lan#1
          Link encap:Ethernet  HWaddr 00:00:00:12:34:57
          inet addr:192.168.10.10  Bcast: 192.168.10.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:54424 errors:0 dropped:0 overruns:0 frame:0
          TX packets:14369 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:20241827 (19.3 MiB)  TX bytes:2089769 (1.9 MiB)
          Base address:0x1000

lan#1     Link encap:Ethernet  HWaddr 00:00:00:12:34:57
          inet addr:192.168.10.11   Bcast:192.168.10.255
Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          Base address:0xe000

bb#01-lan#0
          HWaddr 00:00:00:12:34:59
          inet addr:192.168.10.12  Mask:255.255.255.0

bb#01-lan#1
          HWaddr 00:00:00:12:34:60
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setnetwork(8)

NAME

shownotice - Displays copyright and license information for the XSCF Control Package (XCP)

SYNOPSIS

shownotice [`-c {copyright|license}`]

shownotice `-h`

DESCRIPTION

The `shownotice` is a command to display by page the copyright and, if available, license files for the XCP. When used without an option, `shownotice` displays copyright information and any available license information. You can display only the copyright or the license file by specifying the `-c` option.

Privileges

No privileges are required to run this command.

Refer to `setprivileges`(8) for more information.

OPTIONS

The following options are supported:

`-c {copyright|license}`

Specifies for display by page either the copyright file or the license file for the XCP.

`copyright`

Specifies for display only the copyright file.

`license`

Specifies for display only the license file, if a license file is available for your platform. If the license file for your platform is not available for the `shownotice` command, the `license` argument is not supported.

`-h`

Displays usage statement. When used with other options or operands, an error occurs.

EXAMPLES

EXAMPLE 1 Display Only Copyright Information

```
XSCF> shownotice -c copyright
[Copyright text displays.]
```

EXAMPLE 2 Display Copyright and License Information

```
XSCF> shownotice
[Copyright text displays.]
[License text displays (if available).]
```

EXIT STATUS

The following exit values are returned:

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

showntp - Displays the NTP information set in the XSCF network.

SYNOPSIS

showntp {-l | -a | *address* | -s | -m}

showntp -h

DESCRIPTION

showntp is a command to display the NTP information set currently in the XSCF network.

The following information can be displayed.

- NTP server registered in the XSCF network
- Synchronization status with the upper NTP servers
- Whether NTP service is provided to the client
- stratum value set in the XSCF network
- Whether the preferred server is specified
- Clock address of the local clock set in XSCF
- Enable/disable configuration status of DNS round robin

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a — Displays all NTP servers set currently in the XSCF network.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

-l — Displays whether it is synchronized with the NTP server

-m — Displays whether the preferred server is specified (prefer) and clock address of the local clock (localaddr).

In prefer, either of the following is displayed.

on	The preferred server is specified.
off	The preferred server is not specified.

In localaddr, the least significant byte of the clock address of the local clock 127.127.1.u is displayed by a figure from 0 to 3.

-s — Displays the stratum value set in XSCF.

OPERANDS

The following operands are supported.

address

Specifies the IP address or host name of the NTP server to be displayed. If the `-a` option is specified, it becomes invalid.

To specify them by the IP address, *address* can be specified in a format using four sets of integers separated by periods (`.`).

xxx.xxx.xxx.xxx

xxx Specifies an integer from 0 to 255. This can be specified using zero suppression.

To specify them by the host name, specify *address* within 64 characters in a format separating the label elements by periods (.). For the label element, you can use alphanumeric characters and hyphens (-). However, make the specification using an alphabetic character for the beginning, and an alphanumeric character for the end of the element. (Based on RFC 1034.) Depending on the DNS server, the server name needs to be name-resolvable.

EXTENDED DESCRIPTION

- If the preferred server is not specified, there is no prefer information in the NTP server displayed by `showntp`.
- You can set the NTP server of the XSCF network by using `setntp`(8).
- If `showntp` is executed after executing `setntp`(8), the contents set by `setntp`(8) are displayed. To confirm the settings information of the NTP currently in operation, execute this command with the `-l` option.

EXAMPLES

EXAMPLE 1 Display all registered NTP servers. If `-m prefer=off` is set by `setntp`, the characters `prefer` are not displayed.

```
XSCF> showntp -a
client : enable
server : disable

server ntp1.example.com prefer
server ntp2.example.com
```

EXAMPLE 2 Confirm synchronization with the NTP server and display the result.

```
XSCF> showntp -l
 remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*192.168.0.27    192.168.1.56     2 u   27   64  377   12.929   -2.756   1.993
+192.168.0.57    192.168.1.86     2 u   32   64  377   13.030    2.184  94.421
 127.127.1.0     .LOCL.           5 l   44   64  377    0.000    0.000   0.008
```

EXAMPLE 3 Display the stratum value set in the XSCF network.

```
XSCF> showntp -s
stratum : 5
```

EXAMPLE 4 Display whether the preferred server is specified and the clock address of the local clock.

```
XSCF> showntp -m
prefer : on
localaddr : 0
```

EXAMPLE 5 Confirm synchronization if the NTP server is not synchronized with the upper NTP servers and the service is not provided to the client.

```
XSCF> showntp -l
NTP is unavailable.
```

EXAMPLE 6 Display whether DNS round robin is enabled in registered NTP servers.

```
XSCF> showntp ntp1.example.com
pool ntp1.example.com
```

EXAMPLE 7 Display all NTP servers. In this example, DNS round robin has been enabled in the first NTP server.

```
XSCF> showntp -a
client : enable
server : disable

pool ntp1.example.com
server ntp2.example.com prefer
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setntp(8), **setnameserver**(8)

NAME

showpacketfilters - Displays the IP packet filtering rules set in the XSCF network.

SYNOPSIS

showpacketfilters {-a | -l} [-M]

showpacketfilters -h

DESCRIPTION

showpacketfilters is a command to displays the IP packet filtering rules set in the XSCF network.

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the IP packet filtering rules set by setpacketfilters(8). However, the IP packet filtering rules set by -c ipmi_port are not displayed.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-l	Displays the IP packet filtering rules set by setpacketfilters(8) in the output format of the iptables command.
-M	Displays text one screen at a time.

EXTENDED DESCRIPTION

You can set the IP packet filtering rules used in the XSCF network by using setpacketfilters(8).

EXAMPLES

EXAMPLE 1 For SPARC M10-4S (with crossbar box), display the IP packet filtering rules set in the XSCF network.

```
XSCF> showpacketfilters -a
-s 172.16.0.0/255.255.0.0 -i xbbox#80-lan#0 -j DROP
-s 172.16.0.0/255.255.0.0 -i xbbox#81-lan#0 -j DROP
-s 10.10.10.10/255.255.255.255 -j DROP
-s 192.168.100.0/255.255.255.0 -i xbbox#80-lan#1 -j ACCEPT
-s 192.168.100.0/255.255.255.0 -i xbbox#81-lan#1 -j ACCEPT
-i xbbox#80-lan#1 -j DROP
-i xbbox#81-lan#1 -j DROP
```

EXAMPLE 2 For SPARC M10-4S (with crossbar box), display the operation status of the IP packet filtering rules of the XSCF network.

```
XSCF> showpacketfilters -l
 pkts bytes target     prot in             source
    0     0 DROP       udp  *              0.0.0.0/0.0.0.0           udp dpt:623
    0     0 DROP       all  xbbox#80-lan#0 172.16.0.0/255.255.0.0
    0     0 DROP       all  *              10.10.10.10
```

```
     0     0 ACCEPT     all  xbbox#80-lan#1 192.168.100.0/255.255.255.0
     0     0 DROP       all  xbbox#80-lan#1 0.0.0.0/0.0.0.0

  pkts bytes target     prot in             source
     0     0 DROP       all  xbbox#81-lan#0 172.16.0.0/255.255.0.0
     0     0 DROP       all  *              10.10.10.10
     0     0 ACCEPT     all  xbbox#81-lan#1 192.168.100.0/255.255.255.0
     0     0 DROP       all  xbbox#81-lan#1 0.0.0.0/0.0.0.0
XSCF>
```

EXAMPLE 3 When IP packets are disabled (default) in respect to IPMI ports.

```
XSCF> showpacketfilters -l
 pkts bytes target     prot in             source
    0     0 DROP       udp  *              0.0.0.0/0.0.0.0           udp dpt:623
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setpacketfilters(8)

NAME

showpasswordpolicy - Displays the current password policy setting.

SYNOPSIS

showpasswordpolicy

showpasswordpolicy -h

DESCRIPTION

`showpasswordpolicy` is a command to display the password policy setting.

The `pam_cracklib` module, date of the effective period, and number of the passwords stored in the password history are included.

Privileges

To execute this command, `useradm` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the password policy setting.

```
XSCF> showpasswordpolicy
Mindays:  0
Maxdays:  99999
Warn:     7
Inactive: -1
Expiry:   0
Retry:    3
Difok:    10
Minlen:   9
Dcredit:  1
Ucredit:  1
Lcredit:  1
Ocredit:  1
Remember: 3
```

EXIT STATUS

The following exit values are returned.

`0` Indicates normal end.

`>0` Indicates error occurrence.

SEE ALSO

setpasswordpolicy (8)

NAME

showpciboxdio - Displays each PCI slot setting of whether to enable the direct I/O function for a PCI card mounted in the PCI expansion unit for the SPARC M12-2/M12-2S/M10-4/M10-4S.

SYNOPSIS

showpciboxdio [`-a`|`-b` *bb_id*] [`-M`] `all`

showpciboxdio [`-a`|`-b` *bb_id*] [`-M`] *slot_no...*

showpciboxdio `-h`

DESCRIPTION

`showpciboxdio` is a command to display the enable/disable setting of the direct I/O function for each PCI card mounted in the PCI expansion unit for the SPARC M12-2/M12-2S/M10-4/M10-4S.

`showpciboxdio` is not available for SPARC M12-1/M10-1.

For SPARC M12-1/M10-1, the `setpciboxdio` setting need not be made. The direct I/O function can be used simply by connecting the PCI expansion unit to SPARC M12-1/M10-1.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` — Displays the setting information of the direct I/O function for all SPARC M12-2/M12-2S/M10-4/M10-4S. When omitting both `-a` and `-b` options, the setting information of the current SPARC M12-2/M12-2S/M10-4/M10-4S is displayed.

`-b` *bb_id* — Specifies the BB-ID of the SPARC M12-2/M12-2S/M10-4/M10-4S whose enable/disable setting of the direct I/O function is to be displayed. You can specify any of the following values for *bb_id*.

For SPARC M12-2/M10-4: `0`

For SPARC M12-2S/M10-4S (without crossbar box): an integer from `0` to `3`

For SPARC M12-2S/M10-4S (with crossbar box): an integer from `0` to `15`

When omitting both `-a` and `-b` options, the setting information of the current SPARC M12-2/M12-2S/M10-4/M10-4S is displayed.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.

OPERANDS

`all`	Displays the settings of all PCI slots on the specified SPARC M12-2/M12-2S/M10-4/M10-4S. This operand cannot be used with the *slot_no* at the same time.
slot_no	Specifies the number of a PCI slot to be displayed. An integer 0-10 can be specified in no particular order. Plural slot numbers can be specified at the same time by inserting space characters. This operand cannot be used with the `all` at the same time.

EXTENDED DESCRIPTION

- `showpciboxdio` cannot be executed for any crossbar box. And omitting `-a` and `-b` *bb_id* fails with an error when operating on the crossbar box.
- The configured settings will be ignored when 8-10 is specified for the slot number in SPARC M12-2S/M10-4S.
- When the direct I/O function setting is changed by `setpciboxdio`(8), the logical domain configuration of the PPAR in which the target PSB of the SPARC M12-2/M12-2S/M10-4/M10-4S was added may be reset to factory-default. In this case, the OpenBoot PROM environment variables may also be initialized on SPARC M10-4/M10-4S. On the SPARC M12-2/M12-2S, the OpenBoot PROM environment variables of the control domain are not initialized. For details, see the latest *Product Notes* for your servers.

EXAMPLES

EXAMPLE 1 Displaying setting information of PCI slots 2, 3, and 7 of BB-ID 2.

```
XSCF> showpciboxdio -b 2 2 3 7
PCI slot Direct I/O via PCIBOX
BB#02
 2          enabled
 3          enabled
 7          disabled
```

EXAMPLE 2 Displaying the setting information of all PCI slots on SPARC M10-4.

```
XSCF> showpciboxdio -a
PCI slot Direct I/O via PCIBOX
BB#00
 0          enabled
 1          enabled
 2          enabled
 3          enabled
 4          enabled
 5          enabled
```

```
 6          enabled
 7          disabled
 8          enabled
 9          enabled
10          enabled
```

EXAMPLE 3 Displaying the setting information of all PCI slots of all servers that can be connected according to the system configuration.

```
XSCF> showpciboxdio -a
PCI slot Direct I/O via PCIBOX
BB#00
 0          enabled
 1          enabled
 2          enabled
 3          enabled
 4          disabled
 5          enabled
 6          enabled
 7          enabled
 8          disabled
 9          disabled
10          disabled
BB#01
 0          enabled
 1          enabled
 2          enabled
 3          enabled
 4          enabled
 5          enabled
 6          enabled
 7          enabled
 8          enabled
 9          enabled
10          enabled
BB#02
 0          enabled
 1          enabled
 2          disabled
 3          disabled
 4          enabled
 5          enabled
 6          enabled
 7          disabled
 8          disabled
 9          disabled
10          disabled
BB#03
 0          enabled
 1          enabled
 2          enabled
 3          enabled
 4          enabled
```

```
  5          enabled
  6          enabled
  7          disabled
  8          enabled
  9          enabled
 10          enabled
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setpciboxdio(8**)**

NAME

showpcl - Displays the physical partition (PPAR) configuration information (PCL) that is currently set.

SYNOPSIS

showpcl `[-v] -a [-M]`

showpcl `[-v] -p` *ppar_id* [[`-l` *lsb*]...]

showpcl `-h`

DESCRIPTION

`showpcl` is a command to display the PCL set by `setpcl`(8).

PCL is hardware resource information which can be set in PPAR or logical system boards (LSB) composing PPAR.

LSB is the unit of system boards recognized by Hypervisor. It is indicated by an independent integer from `00` to `15` for each PPAR.

The physical system board (PSB) means the boards recognized by system and mounted as hardware.

`showpcl` command can display the following information in PCL.

`PPAR-ID` PPAR ID

`LSB` LSB number. An integer from `00` to `15` is displayed.

`PSB` PSB number corresponding to LSB. This is displayed in the format below.

xx-y:

*x*x	BB-ID which is an integer from `00` to `15`
y	It is fixed to `0`

`Status` Operating status of PPAR. Any of the following is displayed.

`Powered Off`
: In the power-off status

`Initialization Phase`
: In the status in which POST is in operation

`Initialization Complete`
: In the status in which POST is completed

`Running`
: In the status in which POST is completed and Oracle Solaris is runining

`Hypervisor Abort`
: The status between occurrence of Hypervisor Abort and PPAR reset

If the -v option is specified, the following information is added.

Cfg-policy	Degradation range in the case that an abnormality is detected in the initial hardware diagnosis. Any of the following is displayed.	
	FRU	Degradation occurs by part such as CPU and memory (Default).
	PSB	Degrades by PSB.
	System	Degrades by PPAR.
No-Mem	Whether to make the logical domain use the memory mounted in LSB. Either of the following is displayed.	
	True	Does not allow use of memory.
	False	Allows use of memory (Default).
No-IO	Whether to make the logical domain use the I/O devices mounted in LSB. Either of the following is displayed.	
	True	Does not allow use of I/O devices.
	False	Allows use of I/O devices (Default).

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the information of all PPARs.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-l *lsb*	Specifies the LSB number to be displayed. *lsb* is specified by an integer from 0 to 15. You can specify multiple values for the -l option by separating them with spaces. If the -l option is omitted, all LSBs in PPAR are subject.
-M	Displays text one screen at a time.
-p *ppar_id*	Specifies the PPAR-ID to be displayed. Depending on the system configuration, an integer from 0 to 15 is displayed for *ppar_id*.

`-v` Displays additionally the information of `Cfg-policy`, `No-Mem`, and `No-IO` of PCL.

EXTENDED DESCRIPTION

You can set PCL by using `setpcl`(8).

Note – Even if the value of `No-Mem` is displayed as `True`, Oracle Solaris on logical domains can use the memory that is mounted on the LSB. Read the value of `No-Mem` as `False`.

EXAMPLES

EXAMPLE 1 Display the PCL information set in PPAR-ID 0.

```
XSCF> showpcl -p 0
PPAR-ID   LSB   PSB   Status
00                    Running
          00    00-0
          01    01-0
          02    02-0
          03    03-0
```

EXAMPLE 2 Display the PCL information set in PPAR-ID 0.

```
XSCF> showpcl -p 0
PPAR-ID   LSB   PSB   Status
00                    Running
          00    00-0
          04    01-0
          08    02-0
          12    03-0
```

EXAMPLE 3 Display the detailed information of the PCL for PPAR-ID 0.

```
XSCF> showpcl -v -p 0
PPAR-ID   LSB   PSB   Status   No-Mem   No-IO    Cfg-policy
00                    Running
                                                  System
          00    -
          01    -
          02    -
          03    -
          04    01-0           False    False
          05    -
          06    -
          07    -
          08    02-0           False    False
          09    -
          10    -
          11    -
          12    03-0           False    True
          13    -
          14    -
          15    -
```

EXAMPLE 4 Display the detailed information of the PCL for PPAR.

```
XSCF> showpcl -v -a
PPAR-ID   LSB   PSB   Status   No-Mem   No-IO    Cfg-policy
00                    Running
                                                 System
          00    -
          01    00-0           False    False
 .
 .
-------------------------------------------------------------------
01                     Powered Off
                                                  unknown
          00    01-0           False    True
 .
 .
-------------------------------------------------------------------
15                     Running
                                                 System
          00    15-0           False    True
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addboard(8), **deleteboard**(8), **setpcl**(8), **setupfru**(8), **showboards**(8), **showfru**(8)

NAME

showpowercapping - Displays the status of power capping.

SYNOPSIS

showpowercapping

showpowercapping `-h`

DESCRIPTION

`showpowercapping` is a command to display the status of power capping of the system.

The following statuses are displayed.

- Whether the power capping function is enabled or disabled

  Displays whether to enable/disable the power capping of the system.
- Upper limit of power consumption
  - Upper limit of power consumption (Wattage)

    Displays the upper limit of power consumption by wattage.
  - Upper limit of power consumption (%)

    Displays the upper limit of power consumption by percentage.

    Converts the minimum power consumption value (0%) and maximum power consumption value (100%) of the system to the upper limit power value (watt).

    If the upper limit of the power consumption of `setpowercapping`(8) is set by wattage specification, no value is displayed.
- Window time for exceeding the upper limit

  Displays the window time (second) until recognition as violation after the power consumption value of the system exceeds the upper limit of power consumption.
- System operation at the time of violation

  Displays the system operation (display of warning message, shutdown processing, and forcible power-off processing) when the window time for exceeding the upper limit elapsed while the power consumption value of the system exceeds the upper limit of power consumption.

You can confirm the minimum power consumption value and maximum power consumption value of the system by `showenvironment`(8).

Privileges

To execute this command, any of the following privileges is required.

`useradm`, `platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the status of power capping of the system. (If the upper limit of power consumption of `setpowercapping`(8) is set by percent specification)

```
XSCF> showpowercapping
activate_state      :enabled
powerlimit          :25%
timelimit           :30
violation_actions   :none
XSCF>
```

EXAMPLE 2 Display the status of power capping of the system. (If the upper limit of power consumption of `setpowercapping`(8) is set by wattage specification)

```
XSCF> showpowercapping
activate_state      :enabled
powerlimit          :1000w
timelimit           :300
violation_actions   :poff
XSCF>
```

EXIT STATUS

The following exit values are returned.

`0` Indicates normal end.

`>0` Indicates error occurrence.

SEE ALSO

setpowercapping(8), **showenvironment**(8)

NAME

showpowerschedule - Displays the schedule operation information.

SYNOPSIS

showpowerschedule {-p *ppar_id*|-a} -m state

showpowerschedule {-p *ppar_id*|-a} -m list [-v] [-M]

showpowerschedule -h

DESCRIPTION

showpowerschedule is a command to display the schedule operation information.

The types of the displayed contents are the following two.

- Information regarding the schedule operation settings
  - PPAR-ID
  - Whether schedule operation is enabled/disabled
  - Number of the set schedules
  - Setting of the power recovery mode
- Information regarding the schedule
  - Schedule ID
  - PPAR-ID
  - Specification method
  - Period/Date of specification
  - Power-on time
  - Power-off time

Privileges

To execute this command, any of the following privileges is required.

platadm, platop	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have accessible privilege.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the schedule information of all physical partitions (PPARs).
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-m list	Displays the schedule information.

`-m state`	Displays the schedule operation settings.
`-p` *ppar_id*	Displays the information of the specified *ppar_id*. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
`-v`	Displays the information of the next power-on time and power-off time of PPAR.

EXTENDED DESCRIPTION

- To change the schedule operation information, use `setpowerschedule`(8).
- To set the schedule, use `addpowerschedule`(8). To delete it, use `deletepowerschedule`(8).
- Specifying a non-existent *ppar_id* or invalid option causes an error.

EXAMPLES

EXAMPLE 1 Display the schedule status which sets to all PPARs.

```
XSCF> showpowerschedule -a -m state
PPAR-ID schedule member recover mode
------- -------- ------ ------------
0       disable  -      on
1       enable   2      auto
2       enable   1      on
3       disable  -      off
XSCF>
```

EXAMPLE 2 Display the schedule list of PPAR-ID 1. (If the command is executed at 0 o'clock on January 1st without the `-v` option.)

```
XSCF> showpowerschedule -p 1 -m list
ID#  PPAR-ID Type    Term/Date       OnTime/OffTime Pattern
---- ------- ------- --------------- -------------- ----------------------
------
15    1      Daily   Dec 01 - Mar 01 06:00 / 22:00  -
16    1      Monthly Nov    - Feb    08:00 / --:--  01-01
1     1      Daily   Jan 01 - Dec 31 09:00 / 21:30  -
17    1      Monthly Nov    - Feb    --:-- / 20:00  29-29
4     1      Weekly  Feb    - Apr    07:10 / 19:50
sun,mon,tue,wed,thu,fri,sat
10    1      Special Mar 04 2013     00:00 / 23:50  -
6     1      Monthly May    - May    09:20 / 18:40  01-05
11    1      Holiday May 04 2013     --:-- / --:--  -
12    1      Weekly  Jun    - Aug    07:10 / --:--  mon
13    1      Weekly  Jun    - Aug    --:-- / 19:50  fri
XSCF>
```

EXAMPLE 3 Display the schedule lists of all PPARs.(If the command is executed at 0

o'clock on January 1st with the -v option.)

```
XSCF> showpowerschedule -a -m list -v
PPAR-ID 1  Next Power On= Jan 01 06:00 2013 Next Power Off= Jan 01 21:30 2013
PPAR-ID 2  Next Power On= May 01 09:20 2013 Next Power Off= Mar 01 28:40 2013

ID#  PPAR-ID Type    Term/Date       OnTime/OffTime Pattern
---- ------- ------- --------------- -------------- --------------------
------
15    1      Daily   Dec 01 - Mar 01 06:00 / 22:00  -
16    1      Monthly Nov    - Feb    08:00 / --:--  01-01
1     1      Daily   Jan 01 - Dec 31 09:00 / 21:30  -
17    1      Monthly Nov    - Feb    --:-- / 20:00  29-29
4     1      Weekly  Feb    - Apr    07:10 / 19:50  mon,tue,wed,thu,fri
10    1      Special Mar 04 2013     00:00 / 23:50  -
6     2      Monthly May    - May    09:20 / 18:40  01-05
11    2      Holiday May 04 2013     --:-- / --:--  -
12    2      Weekly  Jun    - Aug    07:10 / --:--  mon
13    2      Weekly  Jun    - Aug    --:-- / 19:50  fri
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addpowerschedule(8), **deletepowerschedule**(8), **setpowerschedule**(8)

NAME

showpowerupdelay - Displays the warm-up time and wait time for air conditioning of the system that is currently set.

SYNOPSIS

showpowerupdelay

showpowerupdelay -h

DESCRIPTION

showpowerupdelay is a command to display the warm-up time and wait time for air conditioning of the system that is currently set.

The following contents are displayed.

warmup time	Warm-up time. The setting value of each physical partition (PPAR) is displayed.
wait time	Wait time for air conditioning

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, pparadm, pparmgr, pparop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

You can set the warm-up time and wait time for air conditioning of the system by using setpowerupdelay(8).

EXAMPLES

EXAMPLE 1 Display the warm-up time and wait time for air conditioning of the system.

```
XSCF> showpowerupdelay
warmup time :
    PPAR#00      :10 minute(s)
    PPAR#01      :10 minute(s)
       :
    PPAR#15      :15 minute(s)
wait time    : 20 minute(s)
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setpowerupdelay(8)

NAME

showpparinfo - Display the resource information of the physical partition (PPAR).

SYNOPSIS

showpparinfo `-p` *ppar_id* [`-M`]

showpparinfo `-h`

DESCRIPTION

`showpparinfo` is a command to display resource information regarding CPU and memory inside the PPAR.

The resource information displayed by `showpparinfo` is as the following:

PPAR# Information — Resource information inside the PPAR. The following information is displayed.

CPU(s)
: Total number of CPU chips that are allotted to the PPAR.

CPU Cores
: Total number of CPU cores that are allotted to the PPAR.

CPU Threads
: Total number of CPU threads that are allotted to the PPAR.

Memory size (GB)
: Amount of memory in GB that is allotted to the PPAR.

CoD Assigned (Cores)
: Total number of CPU core activations that are allotted to the PPAR.

CPU(s)
: Information on CPUs that are mounted on the PSB, that are allotted to the PPAR. The following information is displayed.

  PID
  : Allotted PPAR-ID. Displayed as an integer from 00 to 15.

  PSB
  : Allotted PSB number. Displayed in the format of xx-y (where xx is the BB-ID which is an integer from 00 to 15 and y is fixed as 0).

  CPU#
  : CPU chip number. Displayed as an integer from 0 to 3.

  Cores
  : Total number (integer) of CPU cores under CPU chip.

  Threads
  : Product of the number of CPU cores and the number of threads in each core, under CPU chip.

Memory
: Information on memory that is mounted on the PSB and allotted to the PPAR.

  PID
  : Allotted PPAR-ID. Displayed as an integer from 00 to 15.

  PSB
  : Allotted PSB number. Displayed in the format of xx-y (where xx is the BB-ID which is an integer from 00 to 15 and y is fixed as 0).

  install size GB
  : Amount of memory in GB that is allotted to the PSB.

IO Devices — Information on PCI card that is mounted on the CPU memory unit (CMU) and allotted to the PPAR. The internal on-board devices are not displayed. Displayed when PPAR is powered on. The following information is displayed.

PID
: Allotted PPAR-ID. Displayed as an integer from 00 to 15.

PSB
: Allotted PSB number. Displayed in the format of xx-y (where xx is the BB-ID which is an integer from 00 to 15 and y is fixed as 0).

device
: Location of mounting and category of PCI card is displayed.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-M`	Displays text one screen at a time.
`-p` *ppar_id*	Specifies the PPAR-ID to display the status. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

EXTENDED DESCRIPTION

- Display information on resources that are incorporated in PPAR when the PPAR is powered on.
- Display information on resources that are assigned in a powered off PPAR.

EXAMPLES

EXAMPLE 1 Display information on powered off PPAR#0 (2BB configuration).

```
XSCF> showpparinfo -p 0
PPAR#00 Information:
--------------------
 CPU(s)                    :        8
```

```
 CPU Cores                 :      128
 CPU Threads               :      256
 Memory size (GB)          :     2432
 CoD Assigned (Cores)      :      128

CPU(s):
-------
 PID PSB   CPU#  Cores  Threads
 00  00-0  1        16       32
 00  00-0  2        16       32
 00  00-0  3        16       32
 00  01-0  0        16       32
 00  01-0  1        16       32
 00  01-0  2        16       32
 00  01-0  3        16       32

Memory:
-------
            install
 PID  PSB   size GB
 00   00-0     1216
 00   01-0     1216

IO Devices:
-----------
 PID  PSB   device
```

EXAMPLE 2 Display information on powered on PPAR#0 (2BB configuration).

```
XSCF> showpparinfo -p 0
PPAR#00 Information:
--------------------
 CPU(s)                    :        8
 CPU Cores                 :      128
 CPU Threads               :      256
 Memory size (GB)          :     2432
 CoD Assigned (Cores)      :      128

CPU(s):
-------
 PID PSB   CPU#  Cores  Threads
 00  00-0  1        16       32
 00  00-0  2        16       32
 00  00-0  3        16       32
 00  01-0  0        16       32
 00  01-0  1        16       32
 00  01-0  2        16       32
 00  01-0  3        16       32

Memory:
-------
            install
 PID  PSB   size GB
```

```
 00   00-0     1216
 00   01-0     1216

IO Devices:
-----------
 PID  PSB   device
 00    00-0  PCI#0 Name_Property:pci;
 00    00-0  PCI#0 PCIBOX#0008;
 00    00-0  PCI#0 PCIBOX#0008 PCI#1 Name_Property:network;
 00    00-0  PCI#0 PCIBOX#0008 PCI#4 Name_Property:network;
 00    00-0  PCI#0 PCIBOX#0008 PCI#7 Name_Property:network;
 00    00-0  PCI#1 Name_Property:network;
 00    01-0  PCI#0 Name_Property:LSI,sas;
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

showhardconf(8), **showstatus**(8)

NAME

showpparmode - Displays the operation mode of the physical partition (PPAR) that is currently set.

SYNOPSIS

showpparmode -p *ppar_id* [-v]

showpparmode -h

DESCRIPTION

showpparmode is a command to display the operation mode set currently in the specified PPAR.

The following statuses are displayed.

HOST-ID	Host ID If no host ID is assigned, a hyphen (-) is displayed.
Diagnostics Level	Diagnostics level of the self-diagnosis test (POST) Any of the following is displayed.

off	None
min	Standard (default)
max	Maximum

Message Level	Detailed level of the console message of the POST diagnosis Any of the following is displayed.

none	None
min	Limited volume
normal	Normal volume (default)
max	Maximum volume
debug	Debug output

Watchdog Reaction	Operation of logical domain (including control domain) at the time of host watchdog timeout Any of the following is displayed.

none	None
dumpcore	Generates panic
reset	Resets the logical domain (default)

Break Signal	Whether the break signal suppression is enabled or disabled

on	Enabled (default)
off	Disabled

`Autoboot (Guest Domain)`	Whether the guest domain autoboot is enabled or disabled when PPAR is started	
	`on`	Enabled (default)
	`off`	Disabled
`pad`	Whether the Power Aware Dispatcher function is enabled or disabled on the SPARC M12 system. Either of the following is displayed.	
	`on`	Enabled (default)
	`off`	Disabled
`Elastic Mode`	Whether the power-saving operation of CPUs or memory is enabled or disabled on the SPARC M10 system	
	`off`	Disabled (default). All CPUs and memory in the system operate normally at the highest performance.
	`on`	Enabled. Changes the system power usage according to the utilization levels of CPUs and memory. This can reduce system power consumption.
`Power Management Policy`	Whether the power-saving operation of CPUs or memory is enabled or disabled on the SPARC M12 system	
	Any of the following is displayed.	
	`disabled`	Disabled (default). All CPUs and memory in the system operate normally at the highest performance.
	`elastic`	Enabled. Changes the system power usage according to the utilization levels of CPUs and memory. This can reduce system power consumption.
	`performance`	Enabled. This can save power without much of an effect on performance because unused, idle CPUs in the system operate at slower speeds or may have entered the sleep state.

`IOreconfigure` Whether to reconfigure I/O buses when PPAR is started or reset

Any of the following is displayed.

`true`	Enabled
`false`	Disabled
`nextboot`	Enabled only when the next boot

`CPU Mode` Displays the CPU operational mode that is set up in the PPAR. CPU operational mode determines whether to use SPARC64 X+ functions or the SPARC64 X compatible functions when SPARC64 X+ processors are mounted. CPU operational mode consists of the `auto` mode and the `compatible` mode.

For the SPARC M12-1/M12-2/M12-2S, a hyphen (`-`) is displayed as no mode is set.

`PPAR DR` Displays whether the feature of incorporation / detachment of physical system boards (PSB) to / from a running PPAR is enabled / disabled

`PPAR DR(Current)`
Display the setup status of the PPAR DR feature on the presently running PPAR.
The setup status of the PPAR DR feature on a powered off PPAR (`PPAR DR(Current)`) is displayed as "-".

`PPAR DR(Next)`
Display the setup information of the PPAR DR feature on the next starting or resetting of the target PPAR.

`Ethernet Address` Ethernet (MAC) address of PPAR

This address is used if the environment variable of OpenBoot PROM, `local-mac-address?`, is false. This information is displayed only if the `-v` option is specified. However, if the Ethernet (MAC) address is not assigned, a hyphen "`-`" is displayed.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `fieldeng`	Enables execution for all PPARs.
`pparadm`	Enables execution for PPARs for which you have administration privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-p` *ppar_id*	Specifies the PPAR-ID to be displayed. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.
`-v`	Displays detailed information. If the `-v` option is specified, the Ethernet (MAC) address of PPAR is also displayed.

EXTENDED DESCRIPTION

- The operation mode displayed by `showpparmode` does not indicate the actual operation but the setting status. The actual operation varies according to the status of the mode switch of the operator panel. If the mode switch of the operator panel is "`Service`," the operation mode of PPAR is set as follows regardless of the contents displayed by `showpparmode`.
  - Diagnosis level, message level, Host Watchdog timeout, autoboot of the guest domain, Power Aware Dispatcher function, power-saving operation, I/O bus reconfiguration, CPU operational mode, PPAR DR feature: As the display of `showpparmode`
  - Alive Check: Disabled
  - Break signal (STOP-A): Sending a signal
- You can set the operation mode of PPAR by using `setpparmode`(8).

EXAMPLES

EXAMPLE 1 Display the operation mode of the PPAR set in PPAR-ID 0 on SPARC M10-4S.

```
XSCF> showpparmode -p 0
Host-ID                 :0f010f10
Diagnostic Level        :min
Message Level           :normal
Alive Check             :on
Watchdog Reaction       :reset
Break Signal            :on
Autoboot(Guest Domain)  :on
Elastic Mode            :off
IOreconfigure           :true
CPU Mode                :auto
PPAR DR(Current)        :off
PPAR DR(Next)           :off
Ethernet Address        :00:0b:5d:e2:01:0c
XSCF>
```

EXAMPLE 2 Display the operation mode of the PPAR set in PPAR-ID 0 on SPARC M12-2S.

```
XSCF> showpparmode -p 0
Host-ID                 :0f010f10
Diagnostic Level        :min
Message Level           :normal
Alive Check             :on
Watchdog Reaction       :reset
Break Signal            :on
Autoboot(Guest Domain)  :on
Power Aware Dispatcher  :on
Power Management Policy :disabled
IOreconfigure           :true
CPU Mode                :-
PPAR DR(Current)        :off
PPAR DR(Next)           :off
XSCF>
```

EXAMPLE 3 Display the detailed information of the operation mode of the PPAR set in PPAR-ID 0 on SPARC M10-4S.

```
XSCF> showpparmode -p 0 -v
Host-ID                 :8099010c
Diagnostic Level        :min
Message Level           :normal
Alive Check             :off
Watchdog Reaction       :reset
Break Signal            :off
Autoboot(Guest Domain)  :on
Elastic Mode            :off
IOreconfigure           :true
CPU Mode                :auto
PPAR DR(Current)        :off
PPAR DR(Next)           :on
Ethernet Address        :00:0b:5d:e2:01:0c
XSCF>
```

EXAMPLE 4 Display the detailed information of the operation mode of the PPAR set in PPAR-ID 0 on SPARC M12-2S.

```
XSCF> showpparmode -p 0 -v
Host-ID                 :8099010c
Diagnostic Level        :min
Message Level           :normal
Alive Check             :off
Watchdog Reaction       :reset
Break Signal            :off
Autoboot(Guest Domain)  :on
Power Aware Dispatcher  :on
Power Management Policy :disabled
IOreconfigure           :true
CPU Mode                :-
```

```
PPAR DR(Current)          :off
PPAR DR(Next)             :on
Ethernet Address          :00:0b:5d:e2:01:0c
XSCF>
```

EXAMPLE 5 Display the detailed information of the operation mode of the PPAR set in PPAR-ID 0 on SPARC M10-4S (When the host ID and the ethernet address are unassigned).

```
XSCF> showpparmode -p 0 -v
Host-ID                   :-
Diagnostic Level          :min
Message Level             :normal
Alive Check               :off
Watchdog Reaction         :reset
Break Signal              :off
Autoboot(Guest Domain)    :on
Elastic Mode              :off
IOreconfigure             :true
CPU Mode                  :auto
PPAR DR(Current)          :-
PPAR DR(Next)             :on
Ethernet Address          :-
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setpparmode(8)

NAME

showpparparam - Displays the OpenBoot PROM environmental variable and the boot script of the control domain which will be set at the subsequent startup of the specified physical partition (PPAR).

SYNOPSIS

showpparparam `-p` *ppar_id*

showpparparam `-p` *ppar_id* `-c auto-boot`

showpparparam `-h`

DESCRIPTION

`showpparparam` is a command to display the setup value of the specified physical partition's control domain's OpenBoot PROM environment variables and boot script (the script that is executed at the starting of the OpenBoot PROM), which are setup at the next start.

Note – When you changed the value of the environmental variable from OpenBoot PROM while the PPAR is in operation, it will not be applied to the `showpparparam` output. When you start up the PPAR next time, the value you changed in OpenBoot PROM will be set.

The following setting values are displayed.

`use-nvramrc`	Displays the setting value of the OpenBoot PROM environment variable use-nvramrc? of the control domain.
`security-mode`	Displays the setting value of the OpenBoot PROM environment variable security-mode of the control domain.
`bootscript`	Displays the registered boot script.

Privileges

To execute this command, any of the following privileges is required.

`useradm`, `platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have accessible privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-c auto-boot`	Displays the setting value of OpenBoot PROM environment variables auto-boot?.
`-p` *ppar_id*	Specifies the PPAR-ID to be displayed.

EXTENDED DESCRIPTION

- A hyphen "-" will be displayed as the value of the OpenBoot PROM environment variables which are not set will be displayed.
- As long as they are valid, the setting values that were set with `setpparparam`(8) will appear at "bootscript" displayed by showpparparam. Here, "as long as they are valid" means the time frame after the values are set with `setpparparam`(8) until OpenBoot PROM environment variables are rewritten and the registered boot script is executed, at the next startup of the PPAR. After that, nothing is displayed.
- As long as they are valid, the setting values that were set with `setpparparam`(8) will appear at "use-nvramrc" and "security-mode" displayed by showpparparam. Here, "as long as they are valid" means the time frame after the values are set with `setpparparam`(8) until OpenBoot PROM environment variables are rewritten and the registered boot script is executed, at the next startup of the PPAR. After that, "-" is displayed.
- The current value of the OpenBoot PROM environment variable appears for the "auto-boot?" value displayed when the -c auto-boot? option is specified.

EXAMPLES

EXAMPLE 1 Display the setting value OpenBoot PROM environment variables and the boot script of the control domain set in PPAR-ID 0.

```
XSCF> showpparparam -p 0
use-nvramrc         :false
security-mode       :none
bootscript          :
setenv auto-boot? true
setenv input-device virtual-console
setenv output-device virtual-console
```

EXAMPLE 2 Display the setting OpenBoot PROM environment variables auto-boot? of the control domain set in PPAR-ID 0.

```
XSCF> showpparparam -p 0 -c auto-boot
auto-boot?          :true
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

setpparparam`(8)`

NAME

showpparprogress - Shows the detailed status of physical partitions (PPAR) in the middle of power control sequences.

SYNOPSIS

showpparprogress -p *ppar_id*

showpparprogress -h

DESCRIPTION

showpparprogress is a command to display the detailed status of physical partitions (PPAR) in powering on, powering off and resetting sequences.

The PPAR states displayed by the "showpparprogress" command are as follows:

PPAR Power On Processing	Before powering on a PPAR
PPAR Power On	Powering on a PPAR has started
XBBOX Reset	Resetting of a crossbar box chassis has started
PSU On	Powering on a Power Unit (PSU) has started
CMU Reset Start	Resetting of a CPU Memory Unit (CMU) has started
XB Reset 1	Resetting of a CrossBar Unit (XBU) has started (1/3)
XB Reset 2	Resetting of a CrossBar Unit (XBU) has started (2/3)
XB Reset 3	Resetting of a CrossBar Unit (XBU) has started (3/3)
CPU Reset 1	Resetting of CPU has started (1/2)
CPU Reset 2	Resetting of CPU has started (2/2)
Reset released	Constraints on resetting has been removed
CPU Start	CPU has started
PPAR Power Off	Powering off of PPAR has started
CPU Stop	CPU has stopped
PSU Off	Powering off of PSU has started
PPAR reset	Resetting of PPAR has started

The showpparprogress shows detailed power control sequences in real time. The command terminates as soon as power control sequences comes to an end.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, fieldeng	Enables execution for all PPARs.
pparadm, pparmgr, pparop	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-p` *ppar_id*	Specify the PPAR-ID, whose status is to be displayed. A *ppar_id* must be a whole number between 0 and 15, depending on the system configuration.

EXTENDED DESCRIPTION

- If a non-existent PPAR-ID is specified, the command will be terminated without displaying anything.
- Execute [Ctrl]+[C] to terminate the command.
- The status of logical domains can be displayed by the `showdomainstatus`(8) command.
- If a PPAR has already been powered on and powering off of the PPAR has not been started, the "`This PPAR is powered on`" message is displayed and the command is terminated.
- If a PPAR has already been powered off and powering on of the PPAR has not been started, the "`This PPAR is powered off`" message is displayed and the command is terminated.

EXAMPLES

EXAMPLE 1 Shows the status of a PPAR in a powering on sequence (in the middle of the sequence).

```
XSCF> showpparprogress -p 0
PPAR Power On Preprocessing PPAR#0 [ 1/12]
PPAR Power On               PPAR#0 [ 2/12]
XBBOX Reset                 PPAR#0 [ 3/12]
PSU On                      PPAR#0 [ 4/12]
CMU Reset Start             PPAR#0 [ 5/12]
XB Reset 1                  PPAR#0 [ 6/12]
XB Reset 2                  PPAR#0 [ 7/12]
XB Reset 3                  PPAR#0 [ 8/12]
/
```

EXAMPLE 2 Shows the status of a PPAR in a powering on sequence (in case of a successful power on).

```
XSCF> showpparprogress -p 0
PPAR Power On Preprocessing PPAR#0 [ 1/12]
PPAR Power On               PPAR#0 [ 2/12]
XBBOX Reset                 PPAR#0 [ 3/12]
PSU On                      PPAR#0 [ 4/12]
CMU Reset Start             PPAR#0 [ 5/12]
XB Reset 1                  PPAR#0 [ 6/12]
XB Reset 2                  PPAR#0 [ 7/12]
```

```
XB Reset 3                  PPAR#0 [ 8/12]
CPU Reset 1                 PPAR#0 [ 9/12]
CPU Reset 2                 PPAR#0 [10/12]
Reset released              PPAR#0 [11/12]
CPU Start                   PPAR#0 [12/12]
The sequence of power control is completed.
XSCF>
```

EXAMPLE 3 Shows the status of a PPAR in a powering off sequence (in case of a successful power off).

```
XSCF> showpparprogress -p 0
PPAR Power Off              PPAR#0 [ 1/ 3]
CPU Stop                    PPAR#0 [ 2/ 3]
PSU Off                     PPAR#0 [ 3/ 3]
The sequence of power control is completed.
XSCF>
```

EXAMPLE 4 Shows the status of a PPAR in a power resetting sequence (in case of a successful power reset).

```
XSCF> showpparprogress -p 0
PPAR reset                  PPAR#0 [ 1/13]
CPU Stop                    PPAR#0 [ 2/13]
PSU Off                     PPAR#0 [ 3/13]
XBBOX Reset                 PPAR#0 [ 4/13]
PSU On                      PPAR#0 [ 5/13]
CMU Reset Start             PPAR#0 [ 6/13]
XB Reset 1                  PPAR#0 [ 7/13]
XB Reset 2                  PPAR#0 [ 8/13]
XB Reset 3                  PPAR#0 [ 9/13]
CPU Reset 1                 PPAR#0 [10/13]
CPU Reset 2                 PPAR#0 [11/13]
Reset released              PPAR#0 [12/13]
CPU Start                   PPAR#0 [13/13]
The sequence of power control is completed.
XSCF>
```

EXAMPLE 5 Shows the status of a PPAR in a power resetting sequence (in case of the occurrence of a reset due to degradation of some parts).

```
XSCF> showpparprogress -p 0
PPAR reset                  PPAR#0 [ 1/13]
CPU Stop                    PPAR#0 [ 2/13]
PSU Off                     PPAR#0 [ 3/13]
XBBOX Reset                 PPAR#0 [ 4/13]
PSU On                      PPAR#0 [ 5/13]
CMU Reset Start             PPAR#0 [ 6/13]
* Power control sequence has been restarted
PPAR reset                  PPAR#0 [ 1/13]
CPU Stop                    PPAR#0 [ 2/13]
PSU Off                     PPAR#0 [ 3/13]
```

```
XBBOX Reset                 PPAR#0 [ 4/13]
PSU On                      PPAR#0 [ 5/13]
CMU Reset Start             PPAR#0 [ 6/13]
XB Reset 1                  PPAR#0 [ 7/13]
XB Reset 2                  PPAR#0 [ 8/13]
XB Reset 3                  PPAR#0 [ 9/13]
CPU Reset 1                 PPAR#0 [10/13]
CPU Reset 2                 PPAR#0 [11/13]
Reset released              PPAR#0 [12/13]
CPU Start                   PPAR#0 [13/13]
The sequence of power control is completed.
XSCF>
```

EXAMPLE 6 Shows the status of a PPAR in a powering on sequence (in case of the occurrence of a reset due to degradation of some parts).

```
XSCF> showpparprogress -p 0
PPAR reset                  PPAR#0 [ 1/13]
CPU Stop                    PPAR#0 [ 2/13]
PSU Off                     PPAR#0 [ 3/13]
XBBOX Reset                 PPAR#0 [ 4/13]
PSU On                      PPAR#0 [ 5/13]
CMU Reset Start             PPAR#0 [ 6/13]
* Power control sequence has been restarted
PPAR reset                  PPAR#0 [ 1/13]
CPU Stop                    PPAR#0 [ 2/13]
PSU Off                     PPAR#0 [ 3/13]
XBBOX Reset                 PPAR#0 [ 4/13]
PSU On                      PPAR#0 [ 5/13]
CMU Reset Start             PPAR#0 [ 6/13]
XB Reset 1                  PPAR#0 [ 7/13]
XB Reset 2                  PPAR#0 [ 8/13]
XB Reset 3                  PPAR#0 [ 9/13]
CPU Reset 1                 PPAR#0 [10/13]
CPU Reset 2                 PPAR#0 [11/13]
Reset released              PPAR#0 [12/13]
CPU Start                   PPAR#0 [13/13]
The sequence of power control is completed.
XSCF>
```

EXAMPLE 7 Shows the status of a PPAR in a powering on sequence (in case of an unsuccessful power on).

```
XSCF> showpparprogress -p 0
PPAR Power On Preprocessing PPAR#0 [ 1/12]
PPAR Power On               PPAR#0 [ 2/12]
XBBOX Reset                 PPAR#0 [ 3/12]
PSU On                      PPAR#0 [ 4/12]
CMU Reset Start             PPAR#0 [ 5/12]
The sequence of power control is terminated.
XSCF>
```

EXAMPLE 8 Shows the status of a PPAR in a powering on sequence (in case of a termination of the command).

```
XSCF> showpparprogress -p 0
PPAR Power On Preprocessing PPAR#0 [ 1/12]
PPAR Power On               PPAR#0 [ 2/12]
XBBOX Reset                 PPAR#0 [ 3/12]
PSU On                      PPAR#0 [ 4/12]
CMU Reset Start             PPAR#0 [ 5/12]
XB Reset 1                  PPAR#0 [ 6/12]
/^C
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

poweroff(8), **poweron**(8), **reset**(8)

NAME

showpparstatus - Displays the status of the current physical partition (PPAR).

SYNOPSIS

showpparstatus `-p` *ppar_id*

showpparstatus `-a`

showpparstatus `-h`

DESCRIPTION

`showpparstatus` is a command to display the status of current PPAR.

Any of the following statuses is displayed for each PPAR.

`Powered Off`	In the power-off status
`Initialization Phase`	In the status in which POST is in operation
`Initialization Complete`	In the status in which Power-On Self-Test (POST) is completed
`Running`	In the status in which POST is completed and Oracle Solaris is running.
`Hypervisor Aborted`	The status between occurrence of Hypervisor Abort and PPAR reset
`-`	Other than those above (when PPAR is not defined)

Privileges

To execute this command, any of the following privileges is required.

`useradm`, `platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a`	Displays the statuses of all accessible PPARs.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.
`-p` *ppar_id*	Specifies the PPAR-ID to display the status. Depending on the system configuration, you can specify an integer from 0 to 15 for *ppar_id*.

EXTENDED DESCRIPTION

You can confirm the status of the logical domain by using `showdomainstatus`(8).

EXAMPLES

EXAMPLE 1 Display the statuses of all PPARs.

```
XSCF> showpparstatus -a
PPAR-ID         PPAR Status
00              Powered Off
01              Initialization Phase
02              Initialization Phase
03              Running
04              -
05              Hypervisor Aborted
06              Running
07              Initialization Complete
08              Initialization Phase
09              Initialization Phase
10              -
11              Powered Off
12              Running
13              Running
14              Powered Off
15              -
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

poweroff(8), **poweron**(8), **reset**(8), **showdomainstatus**(8), **showpcl**(8)

NAME

showremotepwrmgmt - Displays the setup of remote power management function (Remote Cabinet Interface over LAN: RCIL) of SPARC M12/M10 systems and the power status of the node.

SYNOPSIS

showremotepwrmgmt [-a|-G *groupid* [-N *nodeid*]] [-M]

showremotepwrmgmt -h

DESCRIPTION

showremotepwrmgmt is a command to display the management information of remote power management group and the power status of the set node.

In showremotepwrmgmt, the following information is displayed.

[Remote Power Management Group Information]

GroupID	This is the group ID of the set remote power management group. An integer from 01 to 32 is displayed.	
Remote Power Management Status	This is the status of the set remote power management group.	
	Enable	The remote power management function enabled
	Disable	The remote power management function disabled
NodeID	Node ID of the set node. An integer from 001 to 128 as a decimal is displayed.	
NodeType	This is the type of the set node. Any of the following nodes is displayed.	
	Master HOST	Server device (Master HOST Node)
	HOST	Server device (HOST Node)
	I/O	I/O device (I/O Node)
	PwrLinkBox	Remote power management box (I/O Node)
	Others	Other node
NodeIdentName	This is the unique ID or name to identify a node. The maximum number of bytes is 32.	
Power	This is the power status of the specified node. Either of the followings is displayed.	
	ON	Power-on
	OFF	Power-off

`PowerLinkage` This is the power-on link flag for the set node. Any of the followings is displayed

`Disable`	Remote power management disabled
`Enable`	Power-on/Power-off link enabled
`Enable(Power-On Link)`	Only power-on link enabled
`Enable(Power-Off Link)`	Only power-off link enabled

If the node is a server device, the following is performed.

- When the flag is "Enable," the server issues the instruction of remote power management to each node in the remote power management group.
- When the flag is "Enable," the server receives the instruction of remote power management from a server device in the remote power management group.

If the node is an I/O device, remote power management box, or any other node, the following is performed.

- When the flag is "Enable," the instruction of remote power management is received from the server device in the remote power management group.

`Operation` This is the power-on method. Either of the followings is displayed

`IPMI`	Power-on by IPMI
`WakeUpOnLAN`	Power-on by Wake-On LAN

[Power Status Information]

Displays the power status information of the node, and subnode(s) when there is any subnode. Subnodes are displayed in the format as "`SubNode#`*xx*", in which "*xx*" represents its PPAR-ID. Either of the following is displayed for the power status.

`ON`	Power-on
`OFF`	Power-off

[IPMI Information]

`IPMI UserName`	This is the IPMI user name of the controller to control the node to be linked. The maximum number of bytes is 20.
`IPMI IP address`	This is the IP address of the IPMI port of the controller to control the node to be linked. This is displayed in the IPv4 format.
`IPMI Slave Address`	This is the IPMI Slave Address of the controller to control the node to be linked. This is displayed in hexadecimal. For Slave Address, see the IPMI specification *Intelligent Platform Management Interface Specification Second Generation v2.0*.
`IPMI MAC Address`	This is the IPMI MAC address of the controller to control the node to be linked.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` — Displays the management information of all the set remote power management groups. This is the same as that displayed when executing `showremotepwrmgmt` without specifying any options.

`-G` *groupid* — Specifies one or more group IDs of the remote power management group to be displayed. A figure from 1 to 32 can be specified.

e.g. `-G 1`

To specify multiple remote power management groups by range, specify the group IDs of the remote power management groups included in the range separating the beginning and end by hyphens (-).

e.g. `-G 2-10`

To specify multiple remote power management groups or ranges of remote power management groups, specify them separating by commas (,). Overlapping specification causes an error.

e.g. `-G 1,3,5`

`-h` — Displays the usage. Specifying this option with another option or operand causes an error.

`-M` — Displays text one screen at a time.

`-N` *nodeid* — Specifies one node of the remote power management device registered to the remote power management group specified by the `-G` option and to be displayed. 1A figure from 1 to 128 can be specified.

e.g. `-N 1`

EXTENDED DESCRIPTION

- Execution specifying a remote power management group not constructed by the "`-G`" option causes an error.
- If this is executed for all remote power management groups by the `-a` option and no remote power management group is constructed (initial status or after executing `clearremotepwrmgmt` (8)), it causes an error.
- If this is executed specifying the remote power management device subject to display by the `-N` option, and the `-G` option specified at the same time is specified by range, it causes an error.

EXAMPLES

EXAMPLE 1 Display the information of all the registered remote power management groups.

```
XSCF> showremotepwrmgmt

[Remote Power Management Group#01 Information]
Remote Power Management Status     :[Enable]

NodeID NodeType    NodeIdentName                    Power PowerLinkage           Operation
------ ----------- -------------------------------- ----- ---------------------- -----------
001    Master HOST XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
002    PwrLinkBox  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
003    Others      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
------ ----------- -------------------------------- ----- ---------------------- -----------

[Remote Power Management Group#02 Information]
Remote Power Management Status     :[Enable]

NodeID NodeType    NodeIdentName                    Power PowerLinkage           Operation
------ ----------- -------------------------------- ----- ---------------------- -----------
001    Master HOST XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
002    I/O         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
------ ----------- -------------------------------- ----- ---------------------- -----------

[Remote Power Management Group#03 Information]
Remote Power Management Status     :[Enable]

NodeID NodeType    NodeIdentName                    Power PowerLinkage           Operation
------ ----------- -------------------------------- ----- ---------------------- -----------
000    Master HOST XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
001    HOST        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
002    PwrLinkBox  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX OFF   Disable                IPMI
003    Others      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX OFF   Disable                IPMI
------ ----------- -------------------------------- ----- ---------------------- -----------

XSCF>
```

EXAMPLE 2 Display the information of the remote power management group 2.

```
XSCF> showremotepwrmgmt -G 2

[Remote Power Management Group#02 Information]
Remote Power Management Status     :[Enable]

NodeID NodeType    NodeIdentName                    Power PowerLinkage           Operation
------ ----------- -------------------------------- ----- ---------------------- -----------
001    Master HOST XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
002    I/O         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ON    Enable                 IPMI
------ ----------- -------------------------------- ----- ---------------------- -----------

XSCF>
```

EXAMPLE 3 Display the information of the remote power management devices (Node ID = 1) included in the remote power management group 2 (without sub nodes).

```
XSCF> showremotepwrmgmt -G 2 -N 1
Remote Power Management Group Information
    GroupID                         :[02]
    Remote Power Management Status  :[Enable]
    NodeID                          :[001]
    NodeType                        :[Master HOST]
    NodeIdentName                   :[XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX]
    PowerLinkage                    :[Enable]
    Operation                       :[IPMI]

Power Status Information
    Node#002                        :[ON]

IPMI Information
    IPMI UserName                   :[pwm]

Controller#0
    LAN#0
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

    LAN#1
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

Controller#1
    LAN#0
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

    LAN#1
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

XSCF>
```

EXAMPLE 4 Display the information of the remote power management devices (Node ID = 2) included in the remote power management group 2 (with sub nodes).

```
XSCF> showremotepwrmgmt -G 2 -N 2
Remote Power Management Group Information
    GroupID                         :[02]
    Remote Power Management Status  :[Enable]
    NodeID                          :[002]
    NodeType                        :[Master HOST]
    NodeIdentName                   :[XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX]
```

```
    PowerLinkage                    :[Enable]
    Operation                       :[IPMI]

Power Status Information
    Node#002                        :[ON]
         SubNode#00                 :[ON]
         SubNode#01                 :[ON]

IPMI Information
    IPMI UserName                   :[pwm]

Controller#0
    LAN#0
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

    LAN#1
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

Controller#1
    LAN#0
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

    LAN#1
    IPMI IP address                 :[xxx.xxx.xxx.xxx]
    IPMI SlaveAddress               :[00]
    IPMI MAC Address                :[00:00:00:00:00:00]

XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

clearremotepwrmgmt(8), **getremotepwrmgmt**(8), **setremotepwrmgmt**(8)

NAME

showremotestorage - Displays information on remote storage.

SYNOPSIS

showremotestorage [`-M`] [*interface*]

showremotestorage `-h`

DESCRIPTION

`showremotestorage` displays network interface configuration, as well as the status of connection to remote storage.

Any of the following is displayed as status.

`Not Installed`	Remote storage cannot be used as the target SPARC M12/M10 chassis has not been implemented.
`Not Set`	Remote storage cannot be used as no IP address has been assigned to the target network interface.
`Unavailable`	Remote storage cannot be used due to network disorder or some other internal error.
`Session Exist`	Remote storage cannot be used over the target network interface as another network interface on the same SPARC M10 chassis is already connected to the remote storage. For example, if bb#00-lan#0 is already connected to the remote storage, an attempt to connect bb#00-lan#1 to the network storage will result in the "Session Exist" status being output.
`Available`	IP address has been configured and remote storage can be used.
IP address	Connected to remote storage. Displays the IP address through which the connection has been made.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-M`	Displays text one screen at a time.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

OPERANDS

The following operand is supported.

interface

Specifies the network interface to be displayed. Any of the following can be specified:

- For SPARC M12-2S/M10-4S (with crossbar box)

```
bb#00-lan#0    : BB#00-LAN#0
bb#00-lan#1    : BB#00-LAN#1
bb#01-lan#0    : BB#01-LAN#0
bb#01-lan#1    : BB#01-LAN#1
 ...
bb#14-lan#0    : BB#14-LAN#0
bb#14-lan#1    : BB#14-LAN#1
bb#15-lan#0    : BB#15-LAN#0
bb#15-lan#1    : BB#15-LAN#1
```

- For SPARC M12-2S/M10-4S (without crossbar box)

```
bb#00-lan#0    : BB#00-LAN#0
bb#00-lan#1    : BB#00-LAN#1
bb#01-lan#0    : BB#01-LAN#0
bb#01-lan#1    : BB#01-LAN#1
bb#02-lan#0    : BB#02-LAN#0
bb#02-lan#1    : BB#02-LAN#1
bb#03-lan#0    : BB#03-LAN#0
bb#03-lan#1    : BB#03-LAN#1
```

- For SPARC M12-1/M12-2/M10-1/M10-4

```
bb#00-lan#0    : BB#00-LAN#0
bb#00-lan#1    : BB#00-LAN#1
```

If *interface* is not specified, all network interfaces are displayed. However, if no network interfaces are installed in the system or if the installed network interfaces have not been configured, no network interface will be displayed.

EXAMPLES

EXAMPLE 1 Diplay the status of BB#02-LAN#0.

```
XSCF> showremotestorage bb#02-lan#0
Interface   XSCF IP Address Netmask         Gateway         Connection
----------- -------------- --------------- --------------- ---------------
bb#02-lan#0 192.168.1.12    255.255.255.0   192.168.1.1     192.168.2.10
```

EXAMPLE 2 Display the status of all network interfaces on a 3BB configuration (SPARC M10-4S (without crossbar box)).

```
XSCF> showremotestorage
Interface   XSCF IP Address Netmask         Gateway         Status
----------- -------------- --------------- --------------- ----------------
bb#00-lan#0 192.168.1.10    255.255.255.0   192.168.1.1     Available
```

```
bb#00-lan#1 -               -               -               Not Set
bb#01-lan#0 192.168.1.11    255.255.255.0   192.168.1.1     Available
bb#01-lan#1 -               -               -               Not Set
bb#02-lan#0 192.168.1.12    255.255.255.0   192.168.1.1     192.168.2.10
bb#02-lan#1 -               -               -               Not Set
bb#03-lan#0 192.168.1.13    255.255.255.0   192.168.1.1     Not Installed
```

EXAMPLE 3 Display the status of all network interfaces on a 16BB configuration (SPARC M10-4S (with crossbar box)).

```
XSCF> showremotestorage
Interface   XSCF IP Address Netmask         Gateway         Status
----------- -------------- --------------- --------------- ----------------
bb#00-lan#0 192.168.1.10    255.255.255.0   192.168.1.1     Available
bb#00-lan#1 -               -               -               Not Set
bb#01-lan#0 192.168.1.11    255.255.255.0   192.168.1.1     Available
bb#01-lan#1 -               -               -               Not Set
bb#02-lan#0 192.168.1.12    255.255.255.0   192.168.1.1     192.168.2.10
bb#02-lan#1 192.168.1.13    255.255.255.0   192.168.1.1     Session Exist
bb#03-lan#0 -               -               -               Not Set
bb#03-lan#1 -               -               -               Not Set
...
bb#14-lan#0 -               -               -               Not Set
bb#14-lan#1 -               -               -               Not Set
bb#15-lan#0 -               -               -               Not Set
bb#15-lan#1 -               -               -               Not Set
```

EXAMPLE 4 Display the status of BB#04-LAN#0, which is not installed.

```
XSCF> showremotestorage bb#04-lan#0
Interface   XSCF IP Address Netmask         Gateway         Connection
----------- -------------- --------------- --------------- ---------------
bb#04-lan#0 -               -               -               Not Installed
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setremotestorage(8)

NAME

showresult - Displays the end status of the previously executed command.

SYNOPSIS

showresult

showresult -h

DESCRIPTION

showresult is a command to display the end status of the previously executed command.

showresult is a convenient way for the remote control program to confirm whether the previously executed command succeeded or not.

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

If showresult is executed after canceling the processing of the command in execution by [Ctrl]+[C] key, etc., the end status depending on the cancelled command is displayed by 0 or another figure.

EXAMPLES

EXAMPLE 1 Display the execution result of showdate(8).

```
XSCF> showdate
Sat Oct 20 14:53:00 JST 2012
XSCF> showresult
0
```

EXIT STATUS

The following exit values are returned.

0 — Indicates normal end.

>0 — Indicates error occurrence.

NAME

showroute - Displays the routing information set in the XSCF network interface.

SYNOPSIS

showroute [-M] [-n] {-a | *interface*}

showroute -h

DESCRIPTION

showroute is a command to display the routing information set currently in the XSCF network interface.

You can display the routing information of the specified network interface or all network interfaces. The following information is displayed.

Destination	Destination IP address
Gateway	Gateway
Netmask	Netmask
Flags	Flag indicating the status of routing

U	Route enabled
H	Only one host reachable
G	Gateway used
R	Dynamic route to be restored
C	Entry of cache
!	Rejected route

Interface	XSCF network interface name

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the routing information set in all the XSCF network interfaces.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-n	Displays the IP address without name-resolution of the host name.

OPERANDS

The following operands are supported.

interface

Specifies the network interface to be displayed. You can specify any of the following depending on the system configuration. If it is specified with the `-a` option, it becomes invalid.

- For SPARC M12-2S/M10-4S (with crossbar box)

`xbbox#80-lan#0`	XBBOX#80-LAN#0
`xbbox#80-lan#1`	XBBOX#80-LAN#1
`xbbox#81-lan#0`	XBBOX#81-LAN#0
`xbbox#81-lan#1`	XBBOX#81-LAN#1

- For SPARC M12-2S/M10-4S (without crossbar box)

`bb#00-lan#0`	BB#00-LAN#0
`bb#00-lan#1`	BB#00-LAN#1
`bb#01-lan#0`	BB#01-LAN#0
`bb#01-lan#1`	BB#01-LAN#1

- For SPARC M12-1/M12-2/M10-1/M10-4

`bb#00-lan#0`	BB#00-LAN#0
`lan#0`	Abbreviated form of bb#00-lan#0
`bb#00-lan#1`	BB#00-LAN#1
`lan#1`	Abbreviated form of bb#00-lan#1

EXTENDED DESCRIPTION

You can set routing of the XSCF network by using `setroute`(8).

EXAMPLES

EXAMPLE 1 Display the routing information set in XBBOX#80-LAN#0.

```
XSCF> showroute xbbox#80-lan#0
Destination     Gateway         Netmask         Flags Interface
192.168.10.0    *               255.255.255.0   U     xbbox#80-lan#0
default         192.168.10.1    0.0.0.0         UG    xbbox#80-lan#0
```

EXAMPLE 2 Display the routing information set in XBBOX#80-LAN#0 without name-resolution.

```
XSCF> showroute -n xbbox#80-lan#0
Destination     Gateway         Netmask         Flags Interface
192.168.10.0    *               255.255.255.0   U     xbbox#80-lan#0
0.0.0.0         192.168.10.1    0.0.0.0         UG    xbbox#80-lan#0
```

EXAMPLE 3 Display the set routing information.

```
XSCF> showroute -a
Destination     Gateway         Netmask         Flags Interface
192.168.10.0    *               255.255.255.0   U     xbbox#80-lan#0
default         192.168.10.1    0.0.0.0         UG    xbbox#80-lan#0
```

```
Destination     Gateway         Netmask         Interface
192.168.10.0    *               255.255.255.0   xbbox#81-lan#0
default         192.168.10.1    0.0.0.0         xbbox#81-lan#0
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

setroute (8)

NAME

showservicetag - Displays whether the servicetag agents are currently enabled or disabled.

SYNOPSIS

showservicetag [-v]

showservicetag -h

DESCRIPTION

showservicetag is a command to display whether the servicetag agents are currently enabled or disabled.

Servicetags provide information -- platform, type, chassis serial number, etc, on platforms that support it.

Privileges

To execute this command, platadm or platopprivilege is required.

Refer to setprivileges(8) for more information.

OPTIONS

The following options are supported:

-h	Displays usage statement. When used with other options or operands, an error occurs.
-v	Specifies verbose output.

EXAMPLES

EXAMPLE 1 Displaying the current state of the servicetag agents. (When it is enabled).

```
XSCF>  showservicetag
Enabled
```

EXAMPLE 2 Displaying the current state of the servicetag agents. (When it is disabled)

```
XSCF>  showservicetag
Disabled
```

EXIT STATUS

The following exit values are returned:

0	Successful completion.
>0	An error occurred.

SEE ALSO

setservicetag(8)

NAME

showsmtp - Displays the settings information of Simple Mail Transfer Protocol (SMTP).

SYNOPSIS

showsmtp

showsmtp [-v]

showsmtp -h

DESCRIPTION

showsmtp is a command to display the settings information of SMTP.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-v	Displays detailed information.

EXTENDED DESCRIPTION

The SMTP information includes the mail server and address for reply.

EXAMPLES

EXAMPLE 1 Display the settings information of SMTP.

```
XSCF>  showsmtp
Mail Server: 10.4.1.1
Port: 25
Authentication Mechanism: smtp-auth
 User Name: jsmith
 Password: ********
Reply Address: adm@customer.com
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setsmtp(8)

NAME

showsnmp - Displays the settings information and the current status of the SNMP agent.

SYNOPSIS

showsnmp

showsnmp -h

DESCRIPTION

showsnmp is a command to display the settings information and the current status of the SNMP agent.

The displayed information includes the status of the agent, port, location of the system, contact and explanation, trap host, and version and enabled MIB module of SNMP.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the SNMP information of the system not set up.

```
XSCF>  showsnmp

Agent Status:       Disabled
Agent Port:         161
System Location:    Unknown
System Contact:     Unknown
System Description: Unknown

Trap Hosts: None
SNMP V1/V2c: None

Enabled MIB Modules: None
```

EXAMPLE 2 Display the SNMP information of the disabled system with SNMPv3 trap host set up.

```
XSCF>  showsnmp

Agent Status:       Disabled
Agent Port:         161
System Location:    SanDiego
System Contact:     bob@jupiter.west
System Description: POST-APL/COL3
```

```
Trap Hosts:
Hostname     Port      Type   Community String  Username  Auth Encrypt
--------     ----      ----   ----------------  --------  ---- -------
host1        162       v3     n/a               jsmith    SHA  DES

SNMP V1/V2c: None

Enabled MIB Modules: None
```

EXAMPLE 3 Display the SNMP information of the enabled system with SNMPv1 or SNMPv2c trap host set up.

```
XSCF>  showsnmp

Agent Status:       Enabled
Agent Port:         161
System Location:    SanDiego
System Contact:     jsmith@jupiter.west
System Description: POST-APL/COL3

Trap Hosts:
Hostname     Port      Type   Community String  Username  Auth Protocol
--------     ----      ----   ----------------  --------  ---- -------
host1        162       v1     public             n/a      n/a  n/a
host2        162       v2c    public             n/a      n/a  n/a
host3        162       v3     n/a                bob      SHA  DES

SNMP V1/V2c:

Status: Enabled
Community String: public

Enabled MIB Modules:
SP_MIB
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setsnmp(8)

NAME

showsnmpusm - Displays the current User-based Security Model (USM) information regarding the SNMP agent.

SYNOPSIS

showsnmpusm

showsnmpusm -h

DESCRIPTION

showsnmpusm is a command to display the current USM information regarding the SNMP agent.

Privileges

To execute this command, any of the following privileges is required.

platadm, platop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the current USM information regarding the SNMP agent.

```
XSCF>  showsnmpusm
Username Auth Encrypt
-------- ---- -------
jsmith   SHA  DES
sue      MD5  AES
```

EXIT STATUS

The following exit values are returned.

0 Indicates normal end.

>0 Indicates error occurrence.

SEE ALSO

setsnmpusm(8)

NAME

showsnmpvacm - Displays the current View-based Control Access (VACM) information regarding the SNMP agent.

SYNOPSIS

showsnmpvacm

showsnmpvacm `-h`

DESCRIPTION

`showsnmpvacm` is a command to display the current VACM information regarding the SNMP agent.

Privileges

To execute this command, any of the following privileges is required.

`platadm`, `platop`, `fieldeng`

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the SNMP information of the system.

```
XSCF>  showsnmpvacm
Groups:
Groupname   Username
---------   --------
admin       jsmith, bob

Views:
View      Subtree   Mask    Type
----      -------   ----    ----
all_view  .1        ff      include

Access:
View      Group
----      -----
all_view  admin
```

EXIT STATUS

The following exit values are returned.

`0` Indicates normal end.

`>0` Indicates error occurrence.

SEE ALSO

setsnmpvacm (8)

NAME

showsscp - Displays the IP address assigned to the SP to SP communication protocol (SSCP).

SYNOPSIS

showsscp [-a|-b *bb_id*] [-N *network_id*] [-M]

showsscp -h

DESCRIPTION

showsscp is a command to display the setting values of the SSCP links of the SPARC M12-2S/M10-4S or crossbar boxes.

If all IP addresses of the SSCP links in the system are displayed, they are output in a table. This table is sorted by PPAR-ID.

If the IP address of the specific PPAR or service processor is displayed, not a table but only the IP address of the specified PPAR or service processor is displayed.

showsscp cannot be used on a SPARC M12-1/M12-2/M10-1/M10-4.

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the setting values of the SSCP links of all crossbar boxes and SPARC M12-2S/M10-4S
-b *bb_id*	Specifies the target BB-ID. For SPARC M12-2S/M10-4S, you can specify an integer from 00 to 15. For crossbar box, you can specify an integer from 80 to 83.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-N *network_id*	Specifies the ID of the SSCP link network subject to setting. For *network_id*, specify a figure from 0 to 2 and 0 to 4 in the case of SPARC M12-2S/M10-4S (without crossbar box) and SPARC M12-2S/M10-4S (with crossbar box), respectively. If omitted, all networks are specified.

EXTENDED DESCRIPTION

- If showsscp is executed without specifying any options, the setting values of the SSCP links of all crossbar boxes and SPARC M12-2S/M10-4S are displayed. This is similar to the case that the -a option is specified.
- If showsscp is executed specifying BB-ID by -b *bb_id*, all the setting values of the SSCP links of the specified BB-ID are displayed.
- If showsscp is executed specifying the network ID by -N *network_id*, only the setting values of the SSCP links of the specified network ID are displayed.

- You can display the setting values of the SSCP links on the specific network of the specific BB-ID by combining `-b` *bb_id* and `-N` *network_id*.
- You can display the setting values of all SSCP links on the specific network by combining `-a` and `-N` *network_id*.

  For information before the settings are reflected, see `applynetwork`(8).
- If `-N` *network_id* is specified and `-b` *bb_id* is not within the following range, it causes an error.

  For SPARC M12-2S/M10-4S (without crossbar box)

`-N` *network_id*	`-b` *bb_id* **range**
0	0 to 3
1	0 to 3
2	0 to 1

  For SPARC M12-2S/M10-4S (with crossbar box)

`-N` *network_id*	`-b` *bb_id* **range**
0	0 to 15, 80
1	0 to 15, 81
2	80 to 83
3	80 to 83
4	80 to 81

- For SPARC M12-2S/M10-4S (without crossbar boxes), there are three networks of SSCP links as shown in the following.
  - Network between BB#00 and each SPARC M10-4S chassis (Network ID 0)
  - Network between BB#01 and each SPARC M10-4S chassis (Network ID 1)
  - Network between BB#00 and BB#01 (Network ID 2)
- For SPARC M12-2S/M10-4S (with crossbar boxes), there are five networks as shown in the following.
  - Network between XBBOX#80 and each SPARC M10-4S chassis (Network ID 0)
  - Network between XBBOX#81 and each SPARC M10-4S chassis (Network ID 1)
  - Network between XBBOX#80 and each crossbar box (Network ID 2)
  - Network between XBBOX#81 and each crossbar box (Network ID 3)
  - Network between XBBOX#80 and XBBOX#81 (Network ID 4)

EXAMPLES

Note – The IP addresses shown in the following examples are samples.

EXAMPLE 1 Display the setting values of all SSCP links in SPARC M10-4S (without crossbar box).

```
XSCF>  showsscp
SSCP network ID:0 address 169.254.1.0
SSCP network ID:0 netmask 255.255.255.248

Location        Address
-------------   ---------------
bb#00-if#0      169.254.1.1
bb#01-if#0      169.254.1.2
bb#02-if#0      169.254.1.3
bb#03-if#0      169.254.1.4

SSCP network ID:1 address 169.254.1.8
SSCP network ID:1 netmask 255.255.255.248

Location        Address
-------------   ---------------
bb#00-if#1      169.254.1.9
bb#01-if#1      169.254.1.10
bb#02-if#1      169.254.1.11
bb#03-if#1      169.254.1.12

SSCP network ID:2 address 169.254.1.16
SSCP network ID:2 netmask 255.255.255.252

Location        Address
-------------   ---------------
bb#00-if#2      169.254.1.17
bb#01-if#2      169.254.1.18
```

EXAMPLE 2 Display the setting values of all SSCP links in SPARC M10-4S (with crossbar box).

```
XSCF>  showsscp -a
SSCP network ID:0 address 169.254.1.0
SSCP network ID:0 netmask 255.255.255.224

Location        Address
-------------   ---------------
xbbox#80-if#0   169.254.1.1
bb#00-if#0      169.254.1.2
bb#01-if#0      169.254.1.3
bb#02-if#0      169.254.1.4
bb#03-if#0      169.254.1.5
bb#04-if#0      169.254.1.6
bb#05-if#0      169.254.1.7
bb#06-if#0      169.254.1.8
bb#07-if#0      169.254.1.9
bb#08-if#0      169.254.1.10
bb#09-if#0      169.254.1.11
bb#10-if#0      169.254.1.12
```

```
bb#11-if#0      169.254.1.13
bb#12-if#0      169.254.1.14
bb#13-if#0      169.254.1.15
bb#14-if#0      169.254.1.16
bb#15-if#0      169.254.1.17

SSCP network ID:1 address 169.254.1.32
SSCP network ID:1 netmask 255.255.255.224

Location        Address
-------------   ---------------
xbbox#81-if#1   169.254.1.33
bb#00-if#1      169.254.1.34
bb#01-if#1      169.254.1.35
bb#02-if#1      169.254.1.36
bb#03-if#1      169.254.1.37
bb#04-if#1      169.254.1.38
bb#05-if#1      169.254.1.39
bb#06-if#1      169.254.1.40
bb#07-if#1      169.254.1.41
bb#08-if#1      169.254.1.42
bb#09-if#1      169.254.1.43
bb#10-if#1      169.254.1.44
bb#11-if#1      169.254.1.45
bb#12-if#1      169.254.1.46
bb#13-if#1      169.254.1.47
bb#14-if#1      169.254.1.48
bb#15-if#1      169.254.1.49

SSCP network ID:2 address 169.254.1.64
SSCP network ID:2 netmask 255.255.255.248

Location        Address
-------------   ---------------
xbbox#80-if#2   169.254.1.65
xbbox#81-if#2   169.254.1.66
xbbox#82-if#2   169.254.1.67
xbbox#83-if#2   169.254.1.68

SSCP network ID:3 address 169.254.1.72
SSCP network ID:3 netmask 255.255.255.248

Location        Address
-------------   ---------------
xbbox#80-if#3   169.254.1.74
xbbox#81-if#3   169.254.1.73
xbbox#82-if#3   169.254.1.75
xbbox#83-if#3   169.254.1.76

SSCP network ID:4 address 169.254.1.80
SSCP network ID:4 netmask 255.255.255.252

Location        Address
```

```
-------------   ---------------
xbbox#80-if#4   169.254.1.81
xbbox#81-if#4   169.254.1.82
```

EXAMPLE 3 Display the current setting in the network of the network ID 1 of BB#14.

```
XSCF>  showsscp -b 14 -N 1
SSCP network ID:1 address 192.168.1.0
SSCP network ID:1 netmask 255.255.255.224

Location        Address
-------------   ---------------
bb#14-if#1      192.168.1.48
```

EXAMPLE 4 Display all IPs of the network of the network ID 1 in SPARC M10-4S (with crossbar box).

```
XSCF>  showsscp -a -N 1

SSCP network ID:1 address 169.254.1.32
SSCP network ID:1 netmask 255.255.255.224

Location        Address
-------------   ---------------
xbbox#81-if#1   169.254.1.33
bb#00-if#1      169.254.1.34
bb#01-if#1      169.254.1.35
bb#02-if#1      169.254.1.36
bb#03-if#1      169.254.1.37
bb#04-if#1      169.254.1.38
bb#05-if#1      169.254.1.39
bb#06-if#1      169.254.1.40
bb#07-if#1      169.254.1.41
bb#08-if#1      169.254.1.42
bb#09-if#1      169.254.1.43
bb#10-if#1      169.254.1.44
bb#11-if#1      169.254.1.45
bb#12-if#1      169.254.1.46
bb#13-if#1      169.254.1.47
bb#14-if#1      169.254.1.48
bb#15-if#1      169.254.1.49
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setsscp(8)

NAME

showssh - Displays the contents of the Secure Shell (SSH) service set in the XSCF network.

SYNOPSIS

showssh [-c hostkey] [-M]

showssh -c pubkey [-u *user_name*] [-M]

showssh -h

DESCRIPTION

showssh is a command to display the contents of SSH service set currently in the XSCF network.

The following information is displayed.

SSH status	Whether SSH service is enabled
RSA key	Host public key in the RSA format
DSA key	Host public key in the DSA format
Fingerprint	Host public key in the fingerprint format

If display of the user public key is specified, the user public key number and user public key automatically given by the system are displayed.

In XSCF, only SSH2 is supported.

Privileges

To execute this command, any of the following privileges is required.

- Specification of the user name:
  useradm
- Other than above:
  No privileges are required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c hostkey	Displays the host public key. If you omit the -c option, -c hostkey is assumed specified.
-c pubkey	Displays the user public key. If you omit the -c option, -c hostkey is assumed specified.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.

-u *user_name* Specifies the user account name to display user public keys. It is specified with -c pubkey. If the -u option is omitted, the user public keys of the user account logged in currently are displayed.

EXTENDED DESCRIPTION

- The user public key numbers automatically given to user public keys can be specified when deleting user public keys by setssh(8).
- You can set SSH service of the XSCF network by using setssh(8).

EXAMPLES

EXAMPLE 1 Display the information of the host public key.

```
XSCF> showssh
SSH status: enabled
RSA key:
ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAIEAt0IG3wfpQnGr51znS9XtzwHcBBb/
UU0LN08SilUXE6j+
avlxdY7AFqBf1wGxLF+Tx5pTa6HuZ8o8yUBbDZVJAAAAFQCfKPxarV+/5qzK4A43Qaigkqu/
6QAAAIBM
LQl22G8pwibESrh5JmOhSxpLzl3P26ksI8qPr+7BxmjLR0k=
Fingerprint:
1024 e4:35:6a:45:b4:f7:e8:ce:b0:b9:82:80:2e:73:33:c4 /etc/ssh/
ssh_host_rsa_key.pub
DSA key:
ssh-dss
AAAAB3NzaC1kc3MAAACBAJSy4GxD7Tk4fxFvyW1D0NUDqZQPY3PuY2IG7QC4BQ1kewDnblB8
/
JEqI+8pnfbWzmOWU37KHL19OEYNAv6v+WZT6RElU5Pyb8F16uq96L8QDMswFlICMZgrn+ilJN
Str6r8
KDJfwOQMmK0eeDFj2mL40NOvaLQ83+rRwW6Ny/yF1Rgv6PUpUqRLw4VeRb+uOfmPRpe6/
kb4z++lOhtp
WI9bay6CK0nrFRok+z54ez7BrDFBQVuNZx9PyEFezJG9ziEYVUag/23LIAiLxxBmW9pqa/
WxC21Ja4RQ
VN3009kmVwAAAIAON1LR/
9Jdd7yyG18+Ue7eBBJHrCA0pkSzvfzzFFj5XUzQBdabh5p5Rwz+1vriawFI
ZI9j2uhM/3HQdrvYSVBEdMjaasF9hB6T/
uFwP8yqtJf6Y9GdjBAhWuH8F13pX4BtvK9IeldqCscnOuu0
e2rlUoI6GICMr64FL0YYBSwfbwLIz6PSA/yKQe23dwfkSfcwQZNq/
5pThGPi3tob5Qev2KCK2OyEDMCA
OvVlMhqHuPNpX+hE19nPdBFGzQ==
Fingerprint:
1024 9e:39:8e:cb:8a:99:ff:b4:45:12:04:2d:39:d3:28:15 /etc/ssh/
ssh_host_dsa_key.pub
```

EXAMPLE 2 Display the user public keys of the user account logged in currently.

```
XSCF> showssh -c pubkey
Public key:
 1  ssh-rsa
AAAAB3NzaC1yc2EAAAABIwAAAIEAzFh95SohrDgpnN7zFCJCVNy+jaZPTjNDxcid
QGbihYDCBttI4151Y0Sv85FJwDpSNHNKoVLMYLjtBmUMPbGgGVB61qskSv/
FeV44hefNCZMiXGItIIpK
P0nBK4XJpCFoFbPXNUHDw1rTD9icD5U/wRFGSRRxFI+Ub5oLRxN8+A8=abcd@example.com
```

```
 2  ssh-rsa
CSqGSIb3DQEJARYHZWUubWFpbDCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEA
nkPntf+TjYtyKlNYFbO/YavFpUzkYTLHdt0Fbz/
tZmGd3e6Jn34A2W9EC7D9hjLsj+kAP41Al6wFwGO7
KP3H4iImX0Uysjl9Hyk4jLBU51sw8JqvT2utTjltV5mFPKL6bDcAgY9=efgh@example.com
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

setssh(8)

NAME

showstatus - Displays the degraded Field Replaceable Unit (FRU).

SYNOPSIS

showstatus [-M]

showstatus -h

DESCRIPTION

showstatus is a command to display the information of the degraded unit in the FRUs composing the system.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, pparadm, pparmgr, pparop, fieldeng

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.

EXTENDED DESCRIPTION

- The information of the unit in which a failure or degradation occurred and unit one layer above in the FRUs composing the system is displayed. Any of the following statuses is displayed after "Status:" on the displayed unit. In addition, on the unit in which a failure or degradation occurred, "*" indicating the abnormal points is displayed.

Status	Contents
Faulted	In the status in which the unit is not in operation due to a failure.
Degraded	A part of the unit has failed or degraded, but the unit is running.
Deconfigured	Due to the failure or degradation of another unit, the target unit and components of its underlying layer has been degraded, though there is no problem in them.
Maintenance	Maintenance work is in progress. addfru(8), replacefru(8), or initbb(8) is operating.

- In the system composed of multiple XSCFs, if the switches of the operator panels of the master XSCF and standby XSCFs do not match, "*" is displayed on the OPNL units of the master XSCF and standby XSCFs.

EXAMPLES

EXAMPLE 1 Display the degraded unit. Here, we take as an example the case that the CPU and memory on CMUL of BB#00 and PSU of XBBOX#80 are degraded due to

a failure.

```
XSCF> showstatus
    BB#00;
        CMUL Status:Normal;
*           CPU#0 Status:Faulted;
*           MEM#00A Status:Faulted;
    XBBOX#80;
*       PSU#0 Status:Faulted;
```

EXAMPLE 2 Display the degraded part. Here, we take as an example the case that memory on MBU is degraded due to a failure.

```
XSCF> showstatus
    MBU Status:Normal;
*       MEM#0A Status:Faulted;
```

EXAMPLE 3 Display the degraded part. Here, we take as an example the case that memory on MBU is degraded due to a failure.

```
XSCF> showstatus
    MBU Status:Normal;
*       MEM#1B Status:Deconfigured;
```

EXAMPLE 4 Display the degraded part. Here, we take as an example the case that the CPU memory unit is degraded because the crossbar unit is degraded.

```
XSCF> showstatus
    BB#00
        CMUU Status:Normal;
*           CPU#1 Status:Deconfigured;
*       XBU#0 Status:Degraded;
```

EXAMPLE 5 Display the degraded components. The following is an example of a case where the XB cable has been degraded due to a failure.

```
XSCF> showstatus
    BB#00 Status:Normal;
        XBU#1 Status:Normal;
*           CBL#2L Status:Degraded;
```

EXAMPLE 6 Display the degraded components. The following is an example of a case where the XB cable under crossbar box has been degraded due to a failure.

```
XSCF> showstatus
    XBBOX#80 Status:Normal;
        XBU#0 Status:Normal;
*           CBL#L1 Status:Faulted;
        XBU#1 Status:Normal;
*           CBL#L2 Status:Degraded;
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

NAME

showtelnet - Displays the status of the Telnet service set in the XSCF network.

SYNOPSIS

showtelnet

showtelnet -h

DESCRIPTION

showtelnet is a command to display the status of the Telnet service set currently in the XSCF network.

Either of the following statuses is displayed.

enable	Indicates that the Telnet service is in operation.
disable	Indicates that the Telnet service is not in operation.

Privileges

No privileges are required to execute this command.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.

EXTENDED DESCRIPTION

You can set the Telnet service of the XSCF network by using settelnet(8).

EXAMPLES

EXAMPLE 1 Display the status of the Telnet service set currently in the XSCF network.

```
XSCF> showtelnet
Telnet status:enabled
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

settelnet(8)

NAME

showtimezone - Displays the currently set time zone of the XSCF and the daylight saving time information.

SYNOPSIS

showtimezone -c tz

showtimezone -c dst [-m {standard|custom}]

showtimezone -h

DESCRIPTION

showtimezone is a command to display the currently set time zone of the XSCF and the daylight saving time information.

Privileges

To execute this command, any of the following privileges is required.

useradm, platadm, platop, auditadm, auditop, fieldeng, pparadm, pparmgr, pparop

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c tz — Displays the time zone.

-c dst — Displays the information of the daylight saving time.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

-m {standard | custom} — Specifies the information of the daylight saving time to be displayed. You can specify either of the following. If you omit the -m option, -m custom is assumed specified.

standard
: Displays the information of the daylight saving time set as standard in the current time zone.

custom
: Displays the information of the daylight saving time set by settimezone(8). If the daylight saving time is not set, nothing is displayed.

EXTENDED DESCRIPTION

- The information of the daylight saving time is displayed in the following format.
  - If custom is specified

    std offset dst[*offset2*] [*from-date*[*/time*] *to-date*[*/time*]]

std — Abbreviated form of the time zone

offset Offset time between the time zone and Greenwich Mean Time (GMT)

If the value of the offset is plus or minus, it is displayed as minus (-) or plus (+), respectively.

dst Daylight saving time name

offset2 Offset time between the daylight saving time and GMT

If the value of the offset is plus or minus, it is displayed as minus (-) or plus (+), respectively.

from-date[/*time*] Daylight saving time start information

from-date is displayed in any of the following formats.

M*m.w.d*

M*m*: Month to start the daylight saving time. *m* is displayed by a figure from 1 to 12.
w: Week to start the daylight saving time. It is displayed by a figure from 1 to 5 with the first week and last week indicated by 1 and 5, respectively.
d: Day of the week to start the daylight saving time. It is displayed by a figure from 0 to 6 with Sunday and Saturday indicated by 0 and 6, respectively.

J*n*

J*n*: Date to start the daylight saving time. It is displayed by a figure from 1 to 365 with January 1st indicated by 1. In leap years, February 29 is not counted.

n

n: Date to start the daylight saving time. It is displayed by a figure from 1 to 365 with January 2nd indicated by 1. In leap years, February 29 is counted.

time displays the time to switch to the daylight saving time by the time before switch.

hh:mm:ss This is specified in the format of "hh:mm:ss." The default is 02:00:00.

to-date[/*time*] Daylight saving time end information

to-date is displayed in any of the following formats.

M*m.w.d*

M*m*: Month to end the daylight saving time. *m* is displayed by a figure from 1 to 12.
w: Week to end the daylight saving time. It is displayed by a figure from 1 to 5 with the first week and last week indicated by 1 and 5, respectively.
d: Day of the week to end the daylight saving time. It is displayed by a figure from 0 to 6 with Sunday and Saturday indicated by 0 and 6, respectively.

J*n*

J*n*: Date to end the daylight saving time. It is displayed by a figure from 1 to 365 with January 1st indicated by 1. In leap years, February 29 is not counted.

n

n: Date to end the daylight saving time. It is displayed by a figure from 1 to 365 with January 2nd indicated by 1. In leap years, February 29 is counted.

time displays the time to switch from the daylight saving time by the time before switch.

hh:mm:ss This is specified in the format of "hh:mm:ss." The default is 02:00:00.

- If standard is specified

  From: *ddd MM dd hh:mm:ss yyyy dst*

  To: *ddd MM dd hh:mm:ss yyyy dst*

ddd	Day of the week
MM	Month
dd	Day
hh	Hour
mm	Minute
ss	Second
yyyy	Year
dst	Daylight saving time zone name

- You can set the time zone of XSCF by using `settimezone`(8).

EXAMPLES

EXAMPLE 1 Display the time zone.

```
XSCF> showtimezone -c tz
Asia/Tokyo
```

EXAMPLE 2 Display the daylight saving time information if you have set the time zone abbreviated form to JST, offset from GMT to +9, daylight saving time zone name to JDT, daylight saving time to one hour earlier, and period to 2:00 on the last Sunday of March to 2:00 on the last Sunday of October.

```
XSCF> showtimezone -c dst -m custom
JST-9JDT,M3.5.0,M10.5.0
```

EXAMPLE 3 Display the daylight saving time information if you have set the time zone abbreviated form to JST, offset from GMT to +9, daylight saving time zone name to JDT, daylight saving time to one hour earlier, and period to 0:00 on the first Sunday of April to 0:00 on the first Sunday of September.

```
XSCF> showtimezone -c dst
JST-9JDT-10,M4.1.0/00:00:00,M9.1.0/00:00:00
```

EXAMPLE 4 If the daylight saving time is not set by `settimezone`.

```
XSCF> showtimezone -c dst
```

EXAMPLE 5 Display the information of the daylight saving time set as standard in the current time zone.

```
XSCF> showtimezone -c dst -m standard
```

EXAMPLE 6 If the standard daylight saving time of the system is not set.

```
XSCF> showtimezone -c dst -m standard
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

setdate(8), **settimezone**(8), **showdate**(8)

NAME

showuser - Displays the XSCF user account information.

SYNOPSIS

showuser [-a] [-p] [-u] [-M]

showuser [-a] [-p] [-u] [-M] *user*

showuser [-a] [-p] [-u] [-M] -l

showuser -h

DESCRIPTION

showuser is a command to display the XSCF user account information.

If showuser is executed specifying the user account name, the account information of the specified user is displayed. If showuser is executed without specifying the user account name, the account information of the current user is displayed. If showuser is executed specifying the -l option, the account information of all users is displayed.

If showuser is executed specifying one or more options among -a, -p, and -u, the information explained in the following sections on the options is displayed. If showuser is executed without specifying any of these options, all the account information is displayed.

Privileges

To execute this command, any of the following privileges is required.

- Display of your own account:
  No privileges are required.
- Display of the account information of other users:
  useradm

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a	Displays the information regarding the validity of the password and status of the account. It is only valid for the XSCF user account.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-l	Displays the account information of all XSCF users sorted by the login name of the user. It cannot be used with the *user* operand.
-M	Displays text one screen at a time.
-p	Displays all privileges assigned to users. This is valid for local users and remote users.

-u	Displays the user ID (UID). This is valid for local users and remote users.

OPERANDS

The following operands are supported.

user	Name of the existing user account. It cannot be used with the -l option.

EXAMPLES

EXAMPLE 1 Display the information regarding the validity of the password and account.

```
XSCF>  showuser -a
User Name:          jsmith
Status:             Enabled
Minimum:            0
Maximum:            99999
Warning:            7
Inactive:           -1
Last Change:        Aug 22, 2005
Password Expires:   Never
Password Inactive: Never
Account Expires:    Never
```

EXAMPLE 2 Display the information of the user privileges.

```
XSCF>  showuser -p
User Name:          jsmith
Privileges:         pparadm@1,3-6,8,9
                    platadm
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

adduser(8), **deleteuser**(8), **disableuser**(8), **enableuser**(8), **password**(8), **setprivileges**(8)

NAME

showvbootcerts - Displays the information of X.509 public key certificates setup at each physical partition (PPAR), that are used for performing Verified Boot of Oracle Solaris.

SYNOPSIS

showvbootcerts `-p` *ppar_id* `-a` [`-M`]

showvbootcerts [`-v`] `-p` *ppar_id* `-{s|u} -i` *index* [`-M`]

showvbootcerts `-h`

DESCRIPTION

The `showvbootcerts` command dispalys the information of X.509 public key certificates setup at each physical partition (PPAR), that are used for performing Verified Boot of Oracle Solaris.

There are two kinds of X.509 public key certificates that are used at the time of Verified Boot: those which are pre-installed in the system and others which can be added by users using the `addvbootcert`(8). The `showvbootcerts` command can display the information of both kinds of certificates.

Privileges

To execute this command, either of the following privileges is required.

`platadm`, `platop`, `fieldeng` Enables execution for all PPARs.

`pparadm`, `pparmgr`, `pparop` Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-a` Displays the information of all X.509 public key certificates that are registered in a PPAR.

`-i` *index* Displays the information of the X.509 public key certificate with the management number specified in index. The possible management numbers are 1 or 2 when `-s` is specified and 1 through 5 when `-u` is specified.

`-M` Displays text one screen at a time.

`-p` *ppar_id* Specifies the PPAR-ID of the PPAR whose X.509 public key certificate is to be displayed.

`-s` Displays the X.509 public key certificates that are pre-installed in the system.

`-u` Displays the X.509 public key certificates that were added using the `addvbootcert`(8) command.

-v Displays the content of the X.509 public key certificates in details.

-h Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the information of the X.509 public key certificate with the management number 1, that was pre-installed in PPAR-ID 0.

```
XSCF> showvbootcerts -p 0 -s -i 1
----------------------------------------------------------------------------
PPAR-ID 0 System Index : 1  name : SYSTEM_CERT_1 [Enable(Unchangeable)]
----------------------------------------------------------------------------
Data:
    Version: 3 (0x2)
    Serial Number:
        0d:fb:b1:5a:2d:2a:e5:81:80:86:eb:34:5e:a4:7e:ed
    Signature Algorithm: sha1WithRSAEncryption
    Issuer: C=US, O=Oracle Corporation, OU=VeriSign Trust Network, OU=Class 2
Managed PKI Individual Subscriber CA, CN=Object Signing CA
    Subject: O=Oracle Corporation, OU=Corporate Object Signing, OU=Solaris
Signed Execution, CN=Solaris 11
----------------------------------------------------------------------------
```

EXAMPLE 2 Display the information of all X.509 public key certificates that are registered in PPAR-ID 2.

```
XSCF> showvbootcerts -p 2 -a
----------------------------------------------------------------------------
PPAR-ID 2 System Index : 1  name : SYSTEM_CERT_1 [Enable(Unchangeable)]
----------------------------------------------------------------------------
Data:
    Version: 3 (0x2)
    Serial Number:
        0d:fb:b1:5a:2d:2a:e5:81:80:86:eb:34:5e:a4:7e:ed
    Signature Algorithm: sha1WithRSAEncryption
    Issuer: C=US, O=Oracle Corporation, OU=VeriSign Trust Network, OU=Class 2
Managed PKI Individual Subscriber CA, CN=Object Signing CA
    Subject: O=Oracle Corporation, OU=Corporate Object Signing, OU=Solaris
Signed Execution, CN=Solaris 11
----------------------------------------------------------------------------
PPAR-ID 2 User Index : 2    name : CUSTOM_CERT_2 [Enable]
----------------------------------------------------------------------------
Data:
    Version: 3 (0x2)
    Serial Number:
        07:ad:b3:06:99:82:39:db:dd:60:41:44:71:be:aa:70
    Signature Algorithm: sha1WithRSAEncryption
    Issuer: C=US, O=Thirdparty Corporation, OU=Thirdparty CA, CN=www.example.com
    Subject: O=Thirdparty Corporation, OU=Thirdparty Signed Execution,
CN=www.example.com
----------------------------------------------------------------------------
PPAR-ID 2 User Index : 5    name : CUSTOM_CERT_5 [Disable]
----------------------------------------------------------------------------
Data:
```

```
    Version: 3 (0x2)
    Serial Number:
        07:ad:b3:06:99:82:39:db:dd:60:41:44:71:be:bb:71
    Signature Algorithm: sha1WithRSAEncryption
    Issuer: C=US, O=Thirdparty Corporation, OU=Thirdparty CA, CN=www.example.com
    Subject: O=Thirdparty Corporation, OU=Thirdparty Signed Execution,
CN=www.example.com
--------------------------------------------------------------------------------
```

EXAMPLE 3 Display the information of the X.509 public key certificate which is registered with the management number 2 in PPAR-ID 4.

```
XSCF> showvbootcerts -v -p 4 -u -i 2
--------------------------------------------------------------------------------
PPAR-ID 4 User Index : 2    name : CUSTOM_CERT_2 [Enable]
--------------------------------------------------------------------------------
Data:
    Version: 3 (0x2)
    Serial Number:
        07:ad:b3:06:99:82:39:db:dd:60:41:44:71:be:aa:70
    Signature Algorithm: sha1WithRSAEncryption
    Issuer: C=US, O=Thirdparty Corporation, OU=Thirdparty CA, CN=www.example.com
    Subject: O=Thirdparty Corporation, OU=Thirdparty Signed Execution,
CN=www.example.com
    Subject Public Key Info:
        Public Key Algorithm: rsaEncryption
            Public-Key: (2048 bit)
            Modulus:
                00:de:f0:2c:45:61:7f:10:c7:16:56:a9:14:b4:a4:
                39:44:b9:2f:65:4f:7e:a7:c0:15:89:b0:e2:1d:c0:
                25:4c:a6:31:75:14:a3:c4:cd:11:d2:87:b7:1a:7c:
                b2:0d:41:99:4f:a6:e9:d4:8e:77:55:19:ce:f1:a4:
                3c:cf:00:8d:e6:d1:c6:bc:06:f7:71:85:28:a4:c5:
                e0:8d:b3:e1:62:25:d5:df:93:d2:d9:1c:5b:48:35:
                70:e1:8a:9b:bf:9d:8b:41:b3:be:b6:c0:50:66:3b:
                d8:9d:2f:82:49:11:f7:6d:43:95:6e:ea:bc:57:dc:
                1c:90:6b:7e:8b:e3:0f:89:bd:32:3a:88:50:f0:48:
                d3:98:8c:bc:eb:7f:44:31:2b:86:01:d0:80:4c:a2:
                36:6e:24:47:48:d5:86:8e:86:06:c3:8e:df:5f:fb:
                6b:fe:6a:aa:0c:a8:ca:b6:ed:60:47:ea:8e:5d:63:
                b1:4f:ff:94:00:34:52:82:cf:a6:6a:84:69:4c:26:
                ac:a3:dc:d7:45:eb:7c:4e:fc:fc:92:4a:73:12:9f:
                31:7a:75:b9:de:33:54:34:af:0b:cf:46:c0:ac:2f:
                ec:28:af:0d:f7:c6:50:c0:e7:4c:88:16:13:95:54:
                0e:01:6e:1a:b6:33:bf:20:52:34:f4:69:a6:9e:bf:
                02:95
            Exponent: 65537 (0x10001)
Signature Algorithm: sha256WithRSAEncryption
     44:65:95:e1:33:a4:ce:d1:c1:02:1a:ce:b3:2c:fa:c0:b2:34:
     4e:12:d0:86:c7:09:23:9d:5b:46:f4:b2:bf:88:8b:5b:5d:d7:
     57:c3:f9:9a:ba:95:bc:ed:4b:29:4b:19:97:ca:6c:bc:e1:44:
     e0:e1:89:a3:ed:bd:29:ad:a7:91:c8:76:ea:62:d2:2c:e3:ff:
     50:01:0a:3b:5a:28:53:38:53:82:ea:de:bc:24:84:bc:31:63:
     ab:b2:10:81:81:73:f4:02:46:5f:2d:6d:22:b0:af:d7:70:c0:
     db:de:ea:b9:23:87:3c:19:ef:c0:24:de:05:77:eb:89:d2:36:
     d0:85:8a:ed:d1:7f:12:b0:58:5f:f5:53:f1:db:0b:44:53:a0:
     72:8c:1a:e6:4a:fd:e8:8e:f8:ee:9e:7e:4e:85:59:42:44:fa:
     1f:d3:70:4f:81:95:8e:a9:0f:83:49:a2:b0:fd:5b:f4:2d:5e:
```

```
      86:ef:f3:56:b3:31:f3:58:3a:37:42:bb:39:c4:c1:b5:8c:e9:
      b4:01:d2:2e:e8:7d:86:1a:66:88:34:1e:e5:36:ee:6d:6c:90:
      78:45:a0:5b:a9:50:84:62:a8:88:ee:a6:70:fa:7c:ad:81:b7:
      89:f1:d6:64:94:c4:17:69:c8:35:81:b2:f3:79:ad:a2:5a:a0:
      02:28:a9:7f
  ------------------------------------------------------------------------------
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addvbootcerts(8), **deletevbootcerts**(8), **setvbootconfig**(8), **showvbootconfig**(8)

NAME

showvbootconfig - Displays the Verified Boot policy of Oracle Solaris and the enable/disable configuration of the X.509 public key certificates that are used for performing Verified Boot.

SYNOPSIS

showvbootconfig `-p` *ppar_id*

showvbootconfig `-h`

DESCRIPTION

The `showvbootconfig` command displays the information on Verified Boot configuration that is set up on a PPAR.

The following information is displayed.

Policies setting: Configuration of boot verification policy will be displayed.

Policy: Policy of boot verification

`boot_policy`	Boot verification policy of the unix and genunix modules.
`module_policy`	Boot verification policy of kernel modules that needs to be loaded after genunix.

Setting: Contents of policy configuration

`none`	Do not execute boot verification (default).
`warning`	Boot verification is performed. Verification is performed before the target of the verification is loaded. Even if the verification fails, the target of the verification is loaded and boot processing continues. If verification of the boot block and unix fails, the failure of the verification is recorded in the system console. It is not recorded in the system log and XSCF error log. If verification of genunix and other kernel modules fails, the failure of the verification is recorded in the system console and the system log. It is not recorded in the XSCF error log.
`enforce`	Boot verification is performed. Verification is performed before the target of the verification is loaded. If verification of the boot block and unix fails, boot processing stops. At this time, the failure of the verification is recorded in the system console and the XSCF error log. It is not recorded in the system log. If verification of genunix fails, boot processing stops. At this time, the failure of the verification is recorded in the system console. It is not recorded in the XSCF error log and the system log. If verification of other kernel modules fails, the boot continues without loading the module. At this time, the failure of the verification is recorded in the system console and the system log. It is not recorded in the XSCF error log.

Certificates setting: Displays the enable/disable configuration of the X.509 public key certificates of each management number.

Index: Certificate management number.

Setting: Registration status of the certificates and the enable/disable configuration. A hyphen (-) will be displayed if a management number does not have a registered certificate.

`Enabled`	Enabled. Used in boot verification.
`Disabled`	Disabled. Not used in boot verification.

Privileges

To execute this command, either of the following privileges is required.

`platadm`, `platop`, `fieldeng`	Enables execution for all PPARs.
`pparadm`, `pparmgr`, `pparop`	Enables execution for PPARs for which you have access privilege.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-p` *ppar_id*	Specifies the PPAR-ID of the PPAR whose configuration is to be displayed.
`-h`	Displays the usage. Specifying this option with another option or operand causes an error.

EXAMPLES

EXAMPLE 1 Display the Verified Boot configuration information that is set to PPAR-ID 0.

```
XSCF> showvbootconfig -p 0
PPAR#00 Verified Boot Information:
----------------------------------
Policies setting:
-----------------
Policy        Setting
boot_policy   warning
module_policy none

System Certificates setting:
----------------------------
Index Certificate Name                Setting
    1 SYSTEM_CERT_1                   Enable(Unchangeable)
    2 SYSTEM_CERT_2                   Enable(Unchangeable)

User Certificates setting:
--------------------------
Index Certificate Name                Setting
```

```
     1 CUSTOM_CERT_1                   Enable
     2 -                               -
     3 CUSTOM_CERT_3                   Disable
     4 -                               -
     5 -                               -
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addvbootcerts(8), **deletevbootcerts**(8), **setvbootconfig**(8), **showvbootcerts**(8)

NAME

snapshot - Collects and transfers the data regarding environment, logs, errors, and Field Replaceable Unit Identifier (FRUID).

SYNOPSIS

snapshot -d *device* [-r] {-a|-b *bb_id*} [-e [-P *password*]] [-L {F|I|R}] [-l] [-v] [[-q] -{y|n}] [-S *time* [-E *time*]]

snapshot -t *user@host:directory* {-a|-b *bb_id*} [-e [-P *password*]] [-k *host-key*] [-l] [-L {F|I|R}] [-p *password*] [-v] [[-q] -{y|n}] [-S *time* [-E *time*]]

snapshot -h

DESCRIPTION

snapshot is a command to provide the data collection mechanism and acquire the diagnosis information on the service processor quickly, securely, and flexibly.

snapshot collects the data of the configuration, environment, logs, error, and FRUID information and transfers it to the specified destination.

snapshot outputs the collected data to a file. The file name is automatically generated based on the host name and IP address assigned to the service processor and the date and UTC time (hour-minute-second format) on the service processor when executing snapshot. For example, it can be jupiter:10.1.1.1_2012-10-20T22-33-44. snapshot cannot specify the output file name. If the file and command outputs are collected from the service processor, snapshot compresses the output data and write it on the archive of the .zip format.

The output file is a .zip format archive composed of the .zip format archives into which the information collected in each SPARC M12/M10 systems chassis is compressed.

The name of .zip archive of each SPARC M12/M10 systems chassis is automatically generated based on the SPARC M12/M10 systems name, host name and IP address assigned to the service processor and the date and UTC time (hour-minute-second format) on the service processor when executing snapshot. For example, it can be BB#01_jupiter_10.1.1.1_2012-10-20T22-33-44.

The name of the .zip archive of the SPARC M12/M10 systems chassis which does not have the host name or IP address assigned to the service processor is automatically generated based on the SPARC M12/M10 systems name and the date and UTC time (hour-minute-second format) on the service processor when executing snapshot. For example, it can be BB#03_2012-10-20T22-33-44.

If snapshot is executed on slave XSCF, only the .zip archive file of the SPARC M12/M10 systems chassis which executed the command is transferred to the specified destination.

snapshot saves the collected data in the remote network host or external media device based on which of the -t and -d options is used. To save the data collected by using the -t option in the remote network host, it is necessary to specify the host name (or IP address), destination directory on the remote network host, and

user name on the remote host. When saving data on the remote network host, snapshot opens SSH network connection to function as a channel of data to the remote file.

You can limit data collection on larger log files by specifying the date range with the -S option, and -E option if necessary.

SSH, which is an encrypted network protocol, is used to transmit data over the network. Moreover, .zip archives can also be encrypted using SSL. To encrypt the .zip archive itself, use the -e option. To decode the .zip archive encrypted in this process, use the encrypted password specified in snapshot by openssl. The following shows an example of decoding of the file jupiter_10.1.1.1_2012-10-20T22-33-44.zip.e.

```
% openssl aes-128-cbc -d -in jupiter_10.1.1.1_2012-10-20T22-33-
44.zip.e -out jupiter_10.1.1.1_2012-10-20T22-33-44.zip
```

All .zip archives generated by snapshot contain two files generated by snapshot itself. The firs file named README describes the original name of the .zip archive, name of the setting file on the service processor used to create the .zip archive, version of snapshot, and whether the log-dedicated mode (-l option) is used to create the archive. The second file named CONFIG is a copy of the actual setting file used by snapshot to create the archive.

The data generated for each SPARC M12/M10 systems chassis by snapshot may be used by field engineers to diagnose the problems with the system. snapshot can collect different sets of data according to the purpose of the diagnosis. These data sets are called Initial, Root Cause, and Full, respectively, and set by using the -L option.

To diagnose a problem from relevant data, execute the snapshot as soon as possible, without powering On/Off the PPAR or changing the setup, after the problem has occurred. Useful data for the diagnosis may be lost if time has passed, other commands are executed or the state of the system is changed in any way.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS The following options are supported.

`-a` In addition to the common logs in the system, the logs stored in all SPARC M12/M10 systems chassis are collected and output to one file.

If the system has an abnormality, some logs cannot be collected.

`-b` *bb_id* Selects the BB-ID to collect data. You cannot specify multiple IDs.

In addition to the common logs in the system, the logs stored in the specified SPARC M12/M10 systems chassis are collected.

For *bb_id*, you can specify an integer from 0 to 15 and 80 to 83 in the case of a SPARC M12/M10 systems chassis and crossbar box chassis, respectively.

`-d` *device* Specifies the external media device to be used. For `-d`, the following options are available.

- `-r` Deletes all files in the external media device before collecting data. This option is disabled if it is used with the `-t` option.

`-E` *time* Specifies the time to finish collecting data. Defines the time frame of the log messages collected by `snapshot` with the `-S` *time* option of the start time. Only the log entries created before the time specified by `-E` *time* are collected by `snapshot`. See also the `-S` option.

- *time* Use either of the following two formats described by `strptime`(3).

```
%Y-%m-%d,%H:%M:%S
%Y-%m-%d_%H-%M-%S
```

`-e` Encrypts the archive of the zip format. It is required to use `-P` and *password*.

`-h` Displays the usage. Specifying this option with another option or operand causes an error.

`-k` *host-key*

Specifies the `-t` option. Set the public key to be used by the service processor to log in the network host. This option is disabled if it is used with the `-d` option.

You can specify this using up to 895 characters.

The values which can be specified in *host-key* are below.

`none`	If the public key is not used for authentication of the network host, specify this literal value.
`download`	For `snapshot` to download the public host key of the network host using `SSH` and the public host key from the host specified by the `-t` argument, specify this literal value. `snapshot` displays the `SHA-256` fingerprint of the key and requests for confirmation. If the key is accepted, it is used for server authentication. If the key is rejected, `snapshot` is terminated without executing anything. If the `-k` option is not specified, this is the default operation in the SSH target mode.
`public`	The specified public key is used for server authentication. The *host-key* argument must be the complete public key of the network host (beginning with the key type). (Therefore, it must be the complete contents of `/etc/ssh/ssh_host_rsa_key.pub` on the network host.)

Note – The public key needs to be enclosed in quotation marks to be handled by the shell as a single word.

`-L {F|I|R}`

Specifies the log set to be collected.

`F`	Full log set
`I`	Initial log set
`R`	Root Cause log set

If the log set is not specified, the Full log set is collected by default.

`-l`

Makes a specification so that only log files are collected. Command outputs are not collected.

`-n`

Automatically responds to prompt with "n" (no).

`-P` *password*
: Specifies it with the `-e` option. Set the encrypted password to be used to encrypt the output file.

  You can specify this using up to 63 characters.

`-p` *password*
: Sets the user password to be used for SSH login. This option is specified with the `-t` option. If it is used with the `-d` option, it becomes invalid.

  You can specify this using up to 63 characters.

`-q`
: Prevents display of messages, including prompt, for standard output.

`-S` *time*
: Specifies the time to start collecting data. Defines the time frame of the log messages collected by `snapshot` with the `-E` *time* option of the end time. If the end time is not specified, the target period ends when `snapshot` is executed. See also the `-E` option.

  time
  : Use either of the following two formats described by `strptime`(3).

    ```
    %Y-%m-%d,%H:%M:%S
    %Y-%m-%d_%H-%M-%S
    ```

`-t` *user@host:directory*
: Sets the network host and remote directory of the data transfer destination. Specify the host name or IP address of the network host in the *host* field. Specify the user name for `ssh` login to the archive host in the *user* field. Specify the archive directory on the archive host in which the output file is saved in the *directory* field. The *directory* field must not begin with "-" or "~."

  Note – No target directory is created by `snapshot`. Create the target directory in the remote host in advance.

`-v`
: Displays detailed information. The status of correction of snapshot files for each SPARC M12/M10 systems chassis. If it is specified with the `-q` option, the `-v` option becomes invalid.

  Note – The user privilege to operate all commands to be executed by the `snapshot` setting file may not have been given. In this case, an error message indicating that these command operations are not allowed is displayed.

`-y`
: Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

Operation mode

The overview of the operation mode of `snapshot` is described below.

The initial mode is the "SSH target mode." If the data collector is started specifying the -t option, this mode is applied for execution. In this mode, the data collector opens the SSH connection of the destination specified by the service processor (after appropriate authentication) and sends the data archive of the zip format to the destination host via the SSH connection. No target directory is created by snapshot. Create the target directory in the remote host in advance. Transfer encryption in this mode is performed by SSH.

The second mode is the "USB device mode." If the data collector is started specifying the -d option, this mode is applied for execution. In this mode, the outputs of the data collector (archive of the zip format) are saved in files on the USB device. The USB device needs to have been formatted by the FAT32 file system. In this mode, you can use the -e option to encrypt zip files like the SSH target mode. However, in this mode, data is local to the service processor, so transfer encryption (like SSH) is not performed.

To execute snapshot in the master chassis, connect the USB device to a USB port of the master chassis.

EXAMPLES

EXAMPLE 1 Download data to the external media device.

```
XSCF> snapshot -d usb0 -r -b 3
Testing writability of USB device....SUCCESS
About to remove all files from device 'usb0'. Continue? [y|n] : y
Collecting data into /media/usb_msd/jupiter_10.1.1.1_2012-10-20T22-41-
51.zip
Data collection complete.
```

EXAMPLE 2 Limit log collection to obtain specific logs for the data range.

```
XSCF> snapshot -d usb0 -b 3 -S 2012-01-01,01:00:00  -E 2012-01-
31_14-00-00
Testing writability of USB device....SUCCESS
Collecting data into /media/usb_msd/jupiter_10.1.1.1_2012-10-20T22-41-
51.zip
Data collection complete.
```

EXAMPLE 3 Collect the logs of all SPARC M12/M10 systems chassis.

```
XSCF> snapshot -d usb0 -r -a -v
Testing writability of USB device....SUCCESS
About to remove all files from device 'usb0'. Continue? [y|n] : y
BB#00: start to execute snapshot
BB#01: start to execute snapshot
.
.
.
BB#00: finish to execute snapshot
BB#01: finish to execute snapshot
.
.
```

```
.
BB#00_jupiter_10.1.1.1_2012-10-20T22-33-44.zip - Status: ok
BB#01_jupiter_10.1.1.2_2012-10-20T22-33-44.zip - Status: FAIL
.
.
.
Collecting data into /media/usb_msd/jupiter_10.1.1.1_2012-10-20T22-41-
51.zip
Data collection complete.
```

EXIT STATUS

The following exit values are returned.

`0`	Indicates normal end.
`>0`	Indicates error occurrence.

SEE ALSO

showlogs(8)

NAME

switchscf - Switches the status of XSCF in between master and standby.

SYNOPSIS

switchscf [[-q] -{y|n}] -t {Master | Standby} [-f]

switchscf -h

DESCRIPTION

switchscf is a command to switch the status of XSCF in between active and standby.

switchscf can be used only for the systems composed of multiple XSCFs.

XSCF in the active status means master XSCF. Therefore, the master XSCF and XSCF in the standby status is switched by executing switchscf.

switchscf can be executed in the master or standby XSCF. If the command is executed for the XSCF logged in currently, switch processing is executed between paired XSCFs (between XBBOX#80 and XBBOX#81 or between BB#00 and BB#01, if there is some or no crossbar box, respectively).

Note – When switching XSCFs, the sessions of the network connected to the master XSCF are disconnected.

Caution – Normally, XSCFs cannot be switched during maintenance work. If XSCF cannot be switched because the execution result of switchscf becomes "Switching of XSCF state is disabled due to a maintenance operation. Try again later.", confirm whether the maintenance commands of addfru(8), replacefru(8), and flashupdate(8) are in execution. If any of these commands is in execution, wait until the command is terminated. If XSCF cannot be switched though the maintenance command is not in execution, use the -f option to switch.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-f — If XSCF is not switched, it can be switched forcibly.

Caution – The -f option forcibly switches XSCF. Therefore, use it only if switching by normal operations is impossible.

-h — Displays the usage. Specifying this option with another option or operand causes an error.

-n — Automatically responds to prompt with "n" (no).

-q	Prevents display of messages, including prompt, for standard output.
-t Master	Switches the status of XSCF to the master status.
-t Standby	Switches the status of XSCF to the standby status.
-y	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.

EXAMPLES

EXAMPLE 1 Switch the status of the XSCF logged in currently to the standby status.

```
XSCF> switchscf -t Standby
The XSCF unit switch between the Master and Standby states. Continue?
[y|n]:y
```

EXAMPLE 2 Switch the status of the XSCF logged in currently to the standby status. The prompt is automatically given a "y" response.

```
XSCF> switchscf -t Standby -y
The XSCF unit switch between the Master and Standby states. Continue?
[y|n]:y
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

testsb - Performs an initial diagnosis on the specified physical system board (PSB).

SYNOPSIS

testsb [[-q] -{y|n}] [-m diag=*mode*] *location*

testsb [[-q] -{y|n}] [-m diag=*mode*] -a

testsb -v [-y|-n] [-m diag=*mode*] [-p] [-s] *location*

testsb -v [-y|-n] [-m diag=*mode*] [-p] [-s] -a

testsb -h

DESCRIPTION

testsb is a command to perform the initial diagnosis of the specified PSB.

The configuration of PSB and operation of each device mounted in PSB are diagnosed. While diagnosing, the PSB is powered on and off. The diagnosis result is displayed after diagnosis. In addition, the items of Test and Fault displayed by showboards(8) can be confirmed.

After diagnosis, confirm that there is no degraded part and no error logs are registered.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-a
: Diagnoses all mounted PSBs.

-h
: Displays the usage. Specifying this option with another option or operand causes an error.

-m diag=*mode*
: Specifies the diagnosis level of the initial diagnosis. You can specify either of the following for *mode*.

min	Standard (Default)
max	Maximum

-n
: Automatically responds to prompt with "n" (no).

-p
: Executes probe-scsi-all of OpenBoot PROM and displays the result in the middle of diagnosis processing.

  For the SPARC M12-1/M12-2/M12-2S, the following information is also displayed if the PCI expansion unit is connected: PCI expansion unit and link card firmware versions, and components mounted in the PCI expansion unit.

-q
: Prevents display of messages, including prompt, for standard output.

`-s`	Executes `show-devs` of OpenBoot PROM and displays the result in the middle of diagnosis processing. For the SPARC M12-1/M12-2/M12-2S, the following information is also displayed if the PCI expansion unit is connected: PCI expansion unit and link card firmware versions, and components mounted in the PCI expansion unit.
`-v`	Displays detailed information.
`-y`	Automatically responds to prompt with "y" (yes).

OPERANDS

The following operands are supported.

location Specifies only one PSB number to be diagnosed.

This can be specified using the following format.

xx-y

xx	BB-ID which is an integer from 00 to 15
y	It is fixed to 0

EXTENDED DESCRIPTION

- For the SPARC M12-2S, the power-on and -off sequences are repeated twice at either of the following times:
  - When diagnosis is executed with location specified
  - When only one PSB in the system is subject to diagnosis
- For the SPARC M12-1/M12-2/M10-1/M10-4/M10-4S, PSB power-on and -off occur during diagnosis.
- Diagnosis by `testsb` is possible even if CPU Activation key is not registered.
- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- Execute the `-a` option while the system is shut down. If the system is not shut down, it causes an error.

  The system shutdown status means the status in which all PPARs are shut down. If it is in operation, all PPARs are shut down by executing `poweroff -a` and then the power of the system is turned off. You can check the system power status by executing `showhardconf`(8) and referring to the "System_Power:" display ("On" or "Off").
- If the status of the specified PSB corresponds to any of the following statuses, `testsb` causes an error.
  - PSB is incorporated into PPAR and the PPAR is in operation.

- PSB is incorporated into PPAR and the status of the PPAR is OpenBoot PROM (ok prompt).
- PSB is incorporated into PPAR and the status of the PPAR is powering on, powering off, or restarting.
- addboard(8) and deleteboard(8) are in execution for PSB.

- An error occurs when testsb is attempted to be executed while testsb or diagxbu(8) is being executed against other PSB or a crossbar box.
- If the status of the specified PSB is Unmount or Faulted, it may be excluded from the diagnosis targets and the diagnosis result may not be displayed. In such a case, confirm the diagnosis result by showboards(8).
- If the warm-up time and wait time before start is set, a prompt to confirm whether it is acceptable to execute testsb ignoring it is displayed. To execute, enter "y." To cancel, enter "n."
- The diagnosis result by testsb is displayed as below.

PSB — Number belonging to PSB

This is displayed in the format below.

xx-y

xx	BB-ID which is an integer from 00 to 15
y	It is fixed to 0

Test — Status of the initial diagnosis of PSB
Any of the following is displayed. This status display is the same as that displayed by showboards(8).

Unmount	Recognition is impossible because it is not mounted or a failure occurred.
Unknown	Not diagnosed.
Testing	The initial diagnosis is in progress.
Passed	The initial diagnosis is normally completed.
Failed	An abnormality occurred in the initial diagnosis. PSB cannot be used or is degraded.

Fault — Degradation status of PSB

The status is displayed by one or more items. This status displays is the same as that displayed by showboards(8).

Normal	Normal status
Degraded	There is a degraded part. PSB can be operated.
Faulted	PSB cannot be operated due to an abnormality.

- If it is executed specifying the `-p` or `-s` option, the power can be shut down forcibly when [Ctrl]+[C] key is pressed while `probe-scsi-all` or `show-devs` is in execution.

EXAMPLES

EXAMPLE 1 Perform the initial diagnosis of PSB 00-0 on SPARC M12-1/M12-2/M10-1/M10-4/M10-4S.

```
XSCF> testsb 00-0
Initial diagnosis is about to start, Continue?[y|n] :y
PSB#00-0 power on sequence started.
  0end
Initial diagnosis started. [7200sec]
  0..... 30..... 60..... 90.....120end
Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0.end
PSB powered off.
PSB  Test    Fault
---- ------- --------
00-0 Passed  Normal
```

EXAMPLE 2 Perform the initial diagnosis of PSB 00-0 on SPARC M12-2S. The power-on and -off sequences are repeated twice.

```
XSCF> testsb 00-0
Initial diagnosis is about to start, Continue?[y|n] :y
PSB#00-0 power on sequence started.
  0end
Initial diagnosis started. [1 / 2] [7200sec]
  0..... 30..... 60.....end
Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0..end
PSB powered off.
PSB#00-0 power on sequence started.
  0end
Initial diagnosis started. [2 / 2] [7200sec]
  0..... 30..... 60..... 90.....120end
Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0..... 30..... 60end
PSB powered off.
PSB  Test    Fault
---- ------- --------
00-0 Passed  Normal
```

EXAMPLE 3 Perform the initial diagnosis of PSB 00-0 displaying a detailed message on SPARC M12-1/M12-2/M10-1/M10-4/M10-4S.

```
XSCF> testsb -v 00-0
Initial diagnosis is about to start. Continue? [y|n] :y
PSB#00-0 power on sequence started.
```

```
     :
auto-boot? =            false
{0} ok Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0.end
PSB powered off.
PSB  Test    Fault
---- ------- --------
00-0 Passed  Normal
```

EXAMPLE 4 Perform the initial diagnosis of PSB 01-0 displaying a detailed message on SPARC M12-2S. The power-on and -off sequences are repeated twice.

```
XSCF> testsb -v 01-0
Initial diagnosis is about to start. Continue? [y|n] :y
PSB#01-0 power on sequence started.
    :
<<The first diagnostic message is displayed.>>
    :
post(s00c0.00.0)>Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0...end
PSB powered off.
PSB#01-0 power on sequence started.
    :
<<The second diagnostic message is displayed.>>
    :
auto-boot? =            false
{0} ok Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0...end
PSB powered off.
PSB  Test    Fault
---- ------- --------
01-0 Passed  Normal
```

EXAMPLE 5 Perform the initial diagnosis of all mounted PSBs.

```
XSCF> testsb -a
Initial diagnosis is about to start. Continue? [y|n] :y
PSB power on sequence started.
  0end
Initial diagnosis started. [1800sec]
  0..... 30..... 60..... 90.....120end
Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0.end
PSB powered off.
PSB  Test    Fault
---- ------- --------
00-0 Passed  Normal
01-0 Passed  Normal
```

```
02-0 Passed  Normal
03-0 Passed  Normal
```

EXAMPLE 6 Perform the initial diagnosis of PSB while warm-up and air conditioning wait are set. (Diagnosis is cancelled during the warm-up time and wait time for air-conditioning.)

```
XSCF> testsb -a
Initial diagnosis is about to start, Continue? [y|n] :y
Ignore warmup-time and air-conditioner-wait-time, Continue?[y|n] :n
Initial diagnosis canceled by operator.
```

EXAMPLE 7 Perform the initial diagnosis of PSB ignoring the set warm-up time and wait time for air conditioning.

```
XSCF> testsb -a
Initial diagnosis is about to start. Continue? [y|n] :y
Ignore warmup-time and air-conditioner-wait-time, Continue?[y|n] :y
PSB power on sequence started.
  0end
Initial diagnosis started. [1800sec]
  0..... 30..... 60..... 90.....120end
Initial diagnosis has completed.
PSB power off sequence started. [1200sec]
  0.end
PSB powered off.
PSB  Test    Fault
---- ------- --------
00-0 Passed  Normal
01-0 Passed  Normal
02-0 Passed  Normal
03-0 Passed  Normal
```

EXAMPLE 8 Perform the initial diagnosis of PSB 01-0 with the `probe-scsi-all` command.

```
XSCF> testsb -v -p 01-0
Initial diagnosis is about to start, Continue? [y|n] :y
PSB#01-0 power on sequence started.
:
auto-boot? =            false
:
PSB  Test    Fault
---- ------- --------
01-0 Passed  Normal
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO **addfru(8)**, **diagxbu**(8), **replacefru**(8), **setupfru**(8), **showboards**(8), **showfru**(8)

NAME

traceroute - Displays the network route to the specified host.

SYNOPSIS

traceroute [-n] [-r] [-v] [-m *maxttl*] [-p *port*] [-q *nqueries*] [-s *src_addr*] [-w *wait*] *host*

traceroute -h

DESCRIPTION

`traceroute` is a command to display the network route to the specified host.

The network route means the router (gateway) to connect the specified hosts and network devices and displays what kinds of routers are located on the route.

`traceroute` attempts to extract the ICMP TIME_EXCEEDED response using the TTL field of IP protocols from all gateways on the network route to the specified hosts or network devices.

Privileges

No privileges are required to execute this command.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

-h	Displays the usage. Specifying this option with another option or operand causes an error.
-m *maxttl*	Specifies the maximum number of hops. Displays the same number of gateways as the specified number of hops. If omitted, it is set to 30.
-n	Outputs just with the IP address without reverse DNS lookup.
-p *port*	Specifies the port number of the UDP packet to be used. This is valid only if the UDP packet is used. If omitted, it is set to 33434.
-q *nqueries*	Specifies the number of attempts for one gateway. If omitted, it is set to 3 times.
-r	Directly transfers packets to the specified hosts or network devices ignoring the routing table. If there is no target host or network device on the same physical network, it causes an error.
-s *src_addr*	Specifies the source address following the route.
-v	Displays detailed information. Displays the transmission size of the packet and source address.
-w *wait*	Specifies the timeout time by seconds. If omitted, it is set to 3 seconds.

OPERANDS

The following operands are supported.

host	Specifies the hosts or network devices to send packets to. You can specify a host name or IP address. Specifying a DSCP address causes an error.

EXTENDED DESCRIPTION

- If no option is specified, the usage is displayed.
- If "`localhost`" and the loopback address (127.0.0.0/8) are specified in *host*, only the users with `fieldeng` privilege can execute this command.
- If the interface of the SSCP link is specified in *host*, only the users with `fieldeng` privilege can execute this command.

EXAMPLES

EXAMPLE 1 Display the network route to the host server.example.com.

```
XSCF> traceroute server.example.com
traceroute to server.example.com (192.168.100.10), 30 hops max, 38 byte
packets
 1  10.16.10.1 (10.16.10.1)  1.792 ms  1.673 ms  1.549 ms
 2  10.16.11.1 (10.16.11.1)  2.235 ms  2.249 ms  2.367 ms
 3  10.24.1.1 (10.24.1.1)  2.199 ms  2.228 ms  2.361 ms
 4  10.13.0.1 (10.13.0.1)  2.516 ms  2.229 ms  2.357 ms
 5  10.15.0.1 (10.15.0.1)  2.546 ms  2.347 ms  2.272 ms
 6  server.example.com (192.168.100.10)  2.172 ms  2.313 ms  2.36 ms
```

EXAMPLE 2 Display the detailed network route to the host server.example.com.(XSCF-LAN=192.168.100.10)

```
XSCF> traceroute -v server.example.com
traceroute to server.example.com (192.168.100.10), 30 hops max, 38 byte
packets
 1  10.16.10.1 (10.16.10.1) 36 bytes to 192.168.100.10  1.792 ms  1.673 ms
1.549 ms
 2  10.16.11.1 (10.16.11.1) 36 bytes to 192.168.100.10  2.235 ms  2.249 ms
2.367 ms
 3  10.24.1.1 (10.24.1.1) 36 bytes to 192.168.100.10  2.199 ms  2.228 ms
2.361 ms
 4  10.13.0.1 (10.13.0.1) 36 bytes to 192.168.100.10  2.516 ms  2.229 ms
2.357 ms
 5  10.15.0.1 (10.15.0.1) 36 bytes to 192.168.100.10  2.546 ms  2.347 ms
2.272 ms
 6  server.example.com (192.168.100.10) 46 bytes to 192.168.100.10  2.172 ms
2.313 ms  2.36 ms
```

EXAMPLE 3 Case that the loopback address is set.

```
XSCF> traceroute 127.0.0.1
This private IP address cannot be accessed.
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

unlockmaintenance - Release multi-activated lock created by `addfru`(8) and `replacefru`(8).

SYNOPSIS

unlockmaintenance [`[-q] -{y|n}`]

unlockmaintenance `-h`

DESCRIPTION

`unlockmaintenance` is a command to release the multi-activated lock from maintenance commands when maintenance procedure is unexpectedly halted due to the termination of LAN etc., in the middle of system maintenance using `addfru`(8) and `replacefru`(8).

Privileges

To execute this command, `fieldeng` privilege is required.

For details on user privileges, see `setprivileges`(8).

OPTIONS

The following options are supported.

`-n`	Automatically responds to prompt with "n" (no).
`-q`	Prevents display of messages, including prompt, for standard output.
`-y`	Automatically responds to prompt with "y" (yes).

EXTENDED DESCRIPTION

Note – Please never use it in any case other than when maintenance procedure is unexpectedly halted in the middle of system maintenance due to termination of LAN etc., as it forcibly halts the multiple activation prevention lock of the maintenance menu.

- When you execute the command, a prompt to confirm whether to execute it with the specified contents is displayed. To execute, press the [y] key. To cancel, press the [n] key.
- You can execute `unlockmaintenance` only from the master XSCF.

EXAMPLES

EXAMPLE 1 Unlock XSCF that was locked by maintenance work.

```
XSCF> unlockmaintenance
This command unlocks the maintenance lock which prevents the multiple
execution of maintenance commands.
*Never* use this command, except when the lock state remains by some reason.
Careless execution of this command causes serious situation because it
interrupts the running command and XSCF might not be able to recognize the
parts.
Continue? [y|n] :y
```

EXAMPLE 2 Unlock XSCF that was locked by maintenance work. The prompt is automat-

ically given a "y" response.

```
XSCF> unlockmaintenance -y
This command unlocks the maintenance lock which prevents the multiple
execution of maintenance commands.
*Never* use this command, except when the lock state remains by some
reason.
Careless execution of this command causes serious situation because it
interrupts the running command and XSCF might not be able to recognize the
parts.
Continue? [y|n] :y
```

EXAMPLE 3 Unlock XSCF that was locked by maintenance work. The message is hidden and the prompt is automatically given a "y" response.

```
XSCF> unlockmaintenance -q -y
XSCF>
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

addfru(8), **replacefru**(8)

NAME

version - Displays the version number of the firmware.

SYNOPSIS

version -c xcp [-v] [-t]

version -c {cmu | xscf} [-v] [-M]

version -h

DESCRIPTION

version is a command to display the version of the firmware.

The following versions can be displayed.

xcp	Versions of XSCF Control Package (XCP) applied to the system
cmu	Representative version of CMU firmware. CMU firmware is the archives of the Power-on self test (POST)/OpenBoot PROM/ Hypervisor
xscf	Version of XSCF firmware

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-c xcp	Displays the versions of XCP.
-c cmu	Displays the representative version of the archives of the POST/ OpenBoot PROM/Hypervisor (cmu firmware version).
-c xscf	Displays the version of the XSCF firmware.
-h	Displays the usage. Specifying this option with another option or operand causes an error.
-M	Displays text one screen at a time.
-t	Displays the information of the total number of versions of XCP registered to XSCF. It is specified with -c xcp.
-v	Displays detailed information. If it is specified with -c xscf, the same information as in the normal status is displayed.

EXAMPLES

EXAMPLE 1 Display the versions of XCP on the SPARC M10-4S (without crossbar boxes).

```
XSCF> version -c xcp
BB#00-XSCF#0 (Master)
XCP0 (Current): 2320
XCP1 (Reserve): 2320
BB#01-XSCF#0 (Standby)
XCP0 (Current): 2320
```

```
XCP1 (Reserve): 2320
BB#02-XSCF#0
XCP0 (Current): 2320
XCP1 (Reserve): 2320
```

EXAMPLE 2 Display the versions of XCP on the SPARC M10-4S (with crossbar boxes).

```
XSCF> version -c xcp
XBBOX#80-XSCF#0 (Master)
XCP0 (Current): 2320
XCP1 (Reserve): 2320
XBBOX#81-XSCF#0 (Standby)
XCP0 (Reserve): 2320
XCP1 (Current): 2320
BB#00-XSCF#0
XCP0 (Current): 2320
XCP1 (Reserve): 2320
BB#01-XSCF#0
XCP0 (Current): 2320
XCP1 (Reserve): 2320
```

EXAMPLE 3 Display the versions of XCP on the SPARC M10-1.

```
XSCF> version -c xcp
BB#00-XSCF#0 (Master)
XCP0 (Current): 2320
XCP1 (Reserve): 2320
```

EXAMPLE 4 Display details of the versions of XCP on the SPARC M10-4S (without crossbar boxes).

```
XSCF> version -c xcp -v
BB#00-XSCF#0 (Master)
XCP0 (Current): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
XCP1 (Reserve): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
BB#01-XSCF#0 (Standby)
XCP0 (Current): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
```

```
XCP1 (Reserve): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
CMU BACKUP
#0: 02.32.0000
#1: ..
```

EXAMPLE 5 Display details of the versions of XCP on the SPARC M10-4S (with crossbar boxes).

```
XSCF> version -c xcp -v
XBBOX#80-XSCF#0 (Master)
XCP0 (Current): 2320
XSCF          : 02.32.0000
XCP1 (Reserve): 2320
XSCF          : 02.32.0000
XBBOX#81-XSCF#0 (Standby)
XCP0 (Reserve): 2320
XSCF          : 02.32.0000
XCP1 (Current): 2290
XSCF          : 02.32.0000
BB#00-XSCF#0
XCP0 (Current): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
XCP1 (Reserve): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
BB#01-XSCF#0
XCP0 (Current): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
XCP1 (Reserve): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
CMU BACKUP
#0: 02.32.0000
#1: ..
```

EXAMPLE 6 Display details of the versions of XCP on the SPARC M10-1.

```
XSCF> version -c xcp -v
BB#00-XSCF#0 (Master)
XCP0 (Current): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
XCP1 (Reserve): 2320
CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
```

EXAMPLE 7 Display details of the versions of XCP on the SPARC M12-2S (without crossbar box).

```
XSCF> version -c xcp -v
BB#00-XSCF#0 (Master)
XCP0 (Current): 3022
XSCF          : 03.02.0002
XCP1 (Reserve): 3022
XSCF          : 03.02.0002
CMU           : 03.02.0002
    POST          : 5.9.0
    OpenBoot PROM : 4.38.5+3.1.0
    Hypervisor    : 1.5.13
BB#01-XSCF#0 (Standby)
XCP0 (Current): 3022
XSCF          : 03.02.0002
XCP1 (Reserve): 3022
XSCF          : 03.02.0002
CMU           : 03.02.0002
    POST          : 5.9.0
    OpenBoot PROM : 4.38.5+3.1.0
    Hypervisor    : 1.5.13
CMU BACKUP
#0: 03.02.0002
#1: ..
```

EXAMPLE 8 Display the version of XCP registered in XSCF.

```
XSCF> version -c xcp -t
XCP: 2320
```

EXAMPLE 9 Display the details on the version of XCP registered in XSCF.

```
XSCF> version -c xcp -v -t
XCP           : 2320
    CMU           : 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
XSCF          : 02.32.0000
```

EXAMPLE 10 Display the version of the CMU firmware.

```
XSCF> version -c cmu
PPAR-ID 0: 02.32.0000
PPAR-ID 1: 02.32.0000
PPAR-ID 2: 02.32.0000
PPAR-ID 3: 02.32.0000
:
PPAR-ID 15: 02.32.0000
```

EXAMPLE 11 Display details of the version of the CMU firmware on the SPARC M10-4S.

```
XSCF> version -c cmu -v
PPAR-ID 0: 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PPAR-ID 1: 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PPAR-ID 2: 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PPAR-ID 3: 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PPAR-ID 15: 02.32.0000
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PSB#00-0: 02.32.0000(Current)
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PSB#00-0: 02.32.0000(Reserve)
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PSB#01-0: 02.32.0000(Current)
    POST          : 3.10.0
```

```
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PSB#01-0: 02.32.0000(Reserve)
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8

    :

PSB#15-0: 02.32.0000(Current)
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
PSB#15-0: 02.32.0000(Reserve)
    POST          : 3.10.0
    OpenBoot PROM : 4.38.5+2.19.0
    Hypervisor    : 1.4.8
```

EXAMPLE 12 Display details of the version of the XSCF firmware on the SPARC M10-4S.

```
XSCF> version -c xscf -v
BB#00-XSCF#0 (Master)
02.32.0000(Reserve) 02.32.0000(Current)
BB#01-XSCF#0 (Standby)
02.32.0000(Current) 02.32.0000(Reserve)
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

NAME

viewaudit - Displays the audit records.

SYNOPSIS

viewaudit

viewaudit [-A *date-time*] [-B *date-time*] [-C] [-c *classes*] [-D *date-time*] [-E *end-record*] [-e *events*] [-i *audit-ids*] [-l] [-m *del*] [-n] [-p *privilege-results*] [-r *return-values*] [-S *start-record*] [-u *users*] [-x]

viewaudit -h

DESCRIPTION

viewaudit is a command to display the audit records.

If viewaudit is executed without specifying any options, all of the current local audit records are displayed. If viewaudit is executed specifying the option, only the selected records are displayed. By default, the records are displayed in the text format. One token per line is shown and comma is used as the field separator character. The output format can be changed by separately using the options of -C, -E, -l, -m *del*, -n, -S, and -x.

Privileges

To execute this command, auditadm or auditop privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

-A *date-time*

Selects the records which occurred after *date-time*. *date-time* is based on the local time. You can specify a range by using the -A and -B options together. The valid values of *date-time* are below.

- Absolute time *date-time*: *yyyymmdd*[*hh*[*mm*[*ss*]]]
  The variables have the following meanings.
  - *yyyy* = Year (1970 is the earliest valid value.)
  - *mm* = Month (01 to 12)
  - *dd* = Day (01 to 31)
  - *hh* = Hour (00 to 23)
  - *mm* = Minute (00 to 59)
  - *ss* = Second (00 to 59)

  The default values of *hh*, *mm*, and *ss* are 00.

`-B` *date-time*

Selects the records which occurred before *date-time*. *date-time* is based on the local time. You can specify a range by using the `-A` and `-B` options together. The valid values of *date-time* are the absolute time and offset time.

- Absolute time *date-time*: *yyyymmdd*[*hh*[*mm*[*ss*]]]

  The variables have the following meanings.

  - *yyyy* = Year (`1970` is the earliest valid value.)
  - *mm* = Month (`01` to `12`)
  - *dd* = Day (`01` to `31`)
  - *hh* = Hour (`00` to `23`)
  - *mm* = Minute (`00` to `59`)
  - *ss* = Second (`00` to `59`)

- Offset *date-time*: +*n d*|*h*|*m*|*s*

  The variables have the following meanings.

  - *n* = Number of units
  - *d* = Number of days
  - *h* = Number of hours
  - *m* = Number of minutes
  - *s* = Number of seconds

  The offset time can be specified only by the `-B` option and needs to be specified with the `-A` option.

  The default values of *hh*, *mm*, and *ss* are `00`.

`-C`

Adds the number of records matching the selection standard at the end of output.

`-c` *classes*

Selects the record of the specified class. *classes* is a comma-separated list of audit classes. Classes can be specified with a number or name. The prefix "`ACS_`" can be omitted. For example, the classes of audit-related events can be expressed as `ACS_AUDIT`, `AUDIT` or `2`.

The valid classes are below.

`all`	All classes
`ACS_SYSTEM(1)`	System-related event
`ACS_write(2)`	Command that can change the status
`ACS_READ(4)`	Command to display the current status
`ACS_LOGIN(8)`	Login-related event
`ACS_AUDIT(16)`	Audit-related event
`ACS_PPAR(32)`	PPAR administration-related event
`ACS_USER(64)`	User administration-related event
`ACS_PLATFORM(128)`	Platform administration-related event
`ACS_MODES(256)`	Mode-related event

`-D` *date-time*

Selects the records which occurred on a specific day (in 24 hours between 00:00:00 and 23:59:59 of the specified day). Specify the specified date in the format of *yyyymmddhhmmss* (year, month, day, hour, minute, second) based on the local time. All records with the time stamp of the specified day are selected. It becomes invalid even if the hour, minute, or second is specified. The `-D` option cannot be specified with the `-A` or `-B` option.

`-E` *end-record*

Specifies the last record matching the selection standard for display.

`-e` *events*

Selects the record of the specified event. *events* is a comma-separated list of audit events. Events can be specified with a number or name. The prefix "`AEV_`" can be omitted. For example, the events of SSH login can be expressed as `AEV_LOGIN_SSH`, `LOGIN_SSH`, or `4`.

For the list of valid events, see `showaudit -e all`.

`-h`

Displays the usage. Specifying this option with another option or operand causes an error.

`-i` *audit-ids*	Selects the record of the specified audit session identifier. If you are interested in the activities reflected in a specific audit record, you can display all audit records of the session. *audit-id* is not fixed and assigned again when the service processor is reset. *audit-ids* is a comma-separated list of audit session identifiers. *audit-id* is the number after the label "subject" of the audit file. For example, *audit-id* is "`1`" in the following list. `subject,1,bob,normal,telnet 45880 jupiter`
`-l`	Outputs one record per line.
`-m` *del*	Not the default delimiter (comma) but *del* is used as the field separator character. If *del* has a special meaning in the shell, it is necessary to enclose it in quotation marks. The maximum number of the delimiters is three. Delimiters have no meaning. In addition, they cannot be specified with the `-x` option.
`-n`	Specifies the UID and IP address not to convert them to the user name or host name.
`-p` *privilege-results*	Selects the record according to the specified *privilege-results*. *privilege-results* is a comma-separated list. *privilege-results* is `granted`, `denied`, or `error`.
`-r` *return-values*	Selects the record according to the specified return value. *returnvals* is a comma-separated list of the value success or failure. `success` corresponds to the return value `0`. `failure` corresponds to nonzero return values.
`-S` *start-record*	Specifies the first record matching the selection standard for displayed.
`-u` *users*	Selects the records belonging to the specified user. *users* is a comma-separated list of users. The user can specify a user name or figure UID.
`-x`	Outputs in the XML format.

EXAMPLES

EXAMPLE 1 Display the audit records of December 12, 2005.

```
XSCF> viewaudit -D 20121212

file,1,2012-01-11 10:52:30.391 -05:00,20120111155230.0000000000.jupiter
```

EXAMPLE 2 Display the audit records of a user.

```
XSCF> viewaudit -u jsmith

file,1,2012-01-11 10:52:30.391 -05:00,20120111155230.0000000000.jupiter
header,37,1,login - telnet,jupiter,2012-01-11 11:31:09.659 -05:00
subject,1,jsmith,normal,ssh 45880 jupiter
command,showuser
platform access,granted
return,0
```

EXAMPLE 3 Display the audit records of user privileges.

```
XSCF> viewaudit -p granted

file,1,2012-01-11 10:52:30.391 -05:00,20120111155230.0000000000.jupiter
header,37,1,login - telnet,jupiter,2012-01-11 11:31:09.659 -05:00
subject,1,jsmith,normal,ssh 45880 jupiter
command,showuser
platform access,granted
return,0
```

EXAMPLE 4 Display the audit records of success of access.

```
XSCF> viewaudit -r success

file,1,2012-01-11 10:52:30.391 -05:00,20120111155230.0000000000.jupiter
header,37,1,login - telnet,jupiter,2012-01-11 11:31:09.659 -05:00
subject,1,jsmith,normal,ssh 45880 jupiter
command,showuser
platform access,granted
return,0header,57,1,command - viewaudit,jupiter.company.com,2006-01-26
16:13:09.128 -05:00
subject,5,sue,normal,ssh 1282 saturn
command,viewaudit
platform access,granted
return,0
...
```

EXAMPLE 5 Display the audit records of two days.

```
XSCF> viewaudit -A 20120108 -B +2d

file,1,2012-01-09 20:12:12.968 -08:00,20120110041212.0000000004.sca-m5k-0-0
file,1,2012-01-10 21:14:49.481 -08:00,terminated
file,1,2012-01-10 21:14:49.485 -08:00,20120111051449.0000000005.sca-m5k-0-0
```

EXAMPLE 6 Display the first five records among the records matching the range of date

(4238 records).

```
XSCF> viewaudit -C -A 20120109 -B 20120110 -E 5

file,1,2012-01-09 20:12:12.968 -08:00,20120110041212.0000000004.sca-m5k-0-0
header,63,1,command - setaudit,sca-m5k-0-0.sfbay.sun.com,2012-01-09
20:12:12.974 -08:00,subject,250,opl,normal,ssh 42759 san-e4900-
0.West.Sun.COM,command,setaudit,delete,platform access,granted,return,0
header,37,1,login - ssh,sca-m5k-0-0.sfbay.sun.com,2012-01-09 20:12:14.455 -
08:00,subject, 252,scfroot,normal,ssh 42761 san-e4900-0.West.Sun.COM
header,37,1,logout,sca-m5k-0-0.sfbay.sun.com,2012-01-09 20:12:14.800 -
08:00,subject,250,o pl,normal,ssh 42759 san-e4900-0.West.Sun.COM
header,37,1,login - ssh,sca-m5k-0-0.sfbay.sun.com,2012-01-09 20:12:15.595 -
08:00,subject, 253,scfroot,normal,ssh 42762 san-e4900-0.West.Sun.COM
4238
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

setaudit(8), **showaudit**(8)

NAME

xscfstartupmode - Set up the startup mode of SPARC M12-1/M10-1.

SYNOPSIS

xscfstartupmode -m *mode*

xscfstartupmode -d

DESCRIPTION

xscfstartupmode is the command to set up the startup mode of SPARC M12-1/M10-1.

There are two kinds of startup mode: fast and normal.

In order to automatically start up the physical partitions of a SPARC M12-1/M10-1, use this command to set the startup mode to "fast", set the operation panel mode switch to "Locked" and turn on the input power of the system (AC ON). If the startup mode is set to "normal", the physical partitions start up only after the execution of the poweron(8) on the XSCF. If the startup mode is set to "fast" while the operation panel mode switch is set to "Service", XSCF is started in the "normal" mode when the input power of the system is turned on.

This command is not supported on SPARC M12-2/M12-2S/M10-4/M10-4S systems.

Privileges

To execute this command, platadm or fieldeng privilege is required.

For details on user privileges, see setprivileges(8).

OPTIONS

The following options are supported.

`-d` Display the following information.

`Current Mode` Display the startup mode of the running system.

`fast`: The system has been started in "fast" mode.

`normal`: The system has been started in "normal" mode.

`Setting Mode` Display the status of startup mode.

`fast`: "fast" mode has been configured. Setting the operation panel mode switch to "Locked" and turning off and on the input power of the system will cause the system to start in the "fast" mode.

`normal`: "normal" mode has been configured. Turning off and on the input power will cause the system to start in the "normal" mode.

`fast [need AC OFF/ON]`: "fast" mode has been configured. Setting the operation panel mode switch to "Locked" and turning off and on the input power of the system will cause the system to start in the "fast" mode.

`normal [need AC ON/OFF]`: "normal" mode has been configured. Turning off and on the input power will cause the system to start in the "normal" mode.

-m *mode*

Set up the startup mode. The following parameters, `fast` and `normal` can be specified. The default mode is `normal`.

`fast`

Set the startup mode to "fast".
Turning off/on the input power of system (AC OFF/ON) is required after setting the startup mode to "fast". If the input power of system is turned off/on while the operation panel mode switch is in "Locked" state, the system starts in "fast" mode. If the input power of system is turned off/on while the operation panel mode switch is in "Service" state, the system starts in "normal" mode.

`normal`

Set the startup mode to "normal".
Turning off/on the input power of system (AC OFF/ON) is required after setting the startup mode to "normal". After the input power of system is turned off/on, the system starts up in "normal" mode, irrespective of the status of operation panel mode switch.

EXTENDED DESCRIPTION

- If the startup mode is changed to "fast" while the physical partitions are in suspension, the physical partitions do not start automatically when XSCF is started. Either turn off/on the input power of system or execute the `poweron`(8) on the XSCF to start the physical partitions.
- If the state of the operation panel mode switch is changed while XSCF is running, the startup mode does not change.
- If the physical partitions are started in the "fast" mode, power recover is registered in the Cause section of the power log.
- The configuration information of startup mode is not included in the system configuration information, that is saved by `dumpconfig`(8) and restored by `restoreconfig`(8).
- When started in the "fast" mode, the highest number of possible logins through telnet or SSH will be 10.
- For SPARC M10-1, the audit log of this command will not be collected.
- When creating or changing system configuration information or logical domain configuration information, check that XSCF has been started in "normal" mode.
- Execute the following commands only when XSCF has been started in "normal" mode:
  - `showhardconf`(8)
  - `showstatus`(8)
  - `dumpconfig`(8), `restoreconfig`(8)

- replacefru(8)
- restoredefaults(8)
- flashupdate(8)

EXAMPLES

EXAMPLE 1 Set the startup mode to "fast".

```
XSCF> xscfstartupmode -m fast
```

EXAMPLE 2 Display the startup mode (before turning on the input power, after "fast" mode has been set up).

```
XSCF> xscfstartupmode -d
Setting Mode: fast [need AC OFF/ON]
Current Mode: normal
```

EXAMPLE 3 Display the startup mode (when started in "fast" mode).

```
XSCF> xscfstartupmode -d
Setting Mode: fast
Current Mode: fast
```

EXAMPLE 4 Display the startup mode (when started in "normal" mode).

```
XSCF> xscfstartupmode -d
Setting Mode: normal
Current Mode: normal
```

EXIT STATUS

The following exit values are returned.

0	Indicates normal end.
>0	Indicates error occurrence.

SEE ALSO

poweron(8), **poweroff**(8), **setpparmode**(8), **showpparmode**(8), **showpparstatus**(8)

Functional Index

XSCF User Accounts