FUJITSU

FUJITSU Server
PRIMEQUEST 2000 Series
Tool Reference

CA92344-0539-12

Preface

This manual provides information on operation methods and settings, including details on the MMB, and EFI functions. The manual is intended for system administrators.
For details on the regulatory compliance statements and safety precautions, see the *PRIMEQUEST 2000 Series Safety and Regulatory Information* (CA92344-0523).

Organization of this manual

This manual is organized as follows.

CHAPTER 1 MMB Web-UI (Web User Interface) Operations

Chapter 1 describes the menus used to manage and operate the PRIMEQUEST 2000 series server with the MMB Web-UI. It also describes how to use the MMB Web-UI.

CHAPTER 2 MMB CLI (Command Line Interface) Operations

Chapter 2 describes the CLI (command line interface) provided by the MMB.

CHAPTER 3 UEFI Menu Operations

Chapter 3 describes the menu operations of the UEFI.

CHAPTER 4 UEFI Command Operations

Chapter 4 describes the command operations of the UEFI.

CHAPTER 5 Dynamic Reconfiguration Operation

Chapter 5 describes the Dynamic Reconfiguration operation.

CHAPTER 6 Setting of sadump environment

Chapter 6 describes the setting of sadump enviroment.

Appendix A List of Setting Items

Appendix A lists the setting items for each window.

Revision History

Edition	Date	Revised location (type) (*1)	Description
01	2014-08-12	All pages	- The edition is initialized to "01" for changing manual code - Added descriptions about Extended Partitioning function
02	2014-10-07	Chapter 3	- Added descriptions about Secure boot
03	2015-02-03	Chapter 2 Chapter 3	- Correction of the error in writing
04	2015-05-01	All pages	- Added descriptions about Memory Scale-up Board - Added descriptions about Extended Socket - Added descriptions about PRIMEQUEST 2400E2/2800E2/2800B2 models
05	2015-09-29	Chapter 1, 2	- Added descriptions about LDAP
		Chapter 1	- Added descriptions about SSD Life Cycle Management
06	2015-10-30	Chapter 1	- Added descriptions about LDAP(Novell eDirectory/OpenLDAP/OpenDS/Open DJ)
07	2016-01-29	Chapter 1	- Added descriptions about Alarm E-Mail message format
08	2016-05-30	All pages	- Added descriptions about PRIMEQUEST 2400E3/2800E3/2800B3 models
09	2016-11-28	Chapter 1, 2	- Added descriptions about [Remote Server Management] window - Added cautions about [Date/Time] window - Added remarks about Access via the management LAN interface
10	2017-01-16	Chapter 3	- Added description about VMware vSphere 6.5
11	2017-02-08	All pages	- Added descriptions about Windows Server 2016
12	2017-08-08	Chapter 1	- Added remarks about NTP function
		Chapter 1,2	- Added remarks about after MMB reset
		Chapter 3	- Added description about Active Processor Cores

*1: Chapter, section, and item numbers in the "Revised location" column refer to those in the latest edition of the document. However, a number marked with an asterisk (*) denotes a chapter, section, or item in a previous edition of the document.

Product operating environment

This product is a computer intended for use in a computer room environment. For details on the product operating environment, see the following manual:

PRIMEQUEST 2000 Series Hardware Installation Manual (CA92344-0535)

Safety Precautions

Alert messages

This manual uses the following alert messages to prevent users and bystanders from being injured and to prevent property damage.

WARNING	This indicates a hazardous situation that is likely to result in death or serious personal injury if the user does not perform the procedure correctly.
CAUTION	This indicates a hazardous situation that could result in minor or moderate personal injury if the user does not perform the procedure correctly. This also indicates that damage to the product or other property may occur if the user does not perform the procedure correctly.
Important	This indicates information that could help the user use the product more efficiently.

Alert messages in the text

An alert statement follows an alert symbol. An alert statement is indented on both ends to distinguish it from regular text. Similarly, one space line is inserted before and after the alert statement.

WARNING

Only Fujitsu certified service engineers should perform the following tasks on this product and the options provided by Fujitsu. Customers must not perform these tasks under any circumstances. Otherwise, electric shock, injury, or fire may result.

- Newly installing or moving equipment
- Removing the front, rear, and side covers
- Installing and removing built-in options
- Connecting and disconnecting external interface cables
- Maintenance (repair and periodic diagnosis and maintenance)

The List of important alert items table lists important alert items.

List of important alert items

The important warning matter that has been described in this manual is as follows.

This indicates a hazardous situation that could result in minor or moderate personal injury if the user does not perform the procedure correctly. This also indicates that damage to the product or other property may occur if the user does not perform the procedure correctly

Operation division	Content of alert	Chapter of description
Normal operation	(data destruction) Reconfirm whether the selection of the disk is correct when you select the dump device. Data is destroyed when executing it with the selection makes a mistake.	6.6 Dump device selection menu

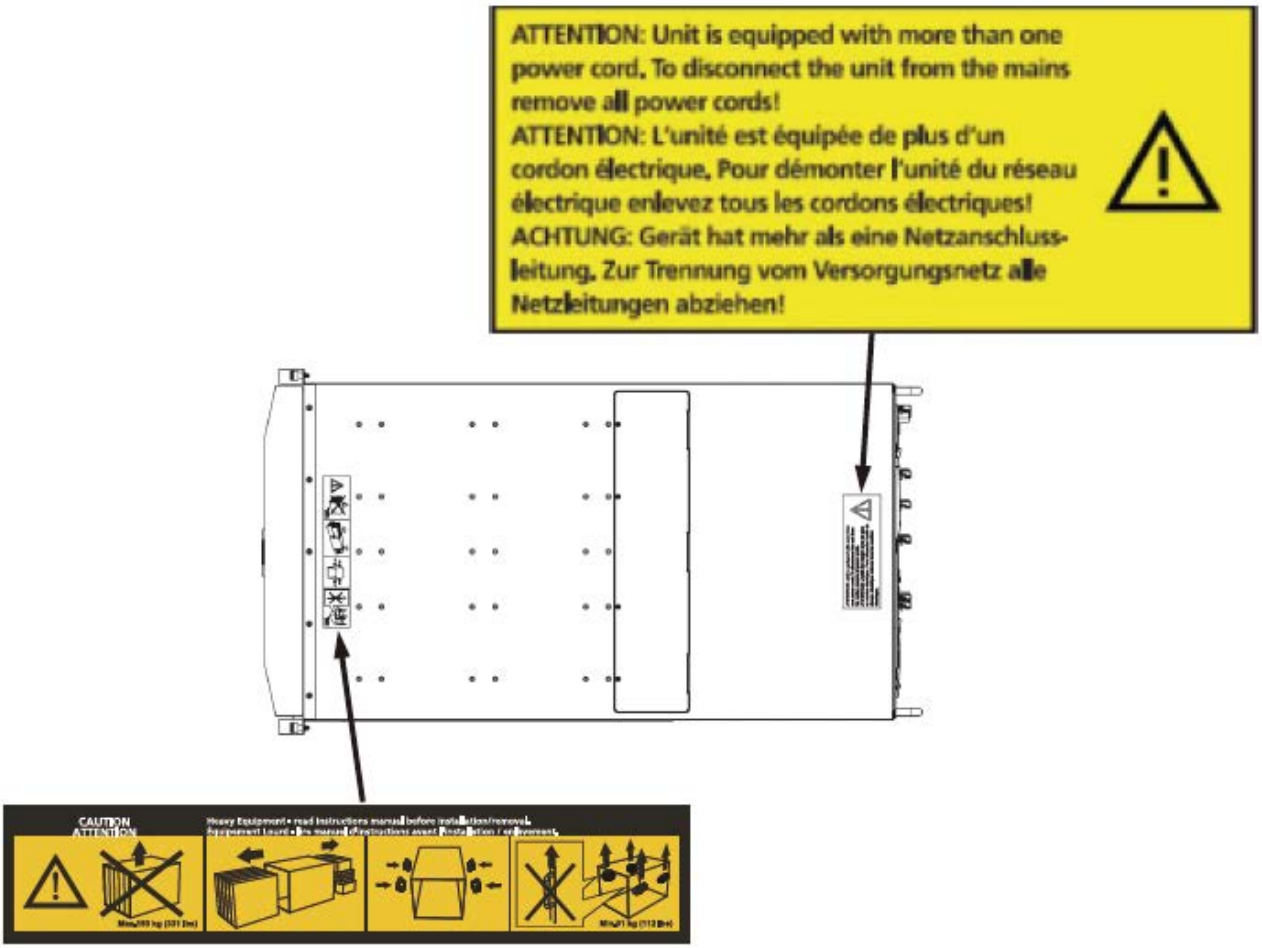
Warning labels

The following warning labels are affixed to this product. These labels are intended for the users of this product.

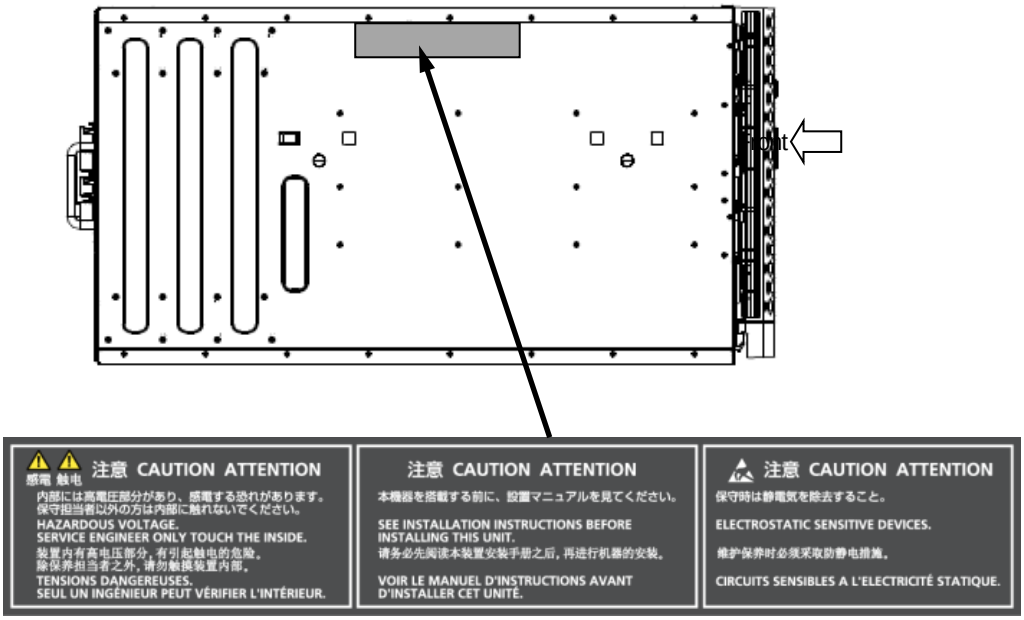
CAUTION

Never remove the warning labels.

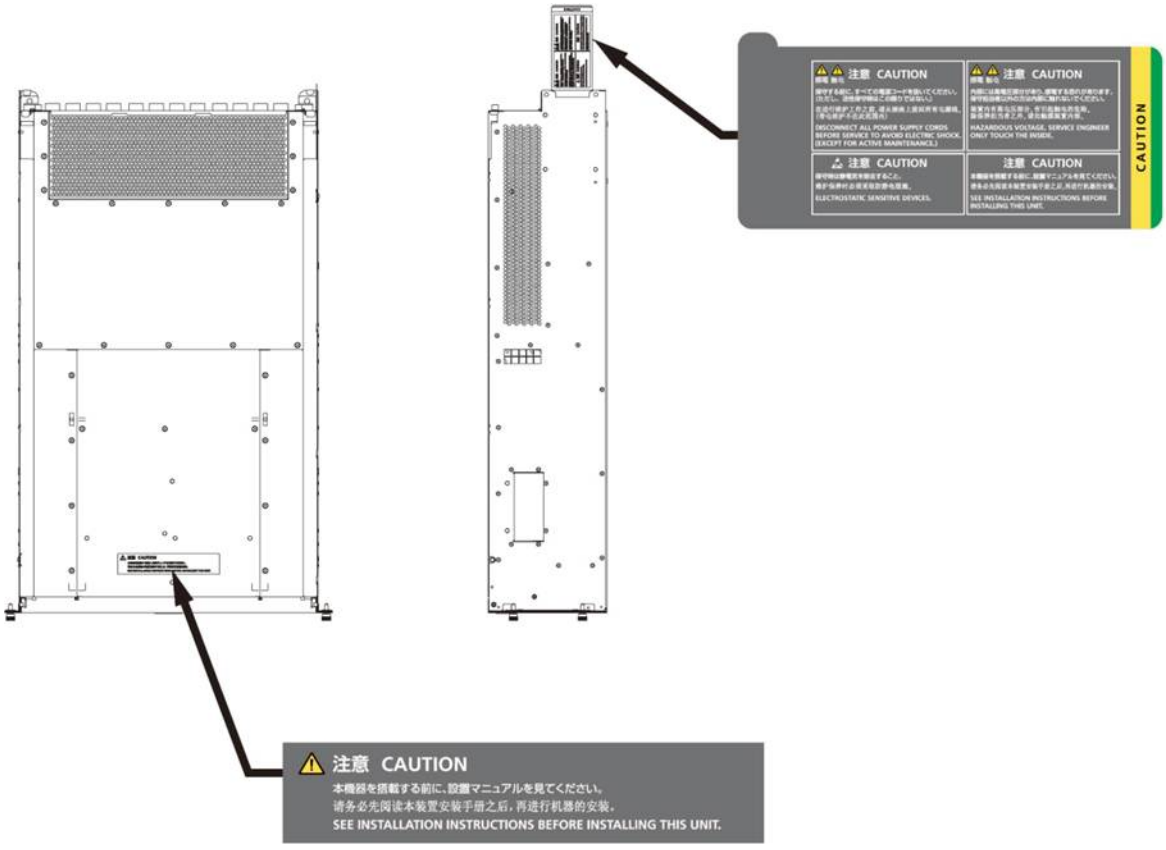
Warning label location (the main cabinet top)



Warning label location (the main cabinet left)



Warning label location (PCI_Box)



Notes on Handling the Product

About this product

This product is designed and manufactured for standard applications. Such applications include, but are not limited to, general office work, personal and home use, and general industrial use. The product is not intended for applications that require extremely high levels of safety to be guaranteed (referred to below as "safety-critical" applications). Use of the product for a safety-critical application may present a significant risk of personal injury and/or death. Such applications include, but are not limited to, nuclear reactor control, aircraft flight control, air traffic control, mass transit control, medical life support, and missile launch control. Customers shall not use the product for a safety-critical application without guaranteeing the required level of safety. Customers who plan to use the product in a safety-critical system are requested to consult the Fujitsu sales representatives in charge.

Storage of accessories

Keep the accessories in a safe place because they are required for server operations.

Adding optional products

For stable operation of the PRIMEQUEST 2000 series server, use only a Fujitsu-certified optional product as an added option.

Note that the PRIMEQUEST 2000 series server is not guaranteed to operate with any optional product not certified by Fujitsu.

Exportation/release of this product

Exportation/release of this product may require necessary procedures in accordance with the regulations of the Foreign Exchange and Foreign Trade Control Law of Japan and/or US export control laws.

Maintenance

Only Fujitsu certified service engineers should perform the following tasks on this product and the options provided by Fujitsu. Customers must not perform these tasks under any circumstances. Otherwise, electric shock, injury, or fire may result.

- Newly installing or moving equipment
- Removing the front, rear, and side covers
- Installing and removing built-in options
- Connecting and disconnecting external interface cables
- Maintenance (repair and periodic diagnosis and maintenance)

Only Fujitsu certified service engineers should perform the following tasks on this product and the options provided by Fujitsu. Customers must not perform these tasks under any circumstances. Otherwise, product failure may result. PRIMEQUEST 2000 Series General Description

- Unpacking an optional Fujitsu product, such as an optional adapter, delivered to the customer

Modifying or recycling the product

Modifying this product or recycling a secondhand product by overhauling it without prior approval may result in personal injury to users and/or bystanders or damage to the product and/or other property.

Note on erasing data from hard disks when disposing of the product or transferring it

Disposing of this product or transferring it as is may enable third parties to access the data on the hard disk and use it for unforeseen purposes. To prevent the leakage of confidential information and important data, all of the data on the hard disk must be erased before disposal or transfer of the product.

However, it can be difficult to completely erase all of the data from the hard disk. Simply initializing (reformatting) the hard disk or deleting files on the operating system is insufficient to erase the data, even though the data appears at a glance to have been erased. This type of operation only makes it impossible to access the data from the operating system. Malicious third parties can restore this data.

If you save your confidential information or other important data on the hard disk, you should completely erase the data, instead of simply carrying out the aforementioned operation, to prevent the data from being restored. To prevent important data on the hard disk from being leaked when the product is disposed of or transferred, you will need to take care to erase all the data recorded on the hard disk on your own responsibility.

Furthermore, if a software license agreement restricts the transfer of the software (operating system and application software) on the hard disk in the server or other product to a third party, transferring the product without deleting the software from the hard disk may violate the agreement. Adequate verification from this point of view is also necessary.

Support and service

Product and service inquiries

For all product use and technical inquiries, contact the distributor where you purchased your product, or a Fujitsu sales representative or systems engineer (SE). If you do not know the appropriate contact address for inquiries about the PRIMEQUEST 2000 series, use the Fujitsu contact line.

Fujitsu contact line

We accept Web inquiries. For details, visit our website:
https://support.ts.fujitsu.com/IndexContact.asp?lng=COM&ln=true

Warranty

If a component failure occurs during the warranty period, we will repair it free of charge in accordance with the terms of the warranty agreement. For details, see the warranty.

Before requesting a repair

If a problem occurs with the product, confirm the problem by referring to 12.2 Troubleshooting in the *PRIMEQUEST 2000 Series Administration Manual* (CA92344-0537). If the error recurs, contact your sales representative or a field engineer.

Confirm the model name and serial number shown on the label affixed to the right front of the device and report it. Also check any other required items beforehand according to 12.2 Troubleshooting in the *PRIMEQUEST 2000 Series Administration Manual* (CA92344-0537).

The system settings saved by the customer will be used during maintenance.

Manual

How to use this manual

This manual contains important information about the safe use of this product. Read the manual thoroughly to understand the information in it before using this product. Be sure to keep this manual in a safe and convenient location for quick reference.

Fujitsu makes every effort to prevent users and bystanders from being injured and to prevent property damage. Be sure to use the product according to the instructions in the manual.

Exportation/release of this document may require necessary procedures in accordance with the regulations of the Foreign Exchange and Foreign Trade Control Law of Japan and/or US export control laws.

Manuals for the PRIMEQUEST 2000 series

The following manuals have been prepared to provide you with the information necessary to use the PRIMEQUEST 2000 series.

You can access HTML versions of these manuals at the following sites:

Japanese-language site:

http://www.fujitsu.com/jp/products/computing/servers/primequest/products/2000/catalog/manual/2000/

Global site: http://www.fujitsu.com/global/products/computing/servers/mission-critical/primequest/

http://manuals.ts.fujitsu.com/

Title	Description	Manual code
PRIMEQUEST 2000 Series Getting Started Guide	Describes what manuals you should read and how to access important information after unpacking the PRIMEQUEST 2000 series server. (This manual comes with the product.)	CA92344-0522
PRIMEQUEST 2000 Series Safety and Regulatory Information	Contains important information required for using the PRIMEQUEST 2000 series safely.	CA92344-0523
PRIMEQUEST 2000 Series General Description	Describes the functions and features of the PRIMEQUEST 2000 series.	CA92344-0534
SPARC M10 Systems/SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual	Provides the necessary information and concepts you should understand for installation and facility planning for SPARC M10 Systems, SPARC Enterprise, and PRIMEQUEST installations.	C120-H007EN
PRIMEQUEST 2000 Series Hardware Installation Manual	Includes the specifications of and the installation location requirements for the PRIMEQUEST 2000 series.	CA92344-0535
PRIMEQUEST 2000 Series Installation Manual	Describes how to set up the PRIMEQUEST 2000 series server, including the steps for installation preparation, initialization, and software installation.	CA92344-0536
PRIMEQUEST 2000 Series User Interface Operating Instructions	Describes how to use the Web-UI and UEFI to assure proper operation of the PRIMEQUEST 2000 series server.	CA92344-0538
PRIMEQUEST 2000 Series Administration Manual	Describes how to use tools and software for system administration and how to maintain the system (component replacement and error notification).	CA92344-0537
PRIMEQUEST 2000 Series Tool Reference	Provides information on operation methods and settings, including details on the MMB and UEFI functions.	CA92344-0539
PRIMEQUEST 2000 Series Message Reference	Lists the messages that may be displayed when a problem occurs during operation and describes how to respond to them	CA92344-0540
PRIMEQUEST 2000 Series REMCS Installation Manual	Describes REMCS service installation and operation.	CA92344-0542
PRIMEQUEST 2000 Series Glossary	Defines the PRIMEQUEST 2000 series related terms and abbreviations.	CA92344-0541

Related manuals

The following manuals relate to the PRIMEQUEST 2000 series.

You can access these manuals at the following site:

http://www.fujitsu.com/global/products/computing/servers/mission-critical/primequest/

http://manuals.ts.fujitsu.com/

Contact your sales representative for inquiries about the ServerView manuals.

Title	Description
ServerView Suite ServerView Operations Manager Quick Installation (Windows)	Describes how to install and start ServerView Operations Manager in a Windows environment.
ServerView Suite ServerView Operations Manager Quick Installation (Linux)	Describes how to install and start ServerView Operations Manager in a Linux environment.
ServerView Suite ServerView Installation Manager	Describes the installation procedure using ServerView Installation Manager.
ServerView Suite ServerView Operations Manager Server Management	Provides an overview of server monitoring using ServerView Operations Manager, and describes the user interface of ServerView Operations Manager.
ServerView Suite ServerView RAID Management User Manual	Describes RAID management using ServerView RAID Manager.
ServerView Suite Basic Concepts	Describes basic concepts about ServerView Suite.
ServerView Operations Manager Installation ServerView Agents for Linux	Describes installation and update installation of ServerView Linux Agent.
ServerView Operations Manager Installation ServerView Agents for Windows	Describes installation and update installation of ServerView Windows Agent.
ServerView Mission Critical Option User Manual	Describes the necessary functions unique to PRIMEQUEST (cluster linkage) and ServerView Mission Critical Option (SVmco), which is required for supporting these functions.
ServerView RAID Manager VMware vSphere ESXi 5 Installation Guide	Describes the installation and settings required to use ServerView RAID Manager on the VMware vSphere ESXi 5 server.
Modular RAID Controller *LSI MegaRAID SAS 2.0 Software* *LSI MegaRAID SAS 2.0 Device Driver Installation*	"Provides technical information on using SAS RAID controllers. RAID Ctrl SAS 6Gb 1GB (D3116C) MegaRAID SAS 9286CV-8e Refer to the following URL: The Fujitsu Technology Solutions manuals server http://manuals.ts.fujitsu.com/"
Modular RAID Controller *LSI MegaRAID SAS 3.0 Software* *LSI Integrated RAID SAS 3.0 Solution*	"Provides technical information on using SAS RAID controllers. PRAID EP400i / EP420i (D3216) PRAID EP420e Refer to the following URL: The Fujitsu Technology Solutions manuals server

Title	Description
	http://manuals.ts.fujitsu.com/"

Abbreviations

This manual uses the following product name abbreviations.

Formal product name	Abbreviation
Microsoft (R) Windows Server (R) 2016 Standard	Windows, Windows Server 2016
Microsoft (R) Windows Server (R) 2016 Datacenter	
Microsoft (R) Windows Server (R) 2012 R2 Datacenter	Windows, Windows Server 2012 R2
Microsoft (R) Windows Server (R) 2012 R2 Standard	
Microsoft (R) Windows Server (R) 2012 Datacenter	Windows, Windows Server 2012
Microsoft (R) Windows Server (R) 2012 Standard	
Microsoft (R) Windows Server (R) 2008 R2 Standard	Windows, Windows Server 2008 R2
Microsoft (R) Windows Server (R) 2008 R2 Enterprise	
Microsoft (R) Windows Server (R) 2008 R2 Datacenter	
Red Hat (R) Enterprise Linux (R) 7 (for Intel64)	Linux RHEL7, RHEL7.x, RHEL
Red Hat (R) Enterprise Linux (R) 6(for Intel64)	Linux RHEL6, RHEL6.x, RHEL
Oracle Linux 6 (x86_64)	Oracle Linux, Oracle Linux 6
VMware vSphere (R) 6	VMware, vSphere 6.x, VMware 6, VMware 6.x
VMware (R) ESXi (R) 6	ESX, ESX 6, ESX 6.x
VMware vSphere (R) 5	VMware, vSphere 5.x, VMware 5, VMware 5.x
VMware (R) ESXi (R) 5	ESX, ESX 5, ESX 5.x
SUSE (R) Linux Enterprise Server 12	SLES, SLES 12
SUSE (R) Linux Enterprise Server 11	SLES, SLES 11

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- Other company names and product names are the trademarks or registered trademarks of their respective owners.
- Trademark indications are omitted for some system and product names in this manual.

Notation

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

Font or symbol	Meaning	Example
italics	Title of a manual that you should refer to	See the PRIMEQUEST 2000 Series Installation Manual (CA92344-0536).
[ ]	Window names as well as the names of buttons, tabs, and drop-down menus in windows are enclosed in brackets.	Click the [OK] button.

Notation for the CLI (command line interface)

The following notation is used for commands.

Command syntax

Command syntax is represented as follows.

- Variables requiring the entry of a value are enclosed in angle brackets < >.
- Optional elements are enclosed in brackets [ ].
- Options for optional keywords are grouped in | (stroke) separated lists enclosed in brackets [ ].
- Options for required keywords are grouped in | (stroke) separated lists enclosed in braces { }.

Command syntax is written in a box.

Remarks

The command output shown in the PDF manuals may include line feeds at places where there is no line feed symbol (¥ at the end of the line).

Notes on notations

- In this manual, the Management Board and MMB firmware are abbreviated as "MMB."
- In this manual,, IOU_10GbE and IOU_1GbE are matched and it is written as "IOU".
- Screenshots contained in this manual may differ from the actual product screen displays.
- The IP addresses, configuration information, and other such information contained in this manual are display examples and differ from that for actual operation.
- If you have a comment or request regarding this manual, or if you find any part of this manual unclear, please take a moment to share it with us by filling in the form at the following webpage, stating your points specifically, and sending the form to us:
  https://support.ts.fujitsu.com/IndexContact.asp?lng=COM&ln=true
- The contents of this manual may be revised without prior notice.
- The PDF file of this manual is intended for display using Adobe (R) Reader (R) in single page viewing mode at 100% zoom.
- The PSU_P supports only 200 V power supply.

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CHAPTER 1 MMB Web-UI (Web User Interface) Operations

This chapter describes the menus used to manage and operate the PRIMEQUEST 2000 series server with the MMB Web-UI. It also describes how to use the MMB Web-UI.

1.1 Web-UI Menus

The available MMB Web-UI menus differ depending on the user privileges. TABLE 1.1 User privileges lists the user privileges needed to check and operate the MMB Web-UI menus.

TABLE 1.1 User privileges

Privilege level	Description
Administrator	Administrator accounts are permitted to perform all operations and checks.
Operator	Operator accounts are permitted to check the PRIMEQUEST 2000 series server status and configure the system. They are not permitted to manage users or change the network configuration. With Operator privileges, you cannot: - Manipulate the power supply from the [System Power Control] window - Change the status of the FANs and PSUs - Change the partition configuration - Configure a Reserved SB
Partition Operator	Partition Operator accounts have the same privileges as Operator accounts, except that their privileges are restricted to specific partitions. Like Operator accounts, they are permitted to check the system status. Unlike Operator accounts, they are not permitted to perform some operations such as clearing the status of an SB/IOU.
User	User accounts are only permitted to check the PRIMEQUEST 2000 series server status. They are not permitted to set system configuration information or power on or off the partitions.
CE	CE accounts are permitted to check the PRIMEQUEST 2000 series server status. They are also permitted to manipulate the power supply.

The following sections outline the Web-UI menus that are available for each type of user privilege.

- 1.1.1 Web-UI menus (Administrator)
- 1.1.2 Web-UI menus (Operator)
- 1.1.3 Web-UI menus (Partition Operator)
- 1.1.4 Web-UI menus (User)
- 1.1.5 Web-UI menus (CE)
- 1.1.6 Web-UI menus in maintenance mode
- 1.1.7 Web-UI menus in maintenance mode (Administrator)
- 1.1.8 Web-UI menus in maintenance mode (Operator)
- 1.1.9 Web-UI menus in maintenance mode (Partition Operator)
- 1.1.10 Web-UI menus in maintenance mode (User)
- 1.1.11 Web-UI menus in maintenance mode (CE)
- 1.1.12 Web-UI menus in maintenance mode (maintenance personnel)
- 1.1.13 Web-UI menus (PRIMEQUEST 2800B3/2800B2/2800B model)

1.1.1 Web-UI menus (Administrator)

This section lists the Web-UI menus that are available with the Administrator privileges.

The meanings of abbreviations in the table are as follows:

- RW: The account user can refer to and set information and control operation from the menu.
- RO: The account user can only refer to information from the menu.
- N/A: The account user cannot view the menu and submenus.

TABLE 1.2 Web-UI menus (Administrator)

Navigation bar	1st level	2nd level	Privileges	Remarks
System				
	System Status		RO	Displays the overall system status.
	System Event Log		RW	Displays system event logs.
	Operation Log		RW	Displays the operations on the Web-UI and CLI.
	Partition Event Log		RW	Displays the REMCS notification messages of a PRIMEQUEST partition.
	System Information		RW	Displays system information, such as the system name or product name.
	Firmware Information		RO	Displays firmware version information.
	System Setup		RW	Sets the system configuration.
	System Power Control		RW	Controls the power.
	LEDs		RW	Displays the LED status.
	Power Supply		RW	Displays the power supply status.
	Fans		RW	Displays the fan status.
	Temperature		RO	Displays the temperatures detected by the temperature sensors of the PRIMEQUEST 2000 series system.
	SB			
		SB#0	RW	Displays the SB or Memory Scale-up Board status. The menu is not displayed for an unmounted SB.
		SB#1	RW	
		SB#2	RW	
		SB#3	RW	
	IOU			
		IOU#0	RW	Displays the IOU status. The menu is not displayed for an unmounted IOU.
		IOU#1	RW	
		IOU#2	RW	
		IOU#3	RW	
	DU			
		DU#0	RW	Displays the DU status. The menu is not displayed for an unmounted DU.
		DU#1	RW	
	PCI_Box			If no PCI_Box is connected, this menu is not displayed.
		PCI_Box#0	RW	Displays the PCI_Box status. The menu is not displayed for an unmounted PCI_Box.
		PCI_Box#1	RW	
		PCI_Box#2	RW	
		PCI_Box#3	RW	
	OPL		RW	
	MMB			
		MMB#0	RW	Displays the MMB status and

Navigation bar	1st level	2nd level	Privileges	Remarks
		MMB#1	RW	information.
	Disk Enclosure			If no Disk Enclosure is connected, this menu is not displayed.
		Disk Enclosure#x	RW	The menu is not displayed for an unmounted Disk Enclosure.
Partition				
	Power Control		RW	Controls the partition power.
	Schedule			
		Schedule Control	RW	Sets scheduled operations.
		Schedule List	RW	Sets the power-on/off schedule.
	Console Redirection Setup		RW	Sets Video Redirection, Remote Storage, and Text Console Redirection.
		IPv4 Console Redirection Setup	RW	Setting for IPv4 Console Redirection.
		IPv6 Console Redirection Setup	RW	Setting for IPv6 Console Redirection.
	Partition Configuration		RW	Changes the partition configuration.
	Partition#n Extended Partition Configuration			Changes the Extended Partitioning configuration. When Extended Partitioning Mode is Disable, this menu is not displayed.
		SB	RW	
		IOU#n	RW	
		PCI_Box#n	RW	
	Extended Socket Configuration		RW	Sets concerning Extended Socket. (Zone setting)
	Reserved SB Configuration		RW	Defines a Reserved SB.
	Power Management Setup		RW	
	Partition#0			If no board belongs to the partition, this submenu is not displayed.
		Information	RO	Displays the partition status and partition-related information.
		ASR Control	RW	Sets the conditions for automatically restarting the partition.
		Console Redirection	RW	Displays the console output of the partition.
		Mode	RW	Sets the mode for the partition.
		SSD Life Cycle Management	RO	If as much as one PCIe SSD card is not installed, this menu is not displayed.
	Partition#1			Same as for Partition#0
	Partition#2			
	Partition#3			
User Administration				
	User List		RW	Lists, edits, and deletes registered user accounts.
	Change Password		RW	Changes the password of the user's own account.
	Who		RO	Displays all users who are logged in to the MMB.

Navigation bar	1st level	2nd level	Privileges	Remarks
	LDAP Configuration		RW	Sets concerning LDAP.
		Directory Service Configuration	RW	Sets for MMB to access directory service by way of LDAP.
		LDAP User Group List	RW	Displays, edits and deletes the list of registered LDAP User Group.
Network Configuration				
	Date/Time		RW	
	Network Interface			
		IPv4 Interface	RW	Sets the IPv4 IP address, etc.
		IPv6 Interface	RW	Sets the IPv6 IP address, etc.
	Management LAN Port Configuration		RW	Configures the Port LAN of the MMB HUB.
	Network Protocols		RW	
	Refresh Rate		RW	Sets the refresh rate of the Web-UI window.
	SNMP Configuration		RW	
		Community	RW	
		Trap	RW	
		SNMPv3 Configuration	RW	
	SSL			
		Create CSR	RW	Creates a secret key and CSR.
		Export Key/CSR	RW	Exports a secret key and CSR.
		Import Certificate	RW	Installs a certificate.
		Create Selfsigned Certificate	RW	Creates a selfsigned certificate.
	SSH			
		SSH Server Key	RW	Creates a private key for the SSH server.
	Remote Server Management		RW	
	Access Control		RW	Sets the IP filtering that permits connections.
	Alarm E-mail		RW	
Maintenance				
	Firmware Update			
		Unified Firmware Update	RW	Performs a batch update.
	Backup/Restore Configuration			Backs up and restores setting information.
		Backup/Restore MMB Configuration	RW	
		Backup BIOS Configuration	RW	
		Restore BIOS Configuration	RW	
	Maintenance Wizard		RW	Performs maintenance through a wizard.
	REMCS			
		REMCS	RW	
		Detail Setup	RW	

1.1.2 Web-UI menus (Operator)

This section lists the Web-UI menus that are available with the Operator privileges.

The meanings of abbreviations in the table are as follows:

- RW: The account user can refer to and set information and control operation from the menu.
- RO: The account user can only refer to information from the menu.
- N/A: The account user cannot view the menu and submenus.

TABLE 1.3 Web-UI menus (Operator)

Navigation bar	1st level	2nd level	Privileges	Remarks
System				
	System Status		RO	Displays the overall system status.
	System Event Log		RO	Displays system event logs.
	Operation Log		RO	Displays the operations on the Web-UI and CLI.
	Partition Event Log		RO	Displays the REMCS notification messages of a PRIMEQUEST partition.
	System Information		RO	Displays system information, such as the system name or product name.
	Firmware Information		RO	Displays firmware version information.
	System Setup		RO	Sets the system configuration.
	System Power Control		RO	Controls the power.
	LEDs		RW	Displays the LED status.
	Power Supply		RO	Displays the power supply status.
	Fans		RO	Displays the fan status.
	Temperature		RO	Displays the temperatures detected by the temperature sensors of the PRIMEQUEST 2000 series system.
	SB			
		SB#0	RW	Displays the SB or Memory Scale-up Board status. The menu is not displayed for an unmounted SB.
		SB#1	RW	
		SB#2	RW	
		SB#3	RW	
	IOU			
		IOU#0	RW	Displays the IOU status. The menu is not displayed for an unmounted IOU.
		IOU#1	RW	
		IOU#2	RW	
		IOU#3	RW	
	DU			
		DU#0	RW	Displays the DU status. The menu is not displayed for an unmounted DU.
		DU#1	RW	
	PCI_Box			If no PCI_Box is connected, this menu is not displayed.
		PCI_Box#0	RW	Displays the PCI_Box status. The menu is not displayed for an unmounted PCI_Box.
		PCI_Box#1	RW	
		PCI_Box#2	RW	
		PCI_Box#3	RW	
	OPL		RW	
	MMB			
		MMB#0	RW	Displays the MMB status and information.
		MMB#1	RW	
	Disk Enclosure			If no Disk Enclosure is connected, this menu is not displayed.
		Disk	RW	The menu is not displayed for an

Navigation bar	1st level	2nd level	Privileges	Remarks
		Enclosure#x		unmounted Disk Enclosure.
Partition				
	Power Control		RW	Controls the partition power.
	Schedule			
		Schedule Control	RW	Sets scheduled operations.
		Schedule List	RW	Sets the power-on/off schedule.
	Console Redirection Setup		RO	Sets Video Redirection, Remote Storage, and Text Console Redirection.
		IPv4 Console Redirection Setup	RO	Setting for IPv4 Console Redirection.
		IPv6 Console Redirection Setup	RO	Setting for IPv6 Console Redirection.
	Partition Configuration		RO	Changes the partition configuration.
	Partition#n Extended Partition Configuration			Changes the Extended Partitioning configuration. When Extended Partitioning Mode is Disable, this menu is not displayed.
		SB	RO	
		IOU#n	RO	
		PCI_Box#n	RO	
	Extended Socket Configuration		RW	Sets concerning Extended Socket. (Zone setting)
	Reserved SB Configuration		RO	Defines a Reserved SB.
	Power Management Setup		RO	
	Partition#0			If no board belongs to the partition, this submenu is not displayed.
		Information	RO	Displays the partition status and partition-related information.
		ASR Control	RO	Sets the conditions for automatically restarting the partition.
		Console Redirection	RW	Displays the console output of the partition.
		Mode	RW	Sets the mode for the partition.
		SSD Life Cycle Management	RO	If as much as one PCIe SSD card is not installed, this menu is not displayed.
	Partition#1			Same as for Partition#0
	Partition#2			
	Partition#3			
User Administration				
	User List		N/A	Lists, edits, and deletes registered user accounts.
	Change Password		RW	Changes the password of the user's own account.
	Who		RO	Displays all users who are logged in to the MMB.
	LDAP Configuration		N/A	Sets concerning LDAP.
		Directory Service Configuration	N/A	Sets for MMB to access directory service by way of LDAP.
		LDAP User	N/A	Displays, edits and deletes the list

Navigation bar	1st level	2nd level	Privileges	Remarks
		Group List		of registered LDAP User Group.
Network Configuration				
	Date/Time		RO	
	Network Interface			
		IPv4 Interface	RO	Sets the IPv4 IP address, etc.
		IPv6 Interface	RO	Sets the IPv6 IP address, etc.
	Management LAN Port Configuration		N/A	Configures the Port LAN of the MMB HUB.
	Network Protocols		RO	
	Refresh Rate		RW	Sets the refresh rate of the Web-UI window.
	SNMP Configuration		N/A	
		Community	N/A	
		Trap	N/A	
		SNMPv3 Configuration	N/A	
	SSL			
		Create CSR	N/A	Creates a secret key and CSR.
		Export Key/CSR	N/A	Exports a secret key and CSR.
		Import Certificate	N/A	Installs a certificate.
		Create Selfsigned Certificate	N/A	Creates a selfsigned certificate.
	SSH			
		SSH Server Key	N/A	Creates a private key for the SSH server.
	Remote Server Management		N/A	
	Access Control		N/A	Sets the IP filtering that permits connections.
	Alarm E-mail		N/A	
Maintenance				
	Firmware Update			
		Unified Firmware Update	N/A	Performs a batch update.
	Backup/Restore Configuration			Backs up and restores setting information.
		Backup/Restore MMB Configuration	N/A	
		Backup BIOS Configuration	N/A	
		Restore BIOS Configuration	N/A	
	Maintenance Wizard		N/A	Performs maintenance through a wizard.
	REMCS			
		REMCS	N/A	
		Detail Setup	N/A	

1.1.3 Web-UI menus (Partition Operator)

This section lists the Web-UI menus that are available with the Partition Operator privileges.

The meanings of abbreviations in the table are as follows:

- RW: The account user can refer to and set information and control operation from the menu.
- RO: The account user can only refer to information from the menu.
- N/A: The account user cannot view the menu and submenus.

TABLE 1.4 Web-UI menus (Partition Operator)

Navigation bar	1st level	2nd level	Privileges (Same partition)	Privileges (Other partition)	Remarks
System					
	System Status		RO	RO	Displays the overall system status.
	System Event Log		RO	RO	Displays system event logs.
	Operation Log		RO	RO	Displays the operations on the Web-UI and CLI.
	Partition Event Log		RO	RO	Displays the REMCS notification messages of a PRIMEQUEST partition.
	System Information		RO	RO	Displays system information, such as the system name or product name.
	Firmware Information		RO	RO	Displays firmware version information.
	System Setup		RO	RO	Sets the system configuration.
	System Power Control		RO	RO	Controls the power.
	LEDs		RW	RW	Displays the LED status.
	Power Supply		RO	RO	Displays the power supply status.
	Fans		RO	RO	Displays the fan status.
	Temperature		RO	RO	Displays the temperatures detected by the temperature sensors of the PRIMEQUEST 2000 series system.
	SB				
		SB#0	RO	RO	Displays the SB or Memory Scale-up Board status. The menu is not displayed for an unmounted SB.
		SB#1	RO	RO	
		SB#2	RO	RO	
		SB#3	RO	RO	
	IOU				
		IOU#0	RO	RO	Displays the IOU

Navigation bar	1st level	2nd level	Privileges (Same partition)	Privileges (Other partition)	Remarks
		IOU#1	RO	RO	status. The menu is not displayed for an unmounted IOU.
		IOU#2	RO	RO	
		IOU#3	RO	RO	
	DU				
		DU#0	RO	RO	Displays the DU status. The menu is not displayed for an unmounted DU.
		DU#1	RO	RO	
	PCI_Box				If no PCI_Box is connected, this menu is not displayed.
		PCI_Box#0	RO	RO	Displays the PCI_Box status. The menu is not displayed for an unmounted PCI_Box.
		PCI_Box#1	RO	RO	
		PCI_Box#2	RO	RO	
		PCI_Box#3	RO	RO	
	OPL		RO	RO	
	MMB				
		MMB#0	RO	RO	Displays the MMB status and information.
		MMB#1	RO	RO	
	Disk Enclosure				If no Disk Enclosure is connected, this menu is not displayed.
		Disk Enclosure#x	RO	RO	The menu is not displayed for an unmounted Disk Enclosure.
Partition					
	Power Control		RW	RO	Controls the partition power.
	Schedule				
		Schedule Control	RW	RO	Sets scheduled operations.
		Schedule List	RW	RO	Sets the power-on/off schedule.
	Console Redirection Setup		RO	RO	Sets Video Redirection, Remote Storage, and Text Console Redirection.
		IPv4 Console Redirection Setup	RO	RO	Setting for IPv4 Console Redirection.
		IPv6 Console Redirection Setup	RO	RO	Setting for IPv6 Console Redirection.
	Partition Configuration		RO	RO	Changes the partition configuration.

Navigation bar	1st level	2nd level	Privileges (Same partition)	Privileges (Other partition)	Remarks
	Partition#n Extended Partition Configuration				Changes the Extended Partitioning configuration. When Extended Partitioning Mode is Disable, this menu is not displayed.
		SB	RO	RO	
		IOU#n	RO	RO	
		PCI_Box#n	RO	RO	
	Extended Socket Configuration		RW	RO	Sets concerning Extended Socket. (Zone setting)
	Reserved SB Configuration		RO	RO	Defines a Reserved SB.
	Power Management Setup		RO	RO	
	Partition#0				If no board belongs to the partition, this submenu is not displayed.
		Information	RO	N/A	Displays the partition status and partition-related information.
		ASR Control	RW	N/A	Sets the conditions for automatically restarting the partition.
		Console Redirection	RW	N/A	Displays the console output of the partition.
		Mode	RW	N/A	Sets the mode for the partition.
		SSD Life Cycle Management	RO	RO	If as much as one PCIe SSD card is not installed, this menu is not displayed.
	Partition#1				Same as for Partition#0
	Partition#2				
	Partition#3				
User Administration					
	User List		N/A	N/A	Lists, edits, and deletes registered user accounts.
	Change Password		RW	N/A	Changes the password of the user's own account.
	Who		RO	RO	Displays all users who are logged in to the MMB.
	LDAP Configuration		N/A	N/A	Sets concerning LDAP.

Navigation bar	1st level	2nd level	Privileges (Same partition)	Privileges (Other partition)	Remarks
		Directory Service Configuration	N/A	N/A	Sets for MMB to access directory service by way of LDAP.
		LDAP User Group List	N/A	N/A	Displays, edits and deletes the list of registered LDAP User Group.
Network Configuration					
	Date/Time		RO	RO	
	Network Interface				
		IPv4 Interface	RO	RO	Sets the IPv4 IP address, etc.
		IPv6 Interface	RO	RO	Sets the IPv6 IP address, etc.
	Management LAN Port Configuration		N/A	N/A	Configures the Port LAN of the MMB HUB.
	Network Protocols		RO	RO	
	Refresh Rate		RW	RW	Sets the refresh rate of the Web-UI window.
	SNMP Configuration		N/A	N/A	
		Community	N/A	N/A	
		Trap	N/A	N/A	
		SNMPv3 Configuration	N/A	N/A	
	SSL				
		Create CSR	N/A	N/A	Creates a secret key and CSR.
		Export Key/CSR	N/A	N/A	Exports a secret key and CSR.
		Import Certificate	N/A	N/A	Installs a certificate.
		Create Selfsigned Certificate	N/A	N/A	Creates a selfsigned certificate.
	SSH				
		SSH Server Key	N/A	N/A	Creates a private key for the SSH server.
	Remote Server Management		N/A	N/A	
	Access Control		N/A	N/A	Sets the IP filtering that permits connections.
	Alarm E-mail		N/A	N/A	
Maintenance					
	Firmware Update				
		Unified Firmware Update	N/A	N/A	Performs a batch update.
	Backup/Restore Configuration				Backs up and restores setting information.

Navigation bar	1st level	2nd level	Privileges (Same partition)	Privileges (Other partition)	Remarks
		Backup/Restore MMB Configuration	N/A	N/A	
		Backup BIOS Configuration	N/A	N/A	
		Restore BIOS Configuration	N/A	N/A	
	Maintenance Wizard		N/A	N/A	Performs maintenance through a wizard.
	REMCS				
		REMCS	N/A	N/A	
		Detail Setup	N/A	N/A	

1.1.4 Web-UI menus (User)

This section lists the Web-UI menus that are available with the User privileges.

The meanings of abbreviations in the table are as follows:

- RW: The account user can refer to and set information and control operation from the menu.
- RO: The account user can only refer to information from the menu.
- N/A: The account user cannot view the menu and submenus.

TABLE 1.5 Web-UI menus (User)

Navigation bar	1st level	2nd level	Privileges	Remarks
System				
	System Status		RO	Displays the overall system status.
	System Event Log		RO	Displays system event logs.
	Operation Log		RO	Displays the operations on the Web-UI and CLI.
	Partition Event Log		RO	Displays the REMCS notification messages of a PRIMEQUEST partition.
	System Information		RO	Displays system information, such as the system name or product name.
	Firmware Information		RO	Displays firmware version information.
	System Setup		RO	Sets the system configuration.
	System Power Control		RO	Controls the power.
	LEDs		RW	Displays the LED status.
	Power Supply		RO	Displays the power supply status.
	Fans		RO	Displays the fan status.
	Temperature		RO	Displays the temperatures detected by the temperature sensors of the PRIMEQUEST 2000 series system.
	SB			
		SB#0	RO	Displays the SB or Memory Scale-up Board status. The menu is not displayed for an unmounted SB.
		SB#1	RO	
		SB#2	RO	
		SB#3	RO	
	IOU			
		IOU#0	RO	Displays the IOU status. The menu is not displayed for an unmounted IOU.
		IOU#1	RO	
		IOU#2	RO	
		IOU#3	RO	
	DU			
		DU#0	RO	Displays the DU status. The menu is not displayed for an unmounted DU.
		DU#1	RO	
	PCI_Box			If no PCI_Box is connected, this menu is not displayed.
		PCI_Box#0	RO	Displays the PCI_Box status. The menu is not displayed for an unmounted PCI_Box.
		PCI_Box#1	RO	
		PCI_Box#2	RO	
		PCI_Box#3	RO	
	OPL		RO	
	MMB			
		MMB#0	RO	Displays the MMB status and information.
		MMB#1	RO	
	Disk Enclosure			If no Disk Enclosure is connected, this menu is not displayed.

Navigation bar	1st level	2nd level	Privileges	Remarks
		Disk Enclosure#x	RO	The menu is not displayed for an unmounted Disk Enclosure.
Partition				
	Power Control		RO	Controls the partition power.
	Schedule			
		Schedule Control	RO	Sets scheduled operations.
		Schedule List	RO	Sets the power-on/off schedule.
	Console Redirection Setup		RO	Sets Video Redirection, Remote Storage, and Text Console Redirection.
		IPv4 Console Redirection Setup	RO	Setting for IPv4 Console Redirection.
		IPv6 Console Redirection Setup	RO	Setting for IPv6 Console Redirection.
	Partition Configuration		RO	Changes the partition configuration.
	Partition#n Extended Partition Configuration			Changes the Extended Partitioning configuration. When Extended Partitioning Mode is Disable, this menu is not displayed.
		SB	RO	
		IOU#n	RO	
		PCI_Box#n	RO	
	Extended Socket Configuration		RO	Sets concerning Extended Socket. (Zone setting)
	Reserved SB Configuration		RO	Defines a Reserved SB.
	Power Management Setup		RO	
	Partition#0			If no board belongs to the partition, this submenu is not displayed.
		Information	RO	Displays the partition status and partition-related information.
		ASR Control	RO	Sets the conditions for automatically restarting the partition.
		Console Redirection	N/A	Displays the console output of the partition.
		Mode	RO	Sets the mode for the partition.
		SSD Life Cycle Management	RO	If as much as one PCIe SSD card is not installed, this menu is not displayed.
	Partition#1			Same as for Partition#0
	Partition#2			
	Partition#3			
User Administration				
	User List		N/A	Lists, edits, and deletes registered user accounts.
	Change Password		RW	Changes the password of the user's own account.
	Who		RO	Displays all users who are logged in to the MMB.
	LDAP Configuration		N/A	Sets concerning LDAP.
		Directory Service Configuration	N/A	Sets for MMB to access directory service by way of LDAP.

Navigation bar	1st level	2nd level	Privileges	Remarks
		LDAP User Group List	N/A	Displays, edits and deletes the list of registered LDAP User Group.
Network Configuration				
	Date/Time		RO	
	Network Interface			
		IPv4 Interface	RO	Sets the IPv4 IP address, etc.
		IPv6 Interface	RO	Sets the IPv6 IP address, etc.
	Management LAN Port Configuration		N/A	Configures the Port LAN of the MMB HUB.
	Network Protocols		RO	
	Refresh Rate		RW	Sets the refresh rate of the Web-UI window.
	SNMP Configuration		N/A	
		Community	N/A	
		Trap	N/A	
		SNMPv3 Configuration	N/A	
	SSL			
		Create CSR	N/A	Creates a secret key and CSR.
		Export Key/CSR	N/A	Exports a secret key and CSR.
		Import Certificate	N/A	Installs a certificate.
		Create Selfsigned Certificate	N/A	Creates a selfsigned certificate.
	SSH			
		SSH Server Key	N/A	Creates a private key for the SSH server.
	Remote Server Management		N/A	
	Access Control		N/A	Sets the IP filtering that permits connections.
	Alarm E-mail		N/A	
Maintenance				
	Firmware Update			
		Unified Firmware Update	N/A	Performs a batch update.
	Backup/Restore Configuration			Backs up and restores setting information.
		Backup/Restore MMB Configuration	N/A	
		Backup BIOS Configuration	N/A	
		Restore BIOS Configuration	N/A	
	Maintenance Wizard		N/A	Performs maintenance through a wizard.
	REMCS			
		REMCS	N/A	
		Detail Setup	N/A	

1.1.5 Web-UI menus (CE)

This section lists the Web-UI menus that are available with the CE privileges.

The meanings of abbreviations in the table are as follows:

- RW: The account user can refer to and set information and control operation from the menu.
- RO: The account user can only refer to information from the menu.
- N/A: The account user cannot view the menu and submenus.

TABLE 1.6 Web-UI menus (CE)

Navigation bar	1st level	2nd level	Privileges	Remarks
System				
	System Status		RO	Displays the overall system status.
	System Event Log		RO	Displays system event logs.
	Operation Log		RO	Displays the operations on the Web-UI and CLI.
	Partition Event Log		RO	Displays the REMCS notification messages of a PRIMEQUEST partition.
	System Information		RO	Displays system information, such as the system name or product name.
	Firmware Information		RO	Displays firmware version information.
	System Setup		RW	Sets the system configuration.
	System Power Control		RO	Controls the power.
	LEDs		RW	Displays the LED status.
	Power Supply		RW	Displays the power supply status.
	Fans		RW	Displays the fan status.
	Temperature		RO	Displays the temperatures detected by the temperature sensors of the PRIMEQUEST 2000 series system.
	SB			
		SB#0	RW	Displays the SB or Memory Scale-up Board status. The menu is not displayed for an unmounted SB.
		SB#1	RW	
		SB#2	RW	
		SB#3	RW	
	IOU			
		IOU#0	RW	Displays the IOU status. The menu is not displayed for an unmounted IOU.
		IOU#1	RW	
		IOU#2	RW	
		IOU#3	RW	
	DU			
		DU#0	RW	Displays the DU status. The menu is not displayed for an unmounted DU.
		DU#1	RW	
	PCI_Box			If no PCI_Box is connected, this menu is not displayed.
		PCI_Box#0	RW	Displays the PCI_Box status. The menu is not displayed for an unmounted PCI_Box.
		PCI_Box#1	RW	
		PCI_Box#2	RW	
		PCI_Box#3	RW	
	OPL		RW	
	MMB			
		MMB#0	RW	Displays the MMB status and information.
		MMB#1	RW	

Navigation bar	1st level	2nd level	Privileges	Remarks
	Disk Enclosure			If no Disk Enclosure is connected, this menu is not displayed.
		Disk Enclosure#x	RW	The menu is not displayed for an unmounted Disk Enclosure.
Partition				
	Power Control		RO	Controls the partition power.
	Schedule			
		Schedule Control	RO	Sets scheduled operations.
		Schedule List	RO	Sets the power-on/off schedule.
	Console Redirection Setup		RO	Sets Video Redirection, Remote Storage, and Text Console Redirection.
		IPv4 Console Redirection Setup	RO	Setting for IPv4 Console Redirection.
		IPv6 Console Redirection Setup	RO	Setting for IPv6 Console Redirection.
	Partition Configuration		RO	Changes the partition configuration.
	Partition#n Extended Partition Configuration			Changes the Extended Partitioning configuration. When Extended Partitioning Mode is Disable, this menu is not displayed.
		SB	RO	
		IOU#n	RO	
		PCI_Box#n	RO	
	Extended Socket Configuration		RO	Sets concerning Extended Socket. (Zone setting)
	Reserved SB Configuration		RO	Defines a Reserved SB.
	Power Management Setup		RO	
	Partition#0			If no board belongs to the partition, this submenu is not displayed.
		Information	RO	Displays the partition status and partition-related information.
		ASR Control	RO	Sets the conditions for automatically restarting the partition.
		Console Redirection	N/A	Displays the console output of the partition.
		Mode	RO	Sets the mode for the partition.
		SSD Life Cycle Management	RO	If as much as one PCIe SSD card is not installed, this menu is not displayed.
	Partition#1			Same as for Partition#0
	Partition#2			
	Partition#3			
User Administration				
	User List		N/A	Lists, edits, and deletes registered user accounts.
	Change Password		RW	Changes the password of the user's own account.
	Who		RO	Displays all users who are logged in to the MMB.

Navigation bar	1st level	2nd level	Privileges	Remarks
	LDAP Configuration		N/A	Sets concerning LDAP.
		Directory Service Configuration	N/A	Sets for MMB to access directory service by way of LDAP.
		LDAP User Group List	N/A	Displays, edits and deletes the list of registered LDAP User Group.
Network Configuration				
	Date/Time		RO	
	Network Interface			
		IPv4 Interface	RO	Sets the IPv4 IP address, etc.
		IPv6 Interface	RO	Sets the IPv6 IP address, etc.
	Management LAN Port Configuration		N/A	Configures the Port LAN of the MMB HUB.
	Network Protocols		RO	
	Refresh Rate		RW	Sets the refresh rate of the Web-UI window.
	SNMP Configuration		N/A	
		Community	N/A	
		Trap	N/A	
		SNMPv3 Configuration	N/A	
	SSL			
		Create CSR	N/A	Creates a secret key and CSR.
		Export Key/CSR	N/A	Exports a secret key and CSR.
		Import Certificate	N/A	Installs a certificate.
		Create Selfsigned Certificate	N/A	Creates a selfsigned certificate.
	SSH			
		SSH Server Key	N/A	Creates a private key for the SSH server.
	Remote Server Management		N/A	
	Access Control		N/A	Sets the IP filtering that permits connections.
	Alarm E-mail		N/A	
Maintenance				
	Firmware Update			
		Unified Firmware Update	RW	Performs a batch update.
	Backup/Restore Configuration			Backs up and restores setting information.
		Backup/Restore MMB Configuration	RW	
		Backup BIOS Configuration	RW	
		Restore BIOS Configuration	RW	
	Maintenance Wizard		RW	Performs maintenance through a wizard.
	REMCS			
		REMCS	RW	
		Detail Setup	RW	

1.1.6 Web-UI menus in maintenance mode

Some parameters have operational restrictions when maintenance mode is set. These restrictions apply to the user who is set to maintenance mode and other users.
The following table lists the Web-UI window restrictions that apply to maintenance personnel and non-maintenance personnel in maintenance mode.

The five types of maintenance mode are as follows.

Reference: The state to do the maintenance work from the screen of Maintenance -> Maintenance Wizard with Maintenance Wizard is called a maintenance mode.

TABLE 1.7 Types of maintenance mode

Maintenance mode	Description
Hot System Maintenance (Target unit not included in a partition) Active (system) for work	For maintenance work on the target unit not included in a partition. The work can be performed without stopping application software.
Hot Partition Maintenance (Target unit in a activated partition) Active (partition) for work	For maintenance work on a partition that is still operating while under maintenance. This work can be performed without stopping application software.
Warm System Maintenance (Target unit in a powered off partition) Partition stopped for work	For maintenance work on the partition under maintenance or the partition containing the target maintenance unit. The partition must be stopped during maintenance. The partitions not under maintenance need not be stopped.
Cold System Maintenance (All partitions powered off, breaker on) Stopped (standby) for work	For maintenance work that requires the system to be stopped. All applications are forcibly stopped during maintenance operation.
Cold System Maintenance (All partitions powered off, breaker off) Stopped (AC off) for work	For maintenance work that requires the system to be stopped and the AC power to be turned off (MMB power off). All applications are forcibly stopped during maintenance operation.

The following sections outline the Web-UI menus that are available in maintenance mode for each type of user privilege.

- 1.1.7 Web-UI menus in maintenance mode (Administrator)
- 1.1.8 Web-UI menus in maintenance mode (Operator)
- 1.1.9 Web-UI menus in maintenance mode (Partition Operator)
- 1.1.10 Web-UI menus in maintenance mode (User)
- 1.1.11 Web-UI menus in maintenance mode (CE)
- 1.1.12 Web-UI menus in maintenance mode (maintenance personnel)

1.1.7 Web-UI menus in maintenance mode (Administrator)

This section outlines the Web-UI menus that are available with the Administrator privileges in maintenance mode.

The maintenance mode column has the following items. For details on the maintenance mode, see 1.1.6 Web-UI menus in maintenance mode.

- Hot System: Hot System Maintenance (Target unit not included in a partition)
- Hot Partition: Hot Partition Maintenance (Target unit in a activated partition)
- Warm System: Warm System Maintenance (Target unit in a powered-off partition)
- Cold System: Cold System Maintenance (All partitions are powered off and turned on their breakers), and Cold System Maintenance (All partitions are powered off and turned off their breakers)

The meanings of abbreviations in the table are as follows:
RW: The account user can refer to and set information in the window.
RO: The account user can only refer to information in the window.
N/A: The account user cannot view the menu and submenu.
*1 The account user can operate partitions not in maintenance mode in this window.
*2 The account user can operate only partitions in maintenance mode in this window.
*3 The SB is neither a Home SB nor Reserved SB. Alternatively, the SB is the Home SB in the Power Off status in a partition in the Standby status.
*4 The partition is in the Standby status.

TABLE 1.8 Web-UI menus in maintenance mode (Administrator)

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
System					
	System Power Control		Hot System	RW	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	MMB				
		MMB#0	Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		MMB#1		Same as for MMB#0	
Partition					
	Power Control		Hot System	RW	
			Hot Partition	RW(*1)	
			Warm System	RW(*1)	
			Cold System	RO	
	Partition Configuration		Hot System	RW	[Add...] is suppressed since the Free unit may be a replacement unit.
			Hot Partition	RO(*1)	
			Warm System	RW(*1)	
			Cold System	RO	
		Add SB / IOU to Partition		Same as for Partition Configuration	
		Remove SB / IOU from Partition		Same as for Partition Configuration	
		Partition Home		Same as for Partition Configuration	
	Partition#n Extended Partition Configuration		Hot System	RW	
			Hot Partition	RO(*1)	
			Warm System	RW(*1)	
			Cold System	RO	

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
		SB		Same as for Partition#n Extended Partition Configuration	
		IOU#n		Same as for Partition#n Extended Partition Configuration	
		PCI_Box#n		Same as for Partition#n Extended Partition Configuration	
	Reserved SB Configuration		Hot System	RW	
			Hot Partition	RO(*1)	
			Warm System	RW(*1)	
			Cold System	RO	
	Console Redirection		Hot System	RW	
			Hot Partition	RW(*1)	
			Warm System	RW(*1)	
			Cold System	RO	
Network Configuration					
	Network Interface	IPv4 Interface	Hot System	RO	
			Hot Partition	RO	
		IPv6 Interface	Warm System	RO	
			Cold System	RO	
Maintenance					
	Firmware Update				
		Unified Firmware Update	Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Backup/ Restore Configuration				
		Backup/ Restore MMB Configuration		RW	[Backup MMB...] is not affected by maintenance mode.
					[Restore MMB...] can be operated only by maintenance personnel.
	Maintenance Wizard		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	

1.1.8 Web-UI menus in maintenance mode (Operator)

This section outlines the Web-UI menus that are available with the Operator privileges in maintenance mode.

The maintenance mode column has the following items. For details on the maintenance mode, see Web-UI menus in maintenance mode.

- Hot System: Hot System Maintenance (Target unit not included in a partition)
- Hot Partition: Hot Partition Maintenance (Target unit in a activated partition)
- Warm System: Warm System Maintenance (Target unit in a powered off partition)
- Cold System: Cold System Maintenance (All partitions powered off, breaker on), and Cold System Maintenance (All partitions powered off, breaker off)

The meanings of abbreviations in the table are as follows:
RW: The account user can refer to and set information in the window.
RO: The account user can only refer to information in the window.
N/A: The account user cannot view the menu and submenu.
*1 The account user can operate partitions not in maintenance mode in this window.
*2 The account user can operate only partitions in maintenance mode in this window.
*3 The SB is neither a Home SB nor Reserved SB. Alternatively, the SB is the Home SB in the Power Off status in a partition in the Standby status.
*4 The partition is in the Standby status.

TABLE 1.9 Web-UI menus in maintenance mode (Operator)

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
System					
	System Power Control		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	MMB				
		MMB#0	Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		MMB#1		Same as for MMB#0	
Partition					
	Power Control		Hot System	RW	
			Hot Partition	RW(*1)	
			Warm System	RW(*1)	
			Cold System	RO	
	Partition Configuration		Hot System	RO	[Add...] is suppressed since the Free unit may be a replacement unit.
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		Add SB / IOU to Partition		Same as for Partition Configuration	
		Remove SB / IOU from Partition		Same as for Partition Configuration	
		Partition Home		Same as for Partition Configuration	
	Partition#n Extended Partition Configuration		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
		SB		Same as for Partition#n Extended Partition Configuration	
		IOU#n		Same as for Partition#n Extended Partition Configuration	
		PCI_Box#n		Same as for Partition#n Extended Partition Configuration	
	Reserved SB Configuration		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Console Redirection		Hot System	RW	
			Hot Partition	RW(*1)	
			Warm System	RW(*1)	
			Cold System	RO	
Network Configuration					
	Network Interface	IPv4 Interface	Hot System	RO	
			Hot Partition	RO	
		IPv6 Interface	Warm System	RO	
			Cold System	RO	
Maintenance					
	Firmware Update				
		Unified Firmware Update	Hot System	N/A	
			Hot Partition	N/A	
			Warm System	N/A	
			Cold System	N/A	
	Backup/ Restore Configuration				
		Backup/ Restore MMB Configuration		N/A	[Backup MMB...] is not affected by maintenance mode.
					[Restore MMB...] can be operated only by maintenance personnel.
	Maintenance Wizard		Hot System	N/A	
			Hot Partition	N/A	
			Warm System	N/A	
			Cold System	N/A	

1.1.9 Web-UI menus in maintenance mode (Partition Operator)

This section outlines the Web-UI menus that are available with the Partition Operator privileges in maintenance mode.

The maintenance mode column has the following items. For details on the maintenance mode, see 1.1.6 Web-UI menus in maintenance mode Hot System: Hot System Maintenance (Target unit not included in a partition)

- Hot Partition: Hot Partition Maintenance (Target unit in a activated partition)
- Warm System: Warm System Maintenance (Target unit in a powered off partition)
- Cold System: Cold System Maintenance (All partitions powered off, breaker on), and Cold System Maintenance (All partitions powered off, breaker off)

The meanings of abbreviations in the table are as follows:
RW: The account user can refer to and set information in the window.
RO: The account user can only refer to information in the window.
N/A: The account user cannot view the menu and submenu.
*1 The account user can operate partitions not in maintenance mode in this window.
*2 The account user can operate only partitions in maintenance mode in this window.
*3 The SB is neither a Home SB nor Reserved SB. Alternatively, the SB is the Home SB in the Power Off status in a partition in the Standby status.
*4 The partition is in the Standby status.

TABLE 1.10 Web-UI menus in maintenance mode (Partition Operator)

Navigation bar	1st level	2nd level	Maintenance mode	Privileges (Same partition)	Privileges (Other partition)	Remarks
System						
	System Power Control		Hot System	RO	RO	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RO	RO	
	MMB					
		MMB#0	Hot System	RO	RO	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RO	RO	
		MMB#1		Same as for MMB#0		
Partition						
	Power Control		Hot System	RW	RO	
			Hot Partition	RW(*1)	RO	
			Warm System	RW(*1)	RO	
			Cold System	RO	RO	
	Partition Configuration		Hot System	RO	RO	[Add...] is suppressed since the Free unit may be a replacement unit.
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RO	RO	
		Add SB / IOU to Partition		Same as for Partition Configuration		
		Remove SB / IOU from Partition		Same as for Partition Configuration		
		Partition Home		Same as for Partition Configuration		
	Partition#n Extended Partition Configuration		Hot System	RO	RO	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RO	RO	

Navigation bar	1st level	2nd level	Maintenance mode	Privileges (Same partition)	Privileges (Other partition)	Remarks
		SB		Same as for Partition#n Extended Partition Configuration		
		IOU#n		Same as for Partition#n Extended Partition Configuration		
		PCI_Box#n		Same as for Partition#n Extended Partition Configuration		
	Reserved SB Configuration		Hot System	RO	RO	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RO	RO	
	Console Redirection		Hot System	RW	N/A	
			Hot Partition	RW(*1)	N/A	
			Warm System	RW(*1)	N/A	
			Cold System	RO	N/A	
Network Configuration						
	Network Interface	IPv4 Interface	Hot System	RO	RO	
			Hot Partition	RO	RO	
		IPv6 Interface	Warm System	RO	RO	
			Cold System	RO	RO	
Maintenance						
	Firmware Update					
		Unified Firmware Update	Hot System	N/A	N/A	
			Hot Partition	N/A	N/A	
			Warm System	N/A	N/A	
			Cold System	N/A	N/A	
	Backup/ Restore Configuration					
		Backup/ Restore MMB Configuration		N/A	N/A	[Backup MMB...] is not affected by maintenance mode. [Restore MMB...] can be operated only by maintenance personnel.
	Maintenance Wizard		Hot System	N/A	N/A	
			Hot Partition	N/A	N/A	
			Warm System	N/A	N/A	
			Cold System	N/A	N/A	

1.1.10 Web-UI menus in maintenance mode (User)

This section outlines the Web-UI menus that are available with the User privileges in maintenance mode.

The maintenance mode column has the following items. For details on the maintenance mode, see 1.1.6 Web-UI menus in maintenance mode. Web-UI menus in

- Hot System: Hot System Maintenance (Target unit not included in a partition)
- Hot Partition: Hot Partition Maintenance (Target unit in a activated partition)
- Warm System: Warm System Maintenance (Target unit in a powered off partition)
- Cold System: Cold System Maintenance (All partitions powered off, breaker on), and Cold System Maintenance (All partitions powered off, breaker off)

The meanings of abbreviations in the table are as follows:
RW: The account user can refer to and set information in the window.
RO: The account user can only refer to information in the window.
N/A: The account user cannot view the menu and submenu.
*1 The account user can operate partitions not in maintenance mode in this window.
*2 The account user can operate only partitions in maintenance mode in this window.
*3 The SB is neither a Home SB nor Reserved SB. Alternatively, the SB is the Home SB in the Power Off status in a partition in the Standby status.
*4 The partition is in the Standby status.

TABLE 1.11 Web-UI menus in maintenance mode (User)

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
System					
	System Power Control		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	MMB				
		MMB#0	Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		MMB#1		Same as for MMB#0	
Partition					
	Power Control		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Partition Configuration		Hot System	RO	[Add...] is suppressed since the Free unit may be a replacement unit.
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		Add SB / IOU to Partition		Same as for Partition Configuration	
		Remove SB / IOU from Partition		Same as for Partition Configuration	
		Partition Home		Same as for Partition Configuration	
	Partition#n Extended		Hot System	RO	
			Hot Partition	RO	

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
	Partition Configuration		Warm System	RO	
			Cold System	RO	
		SB		Same as for Partition#n Extended Partition Configuration	
		IOU#n		Same as for Partition#n Extended Partition Configuration	
		PCI_Box#n		Same as for Partition#n Extended Partition Configuration	
	Reserved SB Configuration		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Console Redirection		Hot System	N/A	
			Hot Partition	N/A	
			Warm System	N/A	
			Cold System	N/A	
Network Configuration					
	Network Interface	IPv4 Interface	Hot System	RO	
			Hot Partition	RO	
		IPv6 Interface	Warm System	RO	
			Cold System	RO	
Maintenance					
	Firmware Update				
		Unified Firmware Update	Hot System	N/A	
			Hot Partition	N/A	
			Warm System	N/A	
			Cold System	N/A	
	Backup/ Restore Configuration				
		Backup/ Restore MMB Configuration		N/A	[Backup MMB...] is not affected by maintenance mode.
					[Restore MMB...] can be operated only by maintenance personnel.
	Maintenance Wizard		Hot System	N/A	
			Hot Partition	N/A	
			Warm System	N/A	
			Cold System	N/A	

1.1.11 Web-UI menus in maintenance mode (CE)

This section outlines the Web-UI menus that are available with the CE privileges in maintenance mode.

The maintenance mode column has the following items. For details on the maintenance mode, see 1.1.6 Web-UI menus in maintenance mode.

- Hot System: Hot System Maintenance (Target unit not included in a partition)
- Hot Partition: Hot Partition Maintenance (Target unit in a activated partition)
- Warm System: Warm System Maintenance (Target unit in a powered off partition)
- Cold System: Cold System Maintenance (All partitions powered off, breaker on), and Cold System Maintenance (All partitions powered off, breaker off)

The meanings of abbreviations in the table are as follows:
RW: The account user can refer to and set information in the window.
RO: The account user can only refer to information in the window.
N/A: The account user cannot view the menu and submenu.
*1 The account user can operate partitions not in maintenance mode in this window.
*2 The account user can operate only partitions in maintenance mode in this window.
*3 The SB is neither a Home SB nor Reserved SB. Alternatively, the SB is the Home SB in the Power Off status in a partition in the Standby status.
*4 The partition is in the Standby status.

TABLE 1.12 Web-UI menus in maintenance mode (CE)

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
System					
	System Power Control		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	MMB				
		MMB#0	Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		MMB#1		Same as for MMB#0	
Partition					
	Power Control		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Partition Configuration		Hot System	RO	[Add...] is suppressed since the Free unit may be a replacement unit.
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
		Add SB / IOU to Partition		Same as for Partition Configuration	
		Remove SB / IOU from Partition		Same as for Partition Configuration	
		Partition Home		Same as for Partition Configuration	
	Partition#n Extended		Hot System	RO	
			Hot Partition	RO	

Navigation bar	1st level	2nd level	Maintenance mode	Privileges	Remarks
	Partitioning Configuration		Warm System	RO	
			Cold System	RO	
		SB		Same as for Partition#n Extended Partition Configuration	
		IOU#n		Same as for Partition#n Extended Partition Configuration	
		PCI_Box#n		Same as for Partition#n Extended Partition Configuration	
	Reserved SB Configuration		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Console Redirection		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
Network Configuration					
	Network Interface	IPv4 Interface	Hot System	RO	
			Hot Partition	RO	
		IPv6 Interface	Warm System	RO	
			Cold System	RO	
Maintenance					
	Firmware Update				
		Unified Firmware Update	Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	
	Backup/ Restore Configuration				
		Backup/ Restore MMB Configuration		RW	[Backup MMB...] is not affected by maintenance mode.
					[Restore MMB...] can be operated only by maintenance personnel.
	Maintenance Wizard		Hot System	RO	
			Hot Partition	RO	
			Warm System	RO	
			Cold System	RO	

1.1.12 Web-UI menus in maintenance mode (maintenance personnel)

This section outlines the Web-UI menus that are available to maintenance personnel (Administrator or CE privileges) in maintenance mode.

The maintenance mode column has the following items. For details on the maintenance mode, see 1.1.6 Web-UI menus in maintenance mode.

- Hot System: Hot System Maintenance (Target unit not included in a partition)
- Hot Partition: Hot Partition Maintenance (Target unit in a activated partition)
- Warm System: Warm System Maintenance (Target unit in a powered off partition)
- Cold System: Cold System Maintenance (All partitions powered off, breaker on), and Cold System Maintenance (All partitions powered off, breaker off)

The meanings of abbreviations in the table are as follows:
RW: The account user can refer to and set information in the window.
RO: The account user can only refer to information in the window.
N/A: The account user cannot view the menu and submenu.
*1 The account user can operate partitions not in maintenance mode in this window.
*2 The account user can operate only partitions in maintenance mode in this window.
*3 The SB is neither a Home SB nor Reserved SB. Alternatively, the SB is the Home SB in the Power Off status in a partition in the Standby status.
*4 The partition is in the Standby status.

TABLE 1.13 Web-UI menus in maintenance mode (maintenance personnel)

Navigation bar	1st level	2nd level	Maintenance mode	Privileges (Administrator)	Privileges (CE)	Remarks
System						
	System Power Control		Hot System	RW	RO	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RW	RW	
	MMB					
		MMB#0	Hot System	RW	RW	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RW	RW	
		MMB#1		Same as for MMB#0		
Partition						
	Power Control		Hot System	RW	RO	
			Hot Partition	RW(*1)	RO	
			Warm System	RW	RW(*2)	
			Cold System	RW	RW	
	Partition Configuration		Hot System	RW	RO	[Add...] is suppressed since the Free unit may be a replacement unit.
			Hot Partition	RO	RO	
			Warm System	RW	RO	
			Cold System	RW	RO	
		Add SB / IOU to Partition		Same as for Partition Configuration		
		Remove SB / IOU from Partition		Same as for Partition Configuration		
		Partition Home		Same as for Partition Configuration		
	Partition#n Extended Partition Configuration		Hot System	RW	RO	
			Hot Partition	RO	RO	
			Warm System	RW	RO	
			Cold System	RW	RO	

Navigation bar	1st level	2nd level	Maintenance mode	Privileges (Administrator)	Privileges (CE)	Remarks
		SB		Same as for Partition#n Extended Partition Configuration		
		IOU#n		Same as for Partition#n Extended Partition Configuration		
		PCI_Box#n		Same as for Partition#n Extended Partition Configuration		
	Reserved SB Configuration		Hot System	RW	RO	
			Hot Partition	RO	RO	
			Warm System	RW	RO	
			Cold System	RW	RO	
	Console Redirection		Hot System	RW	RO	
			Hot Partition	RW(*1)	RO	
			Warm System	RW	RW(*2)	
			Cold System	RW	RW	
Network Configuration						
	Network Interface	IPv4 Interface	Hot System	RO	RO	
			Hot Partition	RO	RO	
		IPv6 Interface	Warm System	RO	RO	
			Cold System	RO	RO	
Maintenance						
	Firmware Update					
		Unified Firmware Update	Hot System	RW	RW	
			Hot Partition	RO	RO	
			Warm System	RO	RO	
			Cold System	RW	RW	
	Backup/ Restore Configuration					
		Backup/ Restore MMB Configuration		RW	RW	[Backup MMB...] is not affected by maintenance mode.
						[Restore MMB...] can be operated only by maintenance personnel.
	Maintenance Wizard		Hot System	RW	RW	
			Hot Partition	RW	RW	
			Warm System	RW	RW	
			Cold System	RW	RW	

1.1.13 Web-UI menus (PRIMEQUEST 2800B3/2800B2/2800B model)

This section lists the Web-UI menus that are available for the PRIMEQUEST 2800B3/2800B2/2800B model.

The meanings of abbreviations in the table are as follows:

- RW: The account user can refer to and set information and control operation from the menu.
- RO: The account user can only refer to information from the menu.
- N/A: The account user cannot view the menu and submenus.

TABLE 1.14 Web-UI menus (PRIMEQUEST 2800B3/2800B2/2800B model)

Navigation bar	1st level	2nd level	Privileges				Remarks
			Admin	Operator	User	CE	
System							
	System Status		RO	RO	RO	RO	Displays the overall system status.
	System Event Log		RW	RO	RO	RO	Displays system event logs.
	Operation Log		RW	RO	RO	RO	Displays the operations on the Web-UI and CLI.
	System Information		RW	RO	RO	RO	Displays system information, such as the system name or product name.
	Firmware Information		RO	RO	RO	RO	Displays firmware version information.
	System Setup		RW	RO	RO	RW	Sets the system configuration.
	Power Control		RW	RW	RO	RO	Controls the power.
	Schedule						
		Schedule Control	RW	RW	RO	RO	Sets scheduled operations.
		Schedule List	RW	RW	RO	RO	Sets the power-on/off schedule.
	Console Redirection Setup		RW	RO	RO	RO	Sets Video Redirection, Remote Storage, and Text Console Redirection.
		IPv4 Console Redirection Setup	RW	RO	RO	RO	Setting for IPv4 Console Redirection.
		IPv6 Console Redirection Setup	RW	RO	RO	RO	Setting for IPv6 Console Redirection.
	Power Management Setup		RW	RO	RO	RO	
	ASR Control		RW	RO	RO	RO	Sets the conditions for automatically restarting the partition.
	Console Redirection		RW	RW	N/A	RO	Displays the console output of the partition.
	Mode		RW	RW	RO	RO	Sets the mode for the partition.
	SSD Life Cycle Management		RO	RO	RO	RO	If as much as one PCIe SSD card is not installed, this menu is not displayed.
	LEDs		RW	RW	RW	RW	Displays the LED status.

Navigation	1st level	2nd level	Privileges				Remarks
	Power Supply		RW	RO	RO	RW	Displays the power supply status.
	Fans		RW	RO	RO	RW	Displays the fan status.
	Temperature		RO	RO	RO	RO	Displays the temperatures detected by the temperature sensors of the PRIMEQUEST 2000 series system.
	SB						
		SB#0	RW	RW	RO	RW	Displays the SB status. The menu is not displayed for an unmounted SB.
		SB#1	RW	RW	RO	RW	
		SB#2	RW	RW	RO	RW	
		SB#3	RW	RW	RO	RW	
	IOU						
		IOU#0	RW	RW	RO	RW	Displays the IOU status. The menu is not displayed for an unmounted IOU.
		IOU#1	RW	RW	RO	RW	
		IOU#2	RW	RW	RO	RW	
		IOU#3	RW	RW	RO	RW	
	DU						
		DU#0	RW	RW	RO	RW	Displays the DU status. The menu is not displayed for an unmounted DU.
		DU#1	RW	RW	RO	RW	
	OPL		RW	RW	RO	RW	
	MMB		RW	RW	RO	RW	
User Administration							
	User List		RW	N/A	N/A	N/A	Lists, edits, and deletes registered user accounts.
	Change Password		RW	RW	RW	RW	Changes the password of the user's own account.
	Who		RO	RO	RO	RO	Displays all users who are logged in to the MMB.
Network Configuration							
	Date/Time		RW	RO	RO	RO	
	Network Interface		RW	RO	RO	RO	
		IPv4 Interface	RW	RO	RO	RO	Sets the IPv4 IP address, etc.
		IPv6 Interface	RW	RO	RO	RO	Sets the IPv6 IP address, etc.
	Management LAN Port Configuration		RW	N/A	N/A	N/A	Configures the Port LAN of the MMB HUB.
	Network Protocols		RW	RO	RO	RO	
	Refresh Rate		RW	RW	RW	RW	Sets the refresh rate of the Web-UI window.
	SNMP Configuration		RW	N/A	N/A	N/A	
		Community	RW	N/A	N/A	N/A	
		Trap	RW	N/A	N/A	N/A	
		SNMPv3 Configuration	RW	N/A	N/A	N/A	
	SSL						
		Create CSR	RW	N/A	N/A	N/A	Creates a secret key and CSR.

Navigation	1st level	2nd level	Privileges				Remarks
		Export Key/CSR	RW	N/A	N/A	N/A	Exports a secret key and CSR.
		Import Security Certificate	RW	N/A	N/A	N/A	Installs a certificate.
		Create Selfsigned Certificate	RW	N/A	N/A	N/A	Creates a selfsigned certificate.
	SSH						
		SSH Server Key	RW	N/A	N/A	N/A	Creates a private key for the SSH server.
	Remote Server Management		RW	N/A	N/A	N/A	
	Access Control		RW	N/A	N/A	N/A	Sets the IP filtering that permits connections.
	Alarm E-mail		RW	N/A	N/A	N/A	
Maintenance							
	Firmware Update						
		Unified Firmware Update	RW	N/A	N/A	RW	Performs a batch update.
	Backup/Restore Configuration						Backs up and restores setting information.
		Backup/Restore MMB Configuration	RW	N/A	N/A	RW	
		Backup/Restore BIOS Configuration	RW	N/A	N/A	RW	
	Maintenance Wizard		RW	N/A	N/A	RW	Performs maintenance through a wizard.
	REMCS						
		REMCS	RW	N/A	N/A	RW	
		Detailed Setup	RW	N/A	N/A	RW	

1.2 [System] Menu for PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E

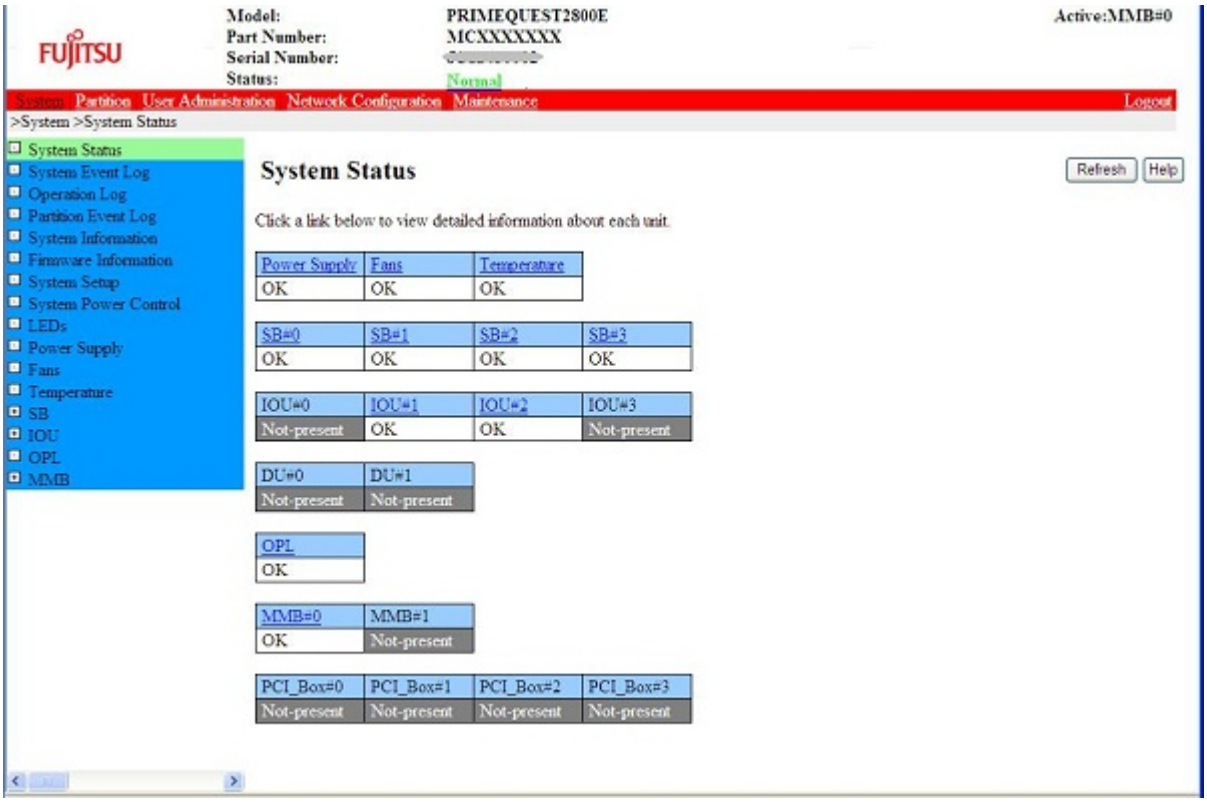
In [System] menu, it is possible to display and set the status of all the hardware components in the PRIMEQUEST 2400E3/2400E2/2400E and PRIMEQUEST 2800E3/2800E2/2800E system.
A display and a set item of [System] menu are different in PRIMEQUEST 2800B3/2800B2/2800B.
Refer to Chapter 1.7 for details.

Remarks
If “Read Error” is displayed for [Part Number] and [Serial Number] on MMB Web-UI (contents area and information area), confirm the problem by referring to “11.2 Troubleshooting” of *PRIMEQUEST 2000 Series Administration Manual* (CA92344-0537). If the error could not be resolved, contact your sales representative or repairs assistance service. Confirm the model name and serial number shown on the label affixed on the main unit and report it.

1.2.1 [System Status] window

[System Status] window shows the status of entire PRIMEQUEST 2000 series system. The contents displayed may differ depending on the configuration of the unit.
You can also display details of each unit by clicking the link displayed in the frame.
.

FIGURE 1.1 [System Status] window



The contents which are displayed as the status of unit are as follows.
[OK] : It is shown for the unit which operates normally without any trouble.
[Not-present] : It is shown for the unit which is not mounted. It is shown in gray colored background.
[Warning] : Though it is not serious, it shows the unit where a problem may occur. It is shown by icon.
[Failed] : It shows the unit, where failure has occurred, and it must be disconnected. It is shown by icon.
[Degraded] : It shows that a failure has occurred in the component of a certain unit, and the unit is operated without disconnecting the failed component. It is shown by icon.

TABLE 1.15 Status of Unit and its Icons

Status	Display Color	Icon
Normal (Normal state)	Green	None
Warning, Degraded	Yellow	Black '!' mark in yellow triangle.
Failed	Red	White 'X' in red circle.

Each unit is linked with the window showing the detailed status. However, for units which are not mounted, there is no window showing the details. Therefore, these units are not linked.

The state of SB#0 – SB#3 is displayed for PRIMEQUEST 2400E3/2400E2 Model in the case that Memory Scale-up Board is used.

TABLE 1.16 Items displayed in [System Status] Window

Items	Description
Power Supply	Shows the status of PSU
Fans	Shows the status of FAN
Temperature	Shows the status of temperature sensor
SB#0 ~ SB#3	Shows the status of system board In case of PRIMEQUEST 2400E3/2400E2/2400E model, it is SB#0 ~ SB#1 *1
IOU#0 ~ IOU#3	Shows the status of IOU
DU#0 ~ DU#1	Shows the status of DU
OPL	Shows the status of OPL
MMB#0 ~ MMB#1	Shows the status of MMB
PCI_Box#0 ~ PCI_Box#3	Shows the status of PCI_Box which are connected

*1 : The state of SB#0 – SB#3 is displayed for PRIMEQUEST 2400E3/2400E2 Model in the case that Memory Scale-up Board is used.

(1) Menu Operation

[System] – [System Status]

(2) Window Operations

1. Click the link corresponding to each unit when the detailed status of unit is to be confirmed. The window showing detailed status of each unit appears.

Remarks

The detailed status can also be displayed by selecting the menu of target unit from [System] sub menu directly. For details on the operations, see "1.2.9 [LEDs] window" ~ "1.2.16 [PCI_Box] Menu".

1.2.2 [System Event Log] Window

Among the events generated in the PRIMEQUEST 2000 series system, events of MMB and BMC stored in the current MMB system event log are displayed on the [System Event Log] window in chronological order.

Maximum 32000 events can be stored in system event log. When the entries in the system event log are full, oldest event log is deleted, and latest event log is stored in system event log.

FIGURE 1.2 [System Event Log] window

In the [System Event Log] Window, only the contents and not the title in the table can be scrolled. When there are no events to be displayed, a message showing “There is no Event Logs.” is displayed instead of the table.

TABLE 1.17 Items displayed in [System Event Log] Window

Items	Description
Severity	Displays the severity of the event and error • Error : Severe errors like hardware error • Warning : Not a severe error, but an error is likely in future • Info : Shows the information like 'Partition power ON'
Date/Time	Displays the local time when an event or error occurred. Format: YYYY-MM-DD HH:MM:SS
Unit	Displays the unit with the sensor where an event or error occurred. For example, displays [SB#0] if an error occurs in CPU#0 of SB#0. This unit retrieves FRU with this sensor from Entity ID of the sensor, and also retrieves Parent Entity from Entity Association Record. It displays Board/Unit name described in FRU Record of parent entry. It is linked to the window (Window on which part number and serial number of each unit can be referenced) showing detailed status of each unit.
Source	Displays the name of the sensor where an event or error occurred.
Part Number	Displays the part number stored in system event log. If part number is not stored, "□" is displayed.
Event ID	Displays the ID (8 digits in hexadecimal system) for identifying contents of Event. For details on the allocation of the Event ID, see "Chapter 2 MMB Message" of *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).
Description	Displays the contents of Events and Errors. **Remarks** For the event of insertion/removal of the board, part number and serial number of board are displayed.

TABLE 1.18 Buttons on [System Event Log] Window

Buttons	Description
Clear All Events	When you click [Clear All Events] button, all the events saved in system event log, are cleared. This is used only if Field engineer instructs to do so.
Download	After the confirmation message is displayed, [System Event Log (Collect)] window appears.
Filter	When you click [Filter] button, [System Event Log Filtering Condition] window for entering filter conditions appears.
Detail	When you click [Detail] button, the details of corresponding event are displayed on [System Event Log (Detail)] window.

(1) Menu Operation

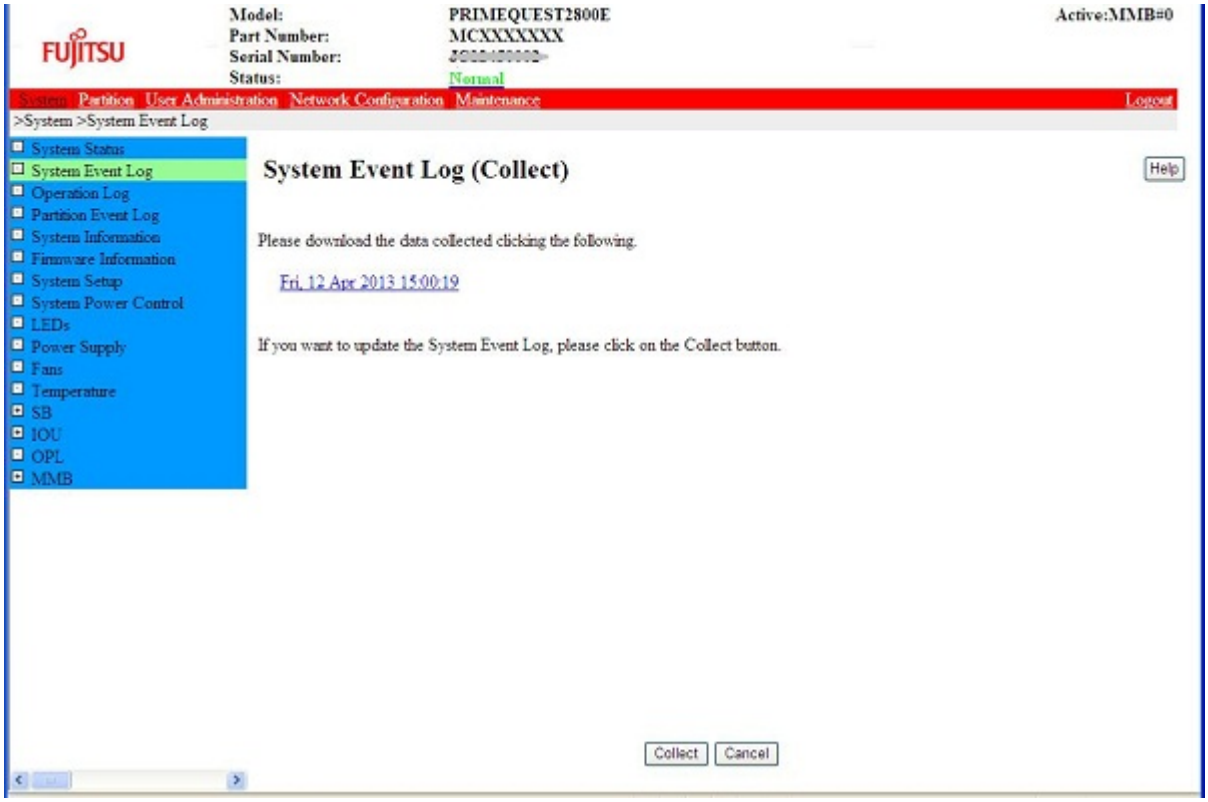
[System] – [System Event Log]

(2) Window Operations

- When the event data saved in system event log is downloaded (if the system event log collected in advance does not exist)
  1. When you click [Download] button, a message showing [I_00417 Are you sure?] is displayed. Click [OK] button.
  2. The collection of system event log information is starts automatically; [Progress] window appears.
  3. [System Event Log (Collect)] window appears, and the link to event data which is collected, is displayed with date information. When you click the link, dialog box appears. By specifying the file name and path name, event data can be downloaded to the PC which displays Web-UI.

- When the event data saved in system event log is downloaded (if the system event log which is collected in advance, exists)
  1. When you click [Download] button, a message showing [I_00417 Are you sure?] is displayed. Click [OK] button.
  2. [System Event Log (Collect)] window appears, and the link to system event log information collected in advance, is displayed.
  3. Click [Collect] button to collect the latest system event log. A message showing [I_00417 Are you sure?] is displayed. Click [OK] button. [Progress] window appears while the system event log information is collected.
  4. [System Event Log (Collect)] window appears, and the link to event data which is collected, is displayed with date information. When you click the link, a dialog box appears. By specifying the file name and path name, event data can be downloaded to the PC which displays Web-UI.

FIGURE 1.3 [System Event Log (Collect)] Window



- Narrowing down the events displayed in the window
  1. Click the [Filter] button.
     The [System Event Log Filtering Condition] window for entering filtering conditions appears.
  2. Enter the conditions in the [System Event Log Filtering Condition] window. Then, click the [Apply] button. The browser returns to the [System Event Log] window. The window displays the events that satisfy the specified conditions.

☐ [System Event Log Filtering Condition] Window

Click [Filter] button on the [System Event Log] window. The [System Event Log Filtering Condition] window for entering filtering conditions appears.

The filtering conditions of events which are displayed in [System Event Log] window can be set in the [System Event Log Filtering Condition] window.

FIGURE 1.4 [System Event Log Filtering Condition] Window

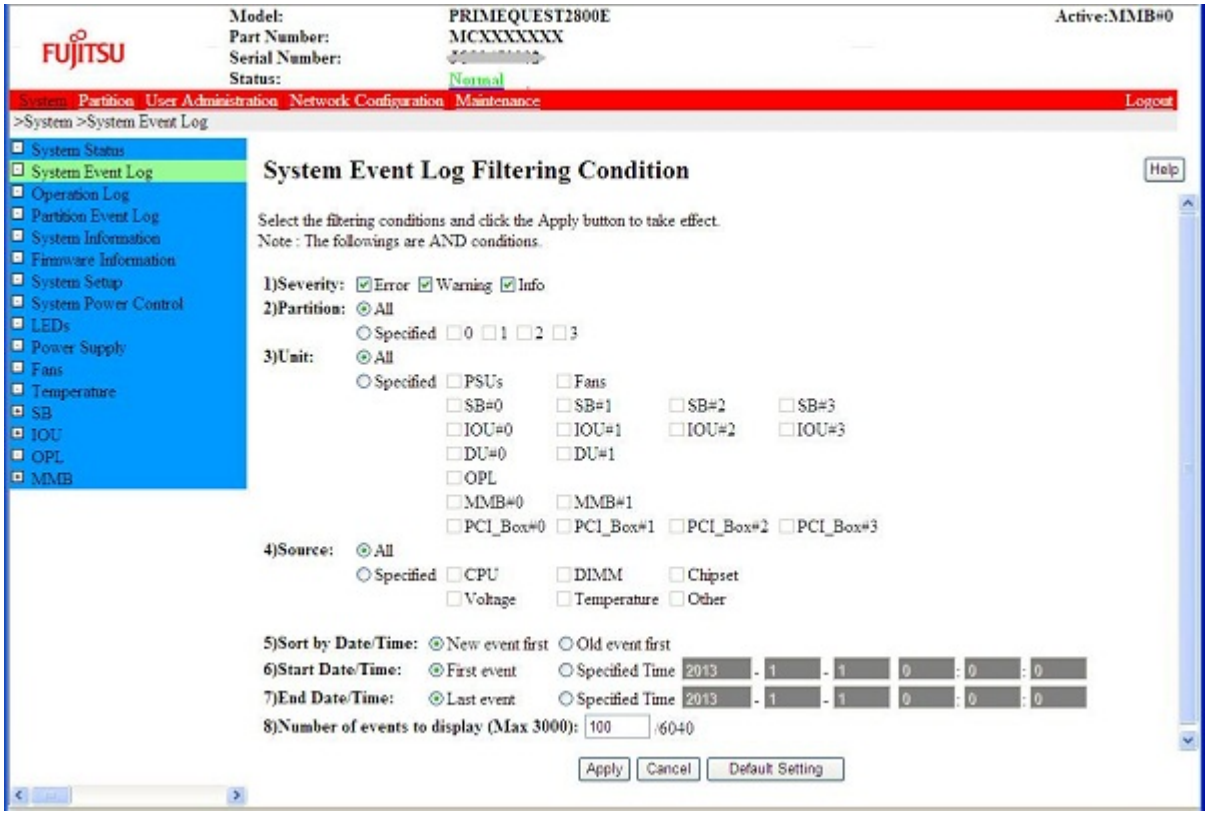


TABLE 1.19 Display and Setting Items on [System Event Log Filtering Condition] Window

Items	Description
Severity	Check the Severity check box. Multiple selections are possible. • Error • Warning • Info • Monitor All are ON by default. **Note** [Monitor] check box is displayed only when login is done with CE privilege.
Partition	Selects the partition to be displayed. Select [All] or [Specified] by radio button. • All: Filtering is not done by the Partition • Specified: Filtering of partition unit can be set. Select the partition to be displayed. In case of Partition Operator, [All] is grayed out and selection is not possible. Further, for filtering of partition; only the partition to be managed can be selected. Default • Partition Operator privilege : [Specified] and Partition to be managed is turned on. • Other than the above : [All] Remarks Specify both CPU and Chipset when filtering as Source with the unit of CPU.
Unit	Select the target unit to be displayed. Select [All] or [Specified] by Radio button. • All: Filtering is not done by Unit. • Specified: Filtering of Unit can be set. Select the Source to be displayed. Default setting is All.
Source	Select target source to be displayed. Select [All] or [Specified] by Radio button. • All: Filtering is not done by Source. • Specified: Filtering of Source unit can be set. Select the Source to be displayed. Default setting is All.
Sort by Date/ Time	Specifies either display by new order or display by old order by using the radio button. • New event first • Old event first The default setting is New event first.
Start Date/ Time	Specifies either display from recent event or specify the time, by using the radio button. • First event: Display by recent event • Specified Time: Specify the time. In case of Specified Time, enter the Start Date and Time. The default setting is First event.

Items	Description
End Date/ Time	Specifies either display till last event or specify the time, by using the radio button. • Last event: Display till Last event • Specified Time: Specify the time. In case of Specified Time, enter the End Date and Time. The default setting is Last event.
Number of events to display	Specifies the number of log to be displayed. As for the denominator, display the total number of events that are logged. A maximum of 3000 events can be specified. The default setting is 100 events.

TABLE 1.20 [System Events Log Filtering Condition] Window Buttons

Buttons	Description
Apply	Log which matches with the specified conditions will be listed on [System Event Log] window by clicking the [Apply] button.
Cancel	Returns to [System Event Log] window by clicking the [Cancel] button.
Default Setting	Selected value returns to the default value.

[Message]

This section describes the messages to be displayed on this window.

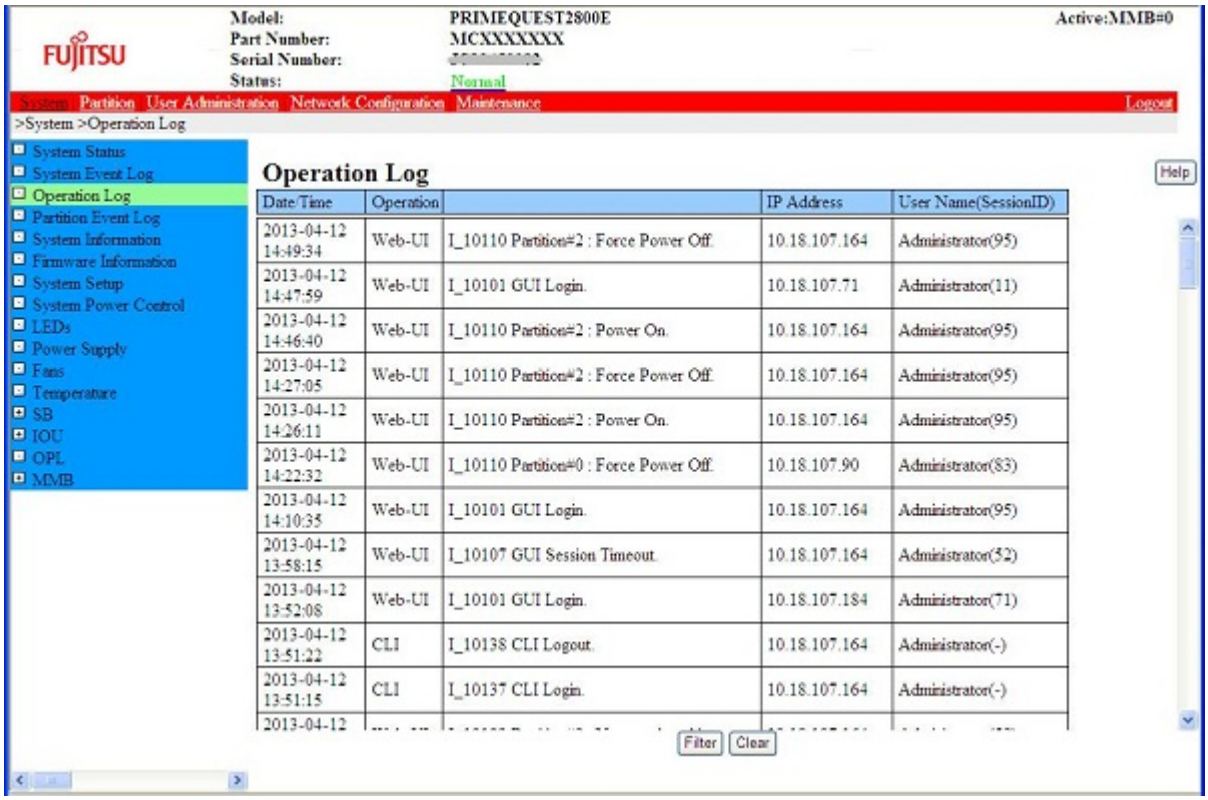
Message Number	Message
W_00413	Nothing is selected.
W_00414	Invalid Date Format.
W_00426	Invalid Values Specified.
W_00434	Invalid Time Format.
W_00441	Range over error.
I_00417	Are you sure?
I_00468	Are you sure you want to clear the SEL?

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.3 [Operation Log] Window

[Operation Log] Window displays the log related to the settings or the operations of Web-UI and CLI. Each Operation Log consists of the login information (Web-UI/CLI/RMCP, IP address, Account) of operating source.

FIGURE 1.5 [Operation Log] Window



In the [Operation Log] window, only the table contents can be scrolled without scrolling the title of the table.
When there is no event to be displayed, a message “There is no Event Logs”; would be displayed instead of table.

TABLE 1.21 Display items of [Operation Log] window

Items	Description
Date/ Time	Displays the local time of occurrence of the event or error. Format: YYYY-MM-DD HH:MM:SS
Operation	Displays the source (Web-UI, CLI or RMCP) and contents of the operation.
IP Address	Displays the source IP address (IPv4 or IPv6 address) of the operation. This column displays [Console] for a CLI operation performed on a console with serial connection. If the host name can be identified from the DNS set on the MMB at the login time, this field displays the host name. Otherwise, it displays the IP address. If the user is logged in from the Web-UI, the field displays only the IP address using the DNS. If the logged-in user is using the IPv6 address connection, the field displays only the IP address using the DNS.
User Name (Session ID)	Displays the operator's name and session ID for Web-UI operations. The session ID for CLI operations is displayed as [-].

TABLE 1.22 [Operation Log] Window Buttons

Buttons	Description
Filter	When [Filter] button is clicked, [Operation Log Filtering Condition] window for entering the filtering conditions appears.
Clear	When [Click] button is clicked, all the operating logs are cleared.

(1) Menu Operation

[System] – [Operation Log]

(2) Window Operations

- When the entire operation log is to be cleared
  1. Click [Clear] button. A dialog box is displayed for confirmation.
  2. Click [OK] button, to clear operation log. Click [Cancel] button, when you do not want to clear operation log.

- Narrowing down the operation log displayed in the window
  1. Click the [Filter] button.
     The [Operation Log Filtering Condition] window for entering filtering conditions appears.
  2. Enter the conditions in the [Operation Log Filtering Condition] window. Then, click the [Apply] button.
     The browser returns to the [Operation Log] window. The window displays the log that satisfies the specified conditions.

☐ [Operation Log Filtering Condition] Window

When [Filter] button on the [Operation Log] window is clicked, the [Operation Log Filtering Condition] window for entering filtering conditions appeared.

Filtering conditions of event which appears on [Operation Log] window can be set on [Operating Log Filtering Condition] Window.

FIGURE 1.6 [Operating Log Filtering Condition] Window

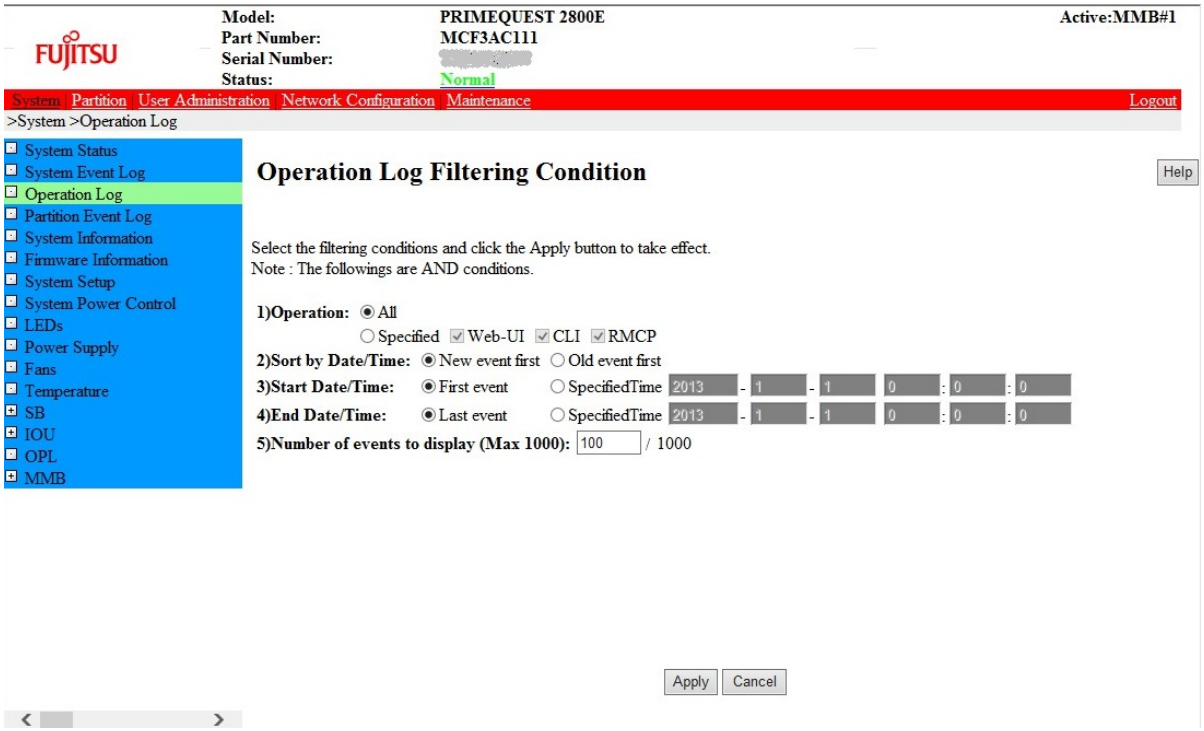


TABLE 1.23 Display and Set Items of [Operating Log Filtering Condition] Window

Items	Description
Operation	Selects the operation to be displayed. Select [All] or [Specified] by the radio button. • All: Do not do filtering by Operation. • Specified: Filtering of Operation can be set. Select the operation to be displayed. The default setting is All.
Sort by Date/ Time	Specified by using radio buttons whether to display by new order or to display by old order. • New event first • Old event first The default setting is New event first.
Start Date/ Time	Specified by using radio button either display from recent event or time specified event. • First event: Set to first event • Specified Time: Set to specified time If Specified Time is selected, enter the date and time of start time. By default, it is First event.
End Date/ Time	Specified by using radio button either display from the last event or time specified event. • Last event : Set to last event • Specified Time : Set to specified time If Specified Time is selected, enter the date and time of end time. By default, it is Last event.
Number of events to display	Specifies the number of log to be displayed. For the denominator part, the total number of logged in events is displayed. It is specified that maximum value is 1000. By default, it is 100.

TABLE 1.24 Buttons on [Operation Log Filtering Condition] window

Buttons	Description
Apply	When [Apply] button is clicked, the log corresponding to the conditions specified is displayed in the list format on [Operation Log] window.
Cancel	Returns to the [Operation Log] window by clicking the [Cancel] button.

[Message]

This section describes the messages to be displayed on this window.

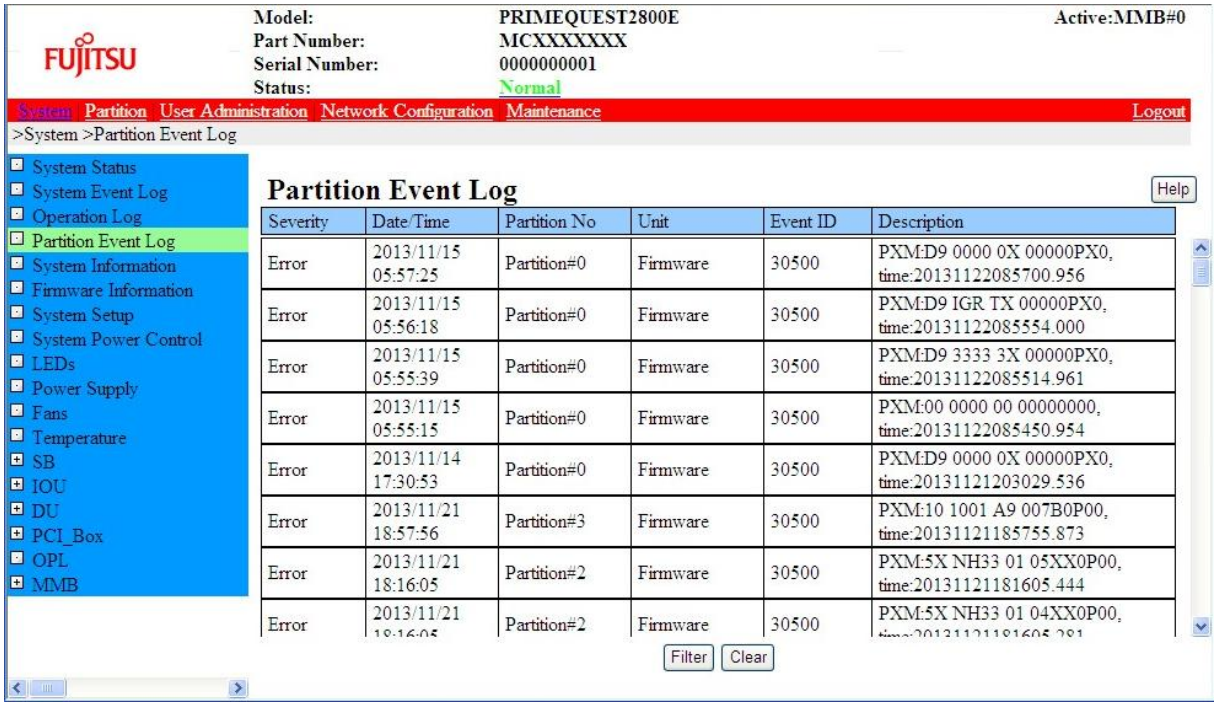
Message Number	Message
W_00413	Nothing is selected.
W_00414	Invalid Date Format.
W_00426	Invalid Values Specified.
W_00434	Invalid Time Format.
W_00441	Range over error.
I_00417	Are you sure?

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.4 [Partition Event Log] Window

[Partition Event Log] Window displays the hardware error information (REMCS message target message). Maximum 1000 events can be stored. When the log is full with the entries, the oldest event log is deleted and newly generated event log is stored.

FIGURE 1.7 [Partition Event Log] window



[Partition Event Log] allows scroll up/down window while keeping table titles on the top.
When there is no event to be displayed, a message “There is no Event Logs”; is displayed instead of table.

TABLE 1.25 Display items of [Partition Event Log] window

Items	Description
Severity	Displays the severity of event. • Error: Severe problems like hardware damage • Warning: Though it is not severe, problems may occur in the future for events. • Information: Event assumed as information when partition power is on.
Date/ Time	Displays the time when event and errors occurs. Format: YYYY-MM-DD HH:MM:SS
Partition No.	Displays the partition number.
Unit	Displays the unit which has the event or error detected sensor.
Event ID	Displays the ID (8 digit hexadecimal) which identifies the contents of the event. For the details of allocation of Event ID, see Chapter 2 MMB Messages in *PRIMEQUEST 2000 series Message Reference* (CA92344-0540).
Description	Displays the events or details of the error.

TABLE 1.26 [Partition Event Log] Window Buttons

Buttons	Description
Filter	When [Filter] button is clicked, [Partition Event Log Filtering Condition] window for entering the filtering conditions is appeared.
Clear	When [Clear] button is clicked, a verification message “Do you want to clear all the partition log events?” displayed.

(1) Menu Operation

[System] – [Partition Event Log]

(2) Window Operations

- When the events displayed on window repeat
  1. Click the [Filter] button.
     Partition Event Log Filtering Condition] window for entering the filter conditions appears.
  2. Enter the conditions on [Partition Event Log Filtering Condition] window. Then, click the [Apply] button.
     Return to [Partition Event Log] window. Events satisfying the specified conditions appear.

- When the partition event log is to be cleared
  1. Click the [Clear] button.
     A dialog box for confirmation appears.
  2. Click the [OK] button if the partition log event is to be cleared. Else, click the [Cancel] button.

☐ [Partition Event Log Filtering Condition] Window

When [Filter] button on the [Partition Event Log] is clicked, [Partition Event Log Condition] window for entering the filter condition appears.

Filtering conditions of events to be displayed on [Partition Event Log] window can be set on [Partition Event Log Filtering Condition] window.

FIGURE 1.8 [Partition Event Log Filtering Condition] Window

TABLE 1.27 Display and Set Items of [Partition Event Log Filtering Condition] Window

Items	Description
Partition	Selects the partition to be displayed. Select [All] or [Specified] by using radio button. • All: Filtering is not done for Partition • Specified: Filtering of partition unit can be set. Select the partition to be displayed. In case of Partition Operator, [All] option is grayed out, selection is not possible. Further, for filtering of the partition; only the partition to be managed can be selected. Default • Partition Operator privilege. : [Specified] and Partition to be managed is turned on. • Other than the above. : [All]
Number of events to display	Specifies the number of logs to be displayed. The denominator represents the total number of logged events. Maximum 1000 events can be displayed. The default setting is100

TABLE 1.28 Buttons on the [Partition Event Log Filtering Condition] Window

Buttons	Description
Apply	When [Apply] button is clicked, the log corresponding to the conditions specified is displayed on the [Partition Event Log] screen.
Cancel	Returns to [Partition Event Log] window when [Cancel] button is clicked.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00413	Nothing is selected.
W_00414	Invalid Date Format.
W_00426	Invalid Values Specified.
W_00434	Invalid Time Format.
W_00441	Range over error.
I_00417	Are you sure?
I_00531	Are you sure you want to clear the Partition Event Log?
E_00100	Failed to set the Partition Event Log Clear

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.5 [System Information] Window

[System Information] window displays the information, such as name of the systems and name of the products etc., related to the PRIMEQUEST 2000 Series System.
Moreover, names and Asset Tag (Property management number) corresponding to the PRIMEQUEST 2000 Series System (Chassis) can be set.

FIGURE 1.9 [System Information] Window

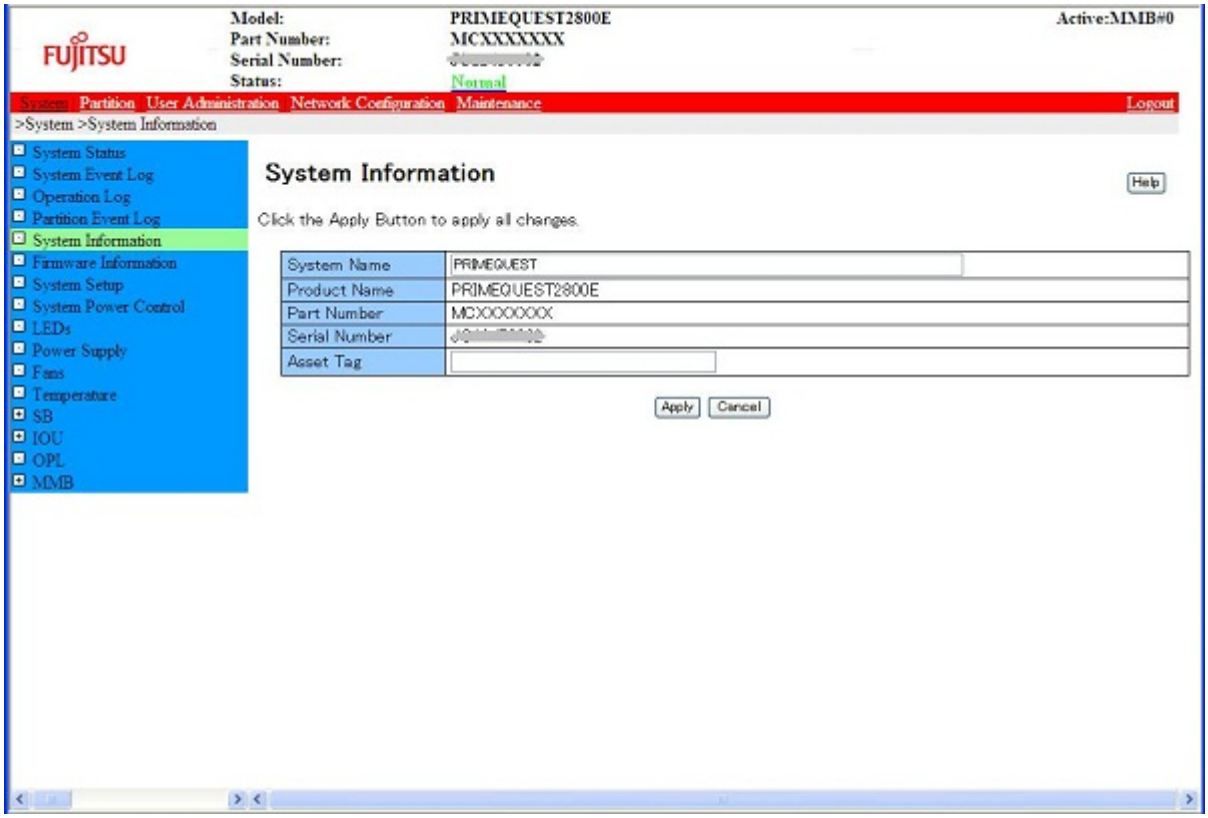


TABLE 1.29 Display and Set Items of [System Information] window

Items	Description
System Name	System name of PRIMEQUEST 2000 series is displayed. User with Administrator privilege can change system name. Maximum 64 characters can be entered. **Remarks** • Characters which can be entered: Alphanumeric characters, half-width space. The following characters can also be entered. ! " # $ % & ' ( ) = - ^ ~ ¥ @ ` [ ] { } : ; * + ? < > . / _ | However, there is a limitation. • # and half-width space cannot be used as first character. • Half-width space cannot be used as last character. Default is < PRIMEQUEST +Product serial number>. When [system Name] is blank, it becomes system name of default.
Product Name	Product name of PRIMEQUEST 2000 series is displayed.
Part Number	Model name of PRIMEQUEST 2000 series is displayed.
Serial Number	Serial number of PRIMEQUEST 2000 series is displayed.
Asset Tag	Property administration information (Asset Tag) is displayed. User with the administrator privilege can change Asset Tag information. Maximum 32 characters can be entered. No default value.

TABLE 1.30 Buttons on the [System Information] Window

Buttons	Description
Apply	When the characters are entered in the [System Name] or [Asset Tag] fields and click the [Apply] button is clicked, the entered information is set.
Cancel	When the [Cancel] button is clicked, the system is restored to the original condition without setting the information entered in the [System Name] or [Asset Tag]

(1) Menu Operation

[System] – [System Information]

(2) Window Operations

1. Change the items of [System Name] or [Asset Tag] and click the [Apply] button.
   Information in each field is set.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
W_00431	Invalid character included.
W_00407	Input characters are too long.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.6 [Firmware Information] Window

Latest version number of applied Firmware, information of the Firmware version which is operating inside the system and the information of the Firmware version with backup is displayed on the [Firmware Information] window.

FIGURE 1.10 [Firmware Information] Window

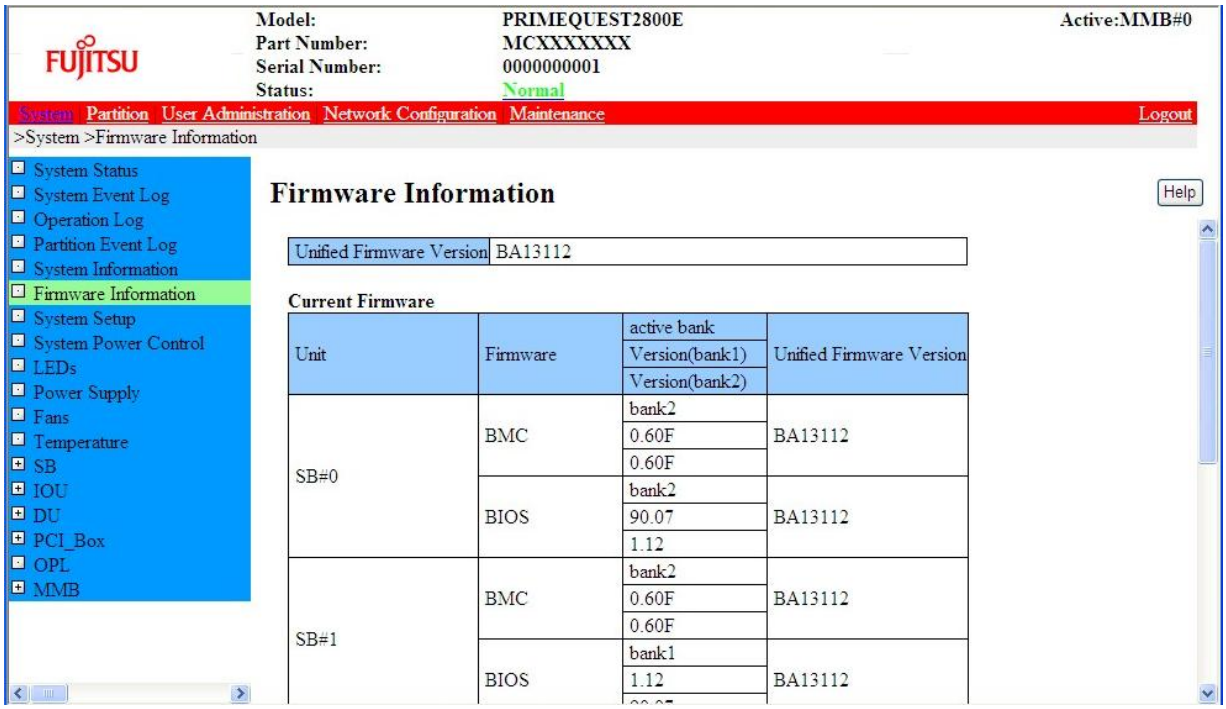


TABLE 1.31 Display Item of [Firmware Information] Window

Items	Description
Unified Firmware Version	Latest version number of applied Firmware.
Current Firmware	
Unit	Target unit mounted with Firmware is displayed. • SB#n • MMB#0 • MMB#1
Firmware	Type and Current version (Active) of Firmware are displayed. • BMC • BIOS • MMB • Not-present: It shows that Unit is not mounted. Gray color background is displayed.
active bank	Bank (bank1 or bank2) of the memory that is operating now is displayed.. After start/restart of the partition, latest Firmware information is reflected in this display.
Version (bank1)	Firmware Version of bank1 is displayed. [Version display format] Firmware maintains Version information in the following format. • Major Version=1Byte data (Binary format) • Minor Version=1Byte data (BCD format) This data is displayed as follows. X.YY X displays Major version in decimal (0~255) Y displays Minor version as it is by double digit in BCD format (Binary coded decimal) (00~99).
Version (bank2)	Firmware Version of bank2 is displayed. [Version display format] Same as bank1
Unified Firmware version	Displays firmware version of target unit. Firmware maintains version information in the following format. • Model identification XX=1 byte data (01h=SA) • Last two digits of the year YY=1 byte data (BCD format) 09-99 • Month MM=1 byte data (BCD format) 01-12 • Serial number N=1 byte data (Binary format) 1-9 This data is displayed as below. XXYYMMN Example: BA13012 In case of uncertain version number “-” is displayed.

After start/restart of the partition is executed by the system administrator or the partition administrator, the latest written Firmware is reflected.

Remarks

After executing Firmware update, it is recommended to reflect in the Firmware by prompt start/restart of the partition.

(1) Menu Operation

[System] – [System Information]

(2) Window Operations

None

1.2.7 [System Setup] Window

In [System Setup] window, Power supply of PRIMEQUEST 2000 system and restoration action etc. can be set.

FIGURE 1.11 [System Setup] Window

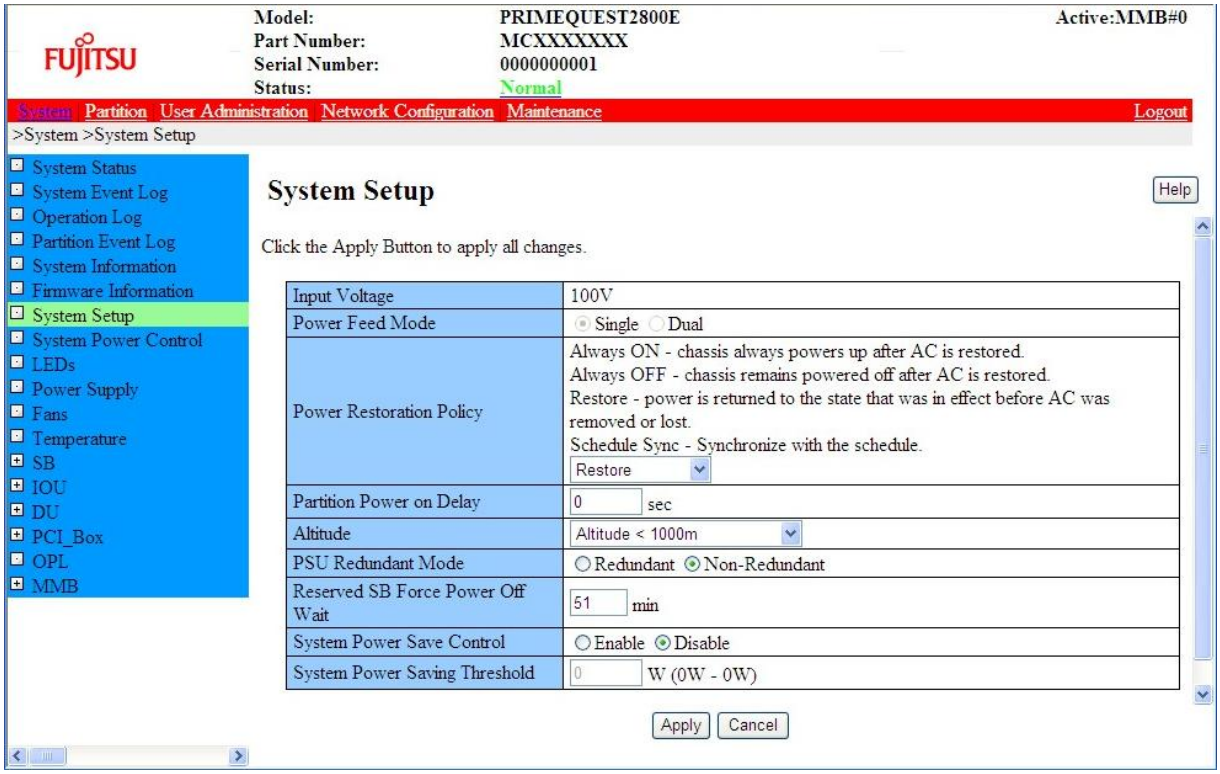


TABLE 1.32 Display Items and Setting Items in [System Setup] Window

Items	Description
Input Voltage	Displays input voltage. • 100V • 200V When information cannot be acquired, it is displayed as 200V.
Power Feed Mode	Whether power supply of PRIMEQUEST 2000 system is configured in primary power feed mode or dual power feed mode is set. • Single: primary power feed mode • Dual: dual power feed mode Default setting is Single.
Power Restoration Policy	Sets the display of the restoration action after power failure. • Always off: Maintains the power-off status after the power restoration. • Always on: Regardless of the condition at the time of power failure, the partition is powered on after the power restoration. • Restore: Restores the status immediately before the power failure. If the power was on when the power failure occurred, it restores the power-on status of the partition. If the power was off, the partition power stays off. • Schedule Sync: If the partition is in the operating time zone, power of partition turns on automatically depending on the schedule operations at the time of restoration of power. (attention) The schedule set with Special is applied only on the specified day. Default setting is Restore.
Partition Power On Delay	Sets the standby time utill power on of partition is specified as per the restoration power policy that is set after the AC power is On (also includes restoration power). This item becomes effective at the time of the Power ON by the schedule. Specifies within the range of 0~9999 seconds. Default value is 0 seconds. (attention) Other start processing is not executed until the processing of Partition Power On Delay ends. However, when Power On by the schedule driving is done for the period of Power on delay by the AC power supply turning on (includes restoration power), Power On delay by the AC power supply turning on (includes restoration power) is given to priority, and Power on delay by Power On by the schedule driving is disregarded.
Altitude	Sets the altitude where PRIMEQEST 2000 series system is installed or placed. • Altitude < 1000 m • 1000 m <= Altitude < 1500 m • 1500 m <= Altitude < 2000 m • 2000 m <= Altitude Default value is Altitude < 1000 m. Setting error of altitude condition is possible up to ±100m.
PSU Redundant Mode	Sets whether PSU is redundantly operated. • Redundant • Non-redundant When Power Feed Mode is Single, it is by default Non-Redundant. When Power Feed Mode is Dual, it is always Redundant.

Items	Description
Reserved SB Force Power Off Wait	While switching to Reserved SB, sets the maximum standby time till the start of force power off of partition which includes the concerned SB. Specifies within the range of 0~99 minutes. Default is 10 minutes.
System Power Save Control	Sets enable/disable for Power Saving function for entire system. • Enable • Disable Power Saving function supports only PSU_P 200V. Default is Disable. When the Power Saving function is used, it is necessary to set all partitions in the system from the UEFI menu as follows. • "Power Technology" is set to "Energy Efficient" or "Custom". • When "Power Technology" is set to "Custom", "Speed Step" is additionally set to "Enabled". • Only for PRIMEQUEST 2400E3/2800E3 "Hardware Controlled Power Management " is made "Legacy Mode ".
System Power Saving Threshold	Sets the power consumption threshold (Limit value) of entire system. Minimum value is 3200W. Maximum value is as shown below. When input voltage is 100V • PRIMEQUEST 2400E3/2400E2/2400E - without Memory Scale-up Board : 5440W - with Memory Scale-up Board : Not supported • PRIMEQUEST 2800E3/2800E2/2800E : Not supported When input voltage is 200V • PRIMEQUEST 2400E3/2400E2/2400E - without Memory Scale-up Board : 5760W - with Memory Scale-up Board : 8640W • PRIMEQUEST 2800E3/2800E2/2800E : 8640W Setting is possible only when System Power Save Control is Enable, gray-out at the time of disable. Default value is the maximum value of each model.

TABLE 1.33 [System Setup] window button

Buttons	Description
Apply	When items such as [Power Feed Mode] and [Power Restore Policy] are specified and [Apply] button is clicked, the information is set.
Cancel	When [Cancel] button is clicked, returns to the original status without setting the changed or input items.

(1) Menu Operation

[System] – [System Setup]

(2) Window Operations

Specify the items such as [Power Feed Mode] and [Power Restoration Policy] and click on the [Apply] button.

Respective information is set.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
E_00100	Failed to set the System Setup
W_00426	Invalid values specified.
E_00098	Failed to get the system configuration.
W_00559	Unable to set Power Save Control because PSU type is not PSU_P.
E_00100	Failed to set the system config .

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.8 [System Power Control] window

In [System Power Control] window, power of the entire PRIMEQUEST 2000 series system can be controlled.

Remarks

- Please shutdown the OS for the partition in which Windows is installed. In case of emergency such as, no response from the system, cut the power supply using Power Off (Force Power Off) of MMB.
- In case of following condition, confirm the contents by referring to "11.2 Troubleshooting" of *PRIMEQUEST 2000 Series Administration Manual* (CA92344-0537). If the error could not be solved, contact your sales representative or sales representative.
  Confirm the model name and serial number shown on the label affixed on the main unit and report it.
  Moreover, do not [Reset] or [Force Power Off] the partition till the error is solved.
  - When [Power off], [Reset], [Force Power Off] and shut down of partition is done by operating system, and if the state of each component on the MMB Web-UI screen is displayed in the state in which processing does not end even for a long time, Part Number and Serial Number are displayed as "Read Error".

FIGURE 1.12 [System Power Control] Window

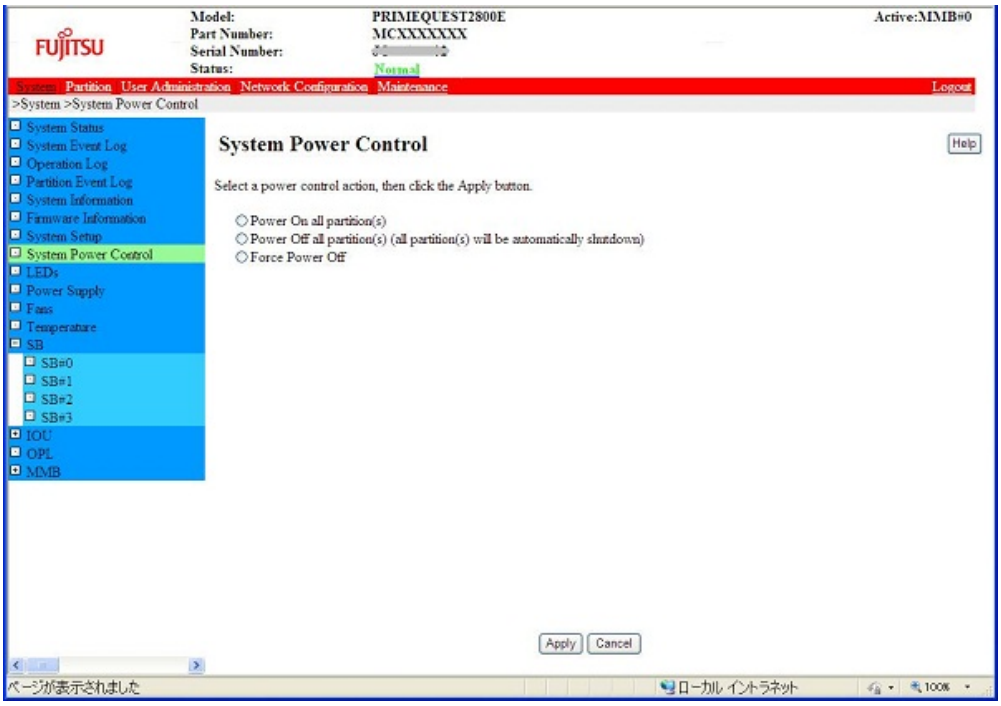


TABLE 1.34 Display Items and Setting Items in [System Power Control] Window

Items	Description
Power on all partition(s)	Turns on the power of all the partition(s). If the status, in which only the power of the chassis is ON, is selected, the power of all partitions is turned on.
Power off all partition(s)(all partition(s)will be automatically shutdown)	Shuts-down all the partitions and turns off the power of the chassis.
Force Power Off	Turns off the power supply without shutting down the running operating system on the partition.

TABLE 1.35 [System Power Control] Window Button

Buttons	Description
Apply	When the [Apply] button is clicked after selecting the control item by the radio button, the power supply is controlled according to the selected information.
Cancel	When the [Cancel] button is clicked, the power supply returns to the original state without being controlled.

(1) Menu Operation

[System] – [System Power Control]

(2) Window Operations

1. Select the power control item by radio button and then click the [Apply] button.
   Dialogue box is displayed for confirmation
2. Click the [OK] button.
   The power supply is controlled according to the selected information

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
E_00069	Can't control system power under maintenance. Release maintenance mode.
E_00077	Partition#xx cannot execute Power On.
E_00078	Partition#xx cannot execute Power Off.
E_00100	Failed to set the System Power Control
E_00101	Unable to power on the partition#%aa due to CPU mismatch between SBs.
E_00107	Unable to power on the chassis.
E_00108	Unable to power off the chassis.
E_00109	Unable to force power off.
I_00212	System Power Control cannot be executed because the system is under maintenance.
E_00422	Unable to power on the partition#%aa due to CPU composition abnormal.
E_00482	Unable to power on the partition#%aa due to DIMM composition abnormal.
E_00491	Unable to power on the partition#%aa due to DIMM does not satisfy requirements of Mode.
E_00517	Unable to power on the partition#%d due to abnormal SB composition.
W_00587	Unable to execute Power Control because the firmware is updating.
W_00588	Unable to execute command because the power control operating.

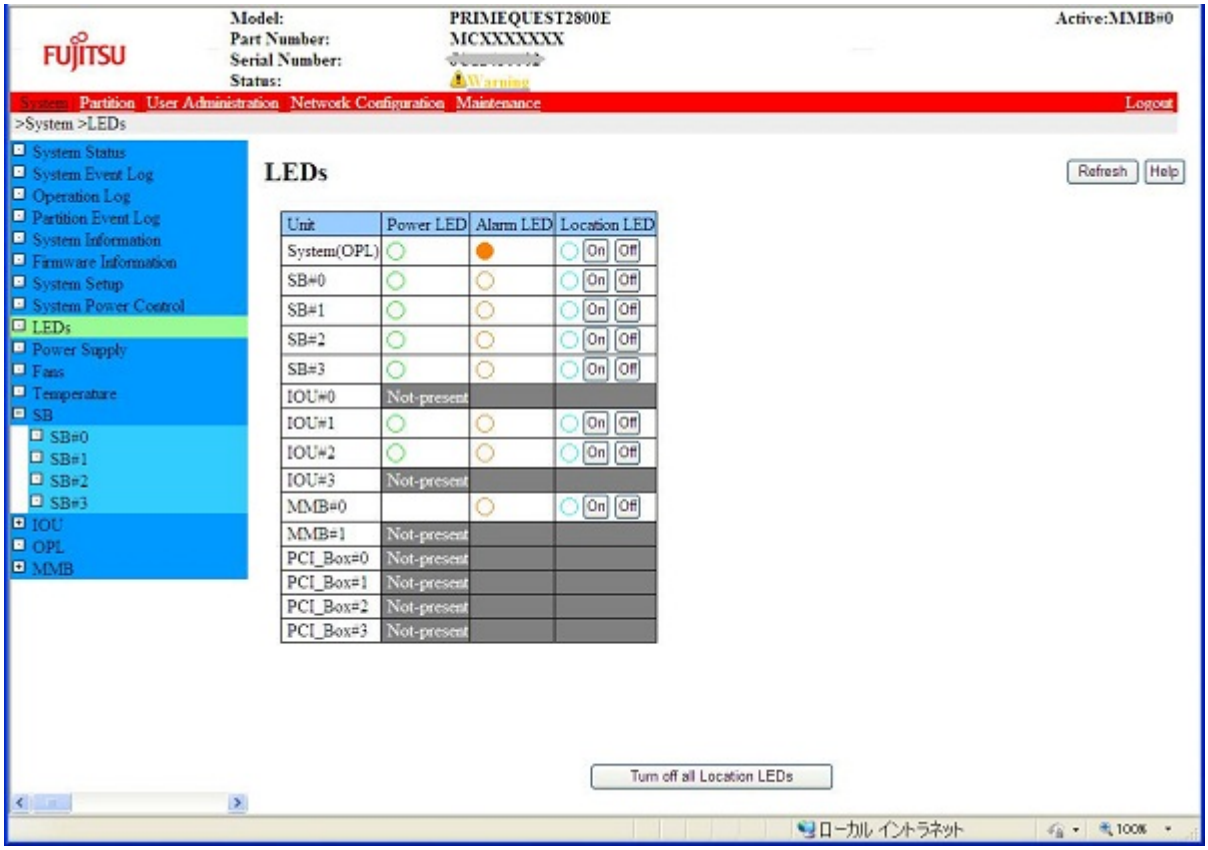
For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

In case of multiple errors, 'multiple errors' message appears in the warning dialogue box.

1.2.9 [LEDs] window

[LEDs] window displays the status of the LED in the system.

FIGURE 1.13 [LEDs] Window



Displays 'Not-present' for the units which are not installed, background color of those rows is displayed in gray color.
Following is displayed only in case of PRIMEQUEST 2400E3/2400E2/2400E model.
SB : SB#0～SB#1

Remarks
The state of SB#0 – SB#3 is displayed for PRIMEQUEST 2400E3/2400E2 Model in the case that Memory Scale-up Board is used.

TABLE 1.36 Display Items and Setting Items in [LEDs] Window

Items	Description
Unit	Displays unit name.
Power LED	The power status is displayed.
Alarm LED	Displays whether the unit is normal or abnormal.
Location LED	Displays/sets the Location LED status of unit.

TABLE 1.37 [LEDs] Window Button

Buttons	Description
On	When [On] button is clicked, Location LED is turned on.
Off	When [Off] button is clicked, Location LED is turned off
Turn off all Location LEDs	When [Turn off all Location LEDs] button is clicked, all [Location LED] in system are turned off.

(1) Menu Operation

[System] – [LEDs

(2) Window Operations

1. Click the [Turn off all Location LEDs] button.
   All [Location LED] in system are turned off.

1.2.10 [Power Supply] window

[Power Supply] window displays the PSU status in the PRIMEQUEST 2000 series.
Once the error in the status of each PSU is detected, the abnormality status is maintained till the PSU is replaced or the abnormality status is cleared by clicking the [Status Clear] button.

FIGURE 1.14 [Power Supply] Window

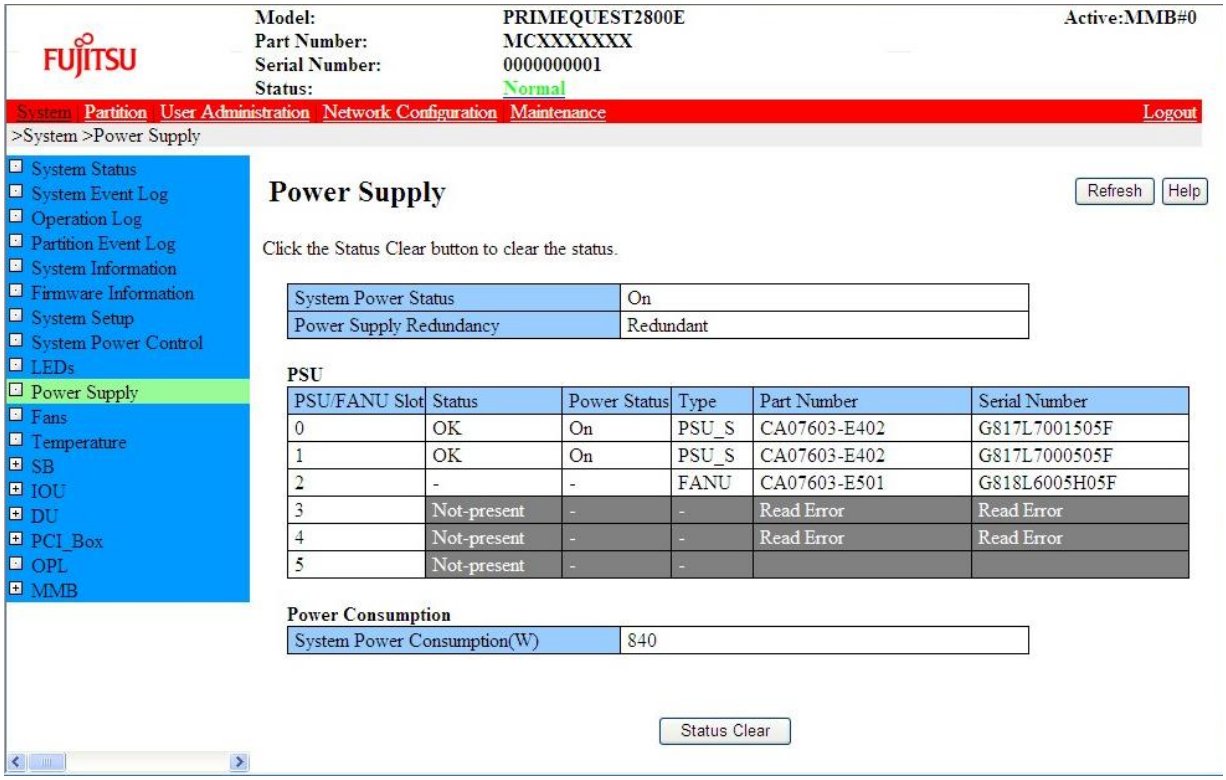


TABLE 1.38 Display Item on [Power Supply] Window

Items	Description
System Power Status	Displays the power supply status of PRIMEQUEST 2000 series system (chassis) • On • Standby
Power Supply Redundancy	Displays redundancy status of PSU/FANU. • Redundant: In case of the PSU is redundant. • Non-redundant: Sufficient Resources: When there is a PSU which is required to operate the system even if redundancy of the PSU is lost. • Non-redundant: Insufficient Resources: When redundancy of the PSU is lost, and when there is no PSU which is required for operating the system.
PSU	
PSU/FANU Slot	Displays the slot of PSU/FANU
Status	Displays the status of PSU/FANU • OK • Not-present • Failed • A/C Lost • Configuration error • - (When Type is FANU)
Power Status	Displays power supply ON/OFF status of PSU/FANU • On • Off • - (When Type is FANU)
Type	Displays the types of PSU/FANU • PSU_P : PSU supporting 80PLUS PLATINUM • PSU_S : PSU supporting 80PLUS SILVER • FANU : Module of FAN only • -: (For Not-present) Mixing of PSU_P/PSU_S in the same component is not possible.
Part Number	Displays the part number of the PSU/FANU.
Serial Number	Displays the serial number of the PSU/FANU
Power Consumption	
System Power Consumption(W)	Displays the power consumption.

TABLE 1.39 Button of [Power Supply] Window

Button	Description
Status Clear	Clears the error status of the PSU

(1) Menu Operation

[System] – [Power Supply]

(2) Window Operations

1. Click the [Status Clear] button.
   Dialog box for confirmation appears.
2. Click the [OK] button to clear the Status of the PSU and click the [Cancel] button when you do not want to clear the Status of the PSU.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00123	Failed to clear the status.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.11 [Fans] window

[Fans] window displays the Fan status in PRIMEQUEST 2000 Series System and clears the Fan status setting.

FIGURE 1.15 [Fans] Window(1)

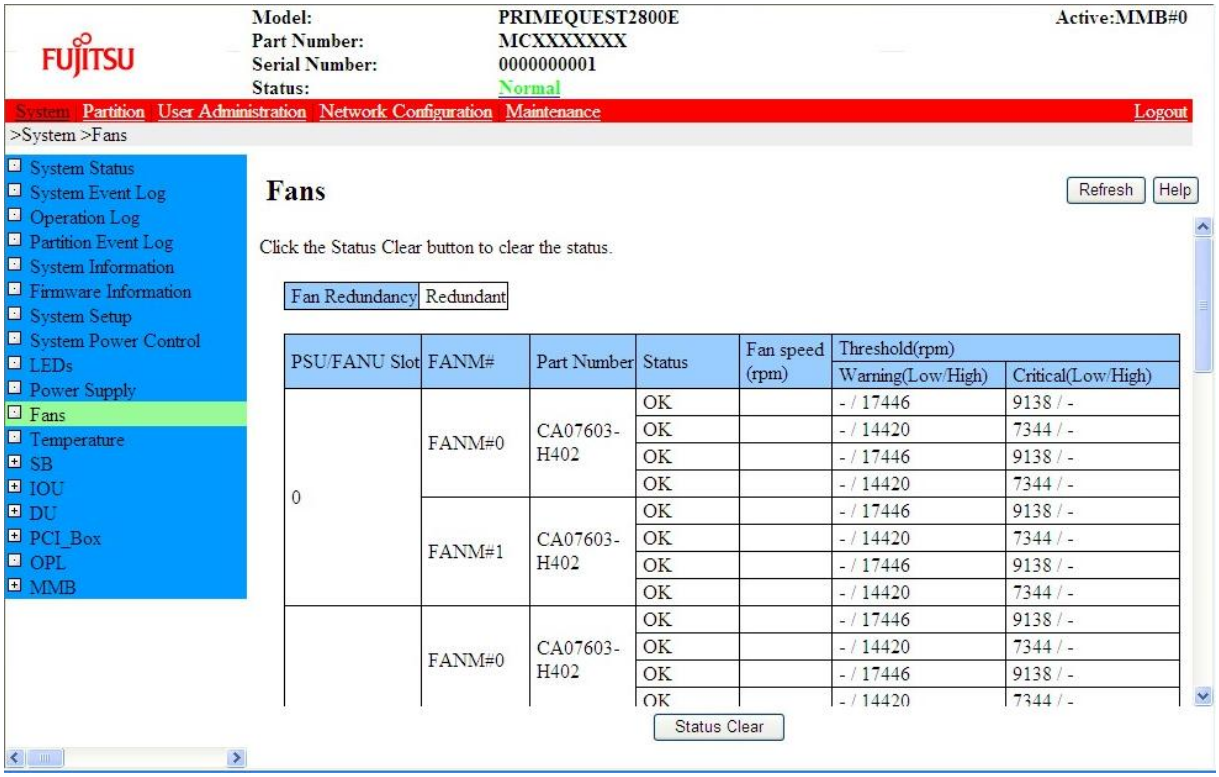
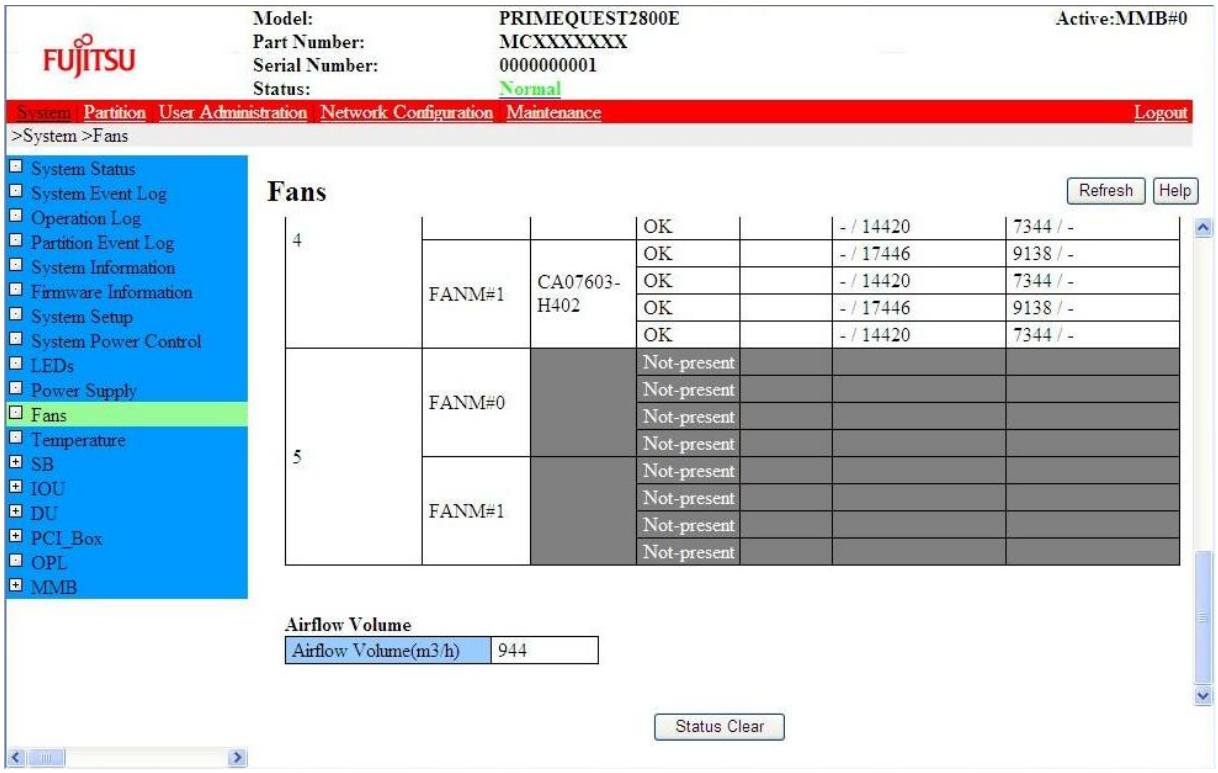


FIGURE 1.16 [Fans] Window(2)



Once an abnormality is detected in the Status of each fan, the abnormal status is maintained until the fan is replaced or until the abnormal status is cleared by clicking the [Status Clear] button.

Remarks

If the abnormality in rotational frequency of a fan is detected again after executing [Status Clear], then, the status changes to [Failed Status]. Accordingly, even if the status of a fan, having abnormal rotational frequency from the beginning is cleared, the status remains as [Failed].

TABLE 1.40 Display items of [Fans] window

Items	Description	
Fan Redundancy	Fan Redundancy Displays the redundancy status of fan. • Redundant: The Fans are Redundant • Non-Redundant: Sufficient Resource: Redundancy of fan is lost, however, there are sufficient fans, to continue the operations of the system. • Non-Redundant: Insufficient Resource: The number of fans is less due to redundancy, and fans to continue operations of the system are sufficient.	
PSU/FANU Slot	Displays the slot location of the PSU or FANU to which the FANM belongs.	
FANM#	Displays the FANM (FAN Module) installed in PSU/FANU Slot.	
Part Number	Displays the part number of the fan.	
Status	Displays the status of each fan • OK • Not-present • Warning • Failed	
Fan Speed(rpm)	Displays the rotational frequency (rpm) of each fan.	
Threshold(rpm)	Warning(Low/High)	Displays the lower limit and upper limit of the warning-level rotational frequency of each fan. (If the rotational frequency is lower or upper than this limit, it is considered to be abnormal)
	Critical(Low/High)	Displays the lower limit and upper limit of the critical-level rotational frequency of each fan. (If the rotational frequency is lower or upper than this limit, it is considered to be abnormal)
Airflow Volume	Displays the airflow.	

TABLE 1.41 [Fans] Window Button

Button	Description
Status Clear	Clears the status of fan.

(1) Menu Operation

[System] – [Fans]

(2) Window Operations

1. Click the [Status Clear] button.
   Dialog box for confirmation appears.
2. Click the [OK] button to clear the Status of the fan and, click the [Cancel] button when you do not want to clear the fan status.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00123	Failed to clear the status.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.12 [Temperature] window

[Temperature] Window displays the temperature of the temperature sensor of PRIMEQUEST 2000 series system.

In case of PRIMEQUEST 2400E3/2400E2/2400E model, only the following items are displayed.
SB: SB#0~SB#1

Remarks
The state of SB#0 – SB#3 is displayed for PRIMEQUEST 2400E3/2400E2 Model in the case that Memory Scale-up Board is used.

FIGURE 1.17 [Temperature] Window

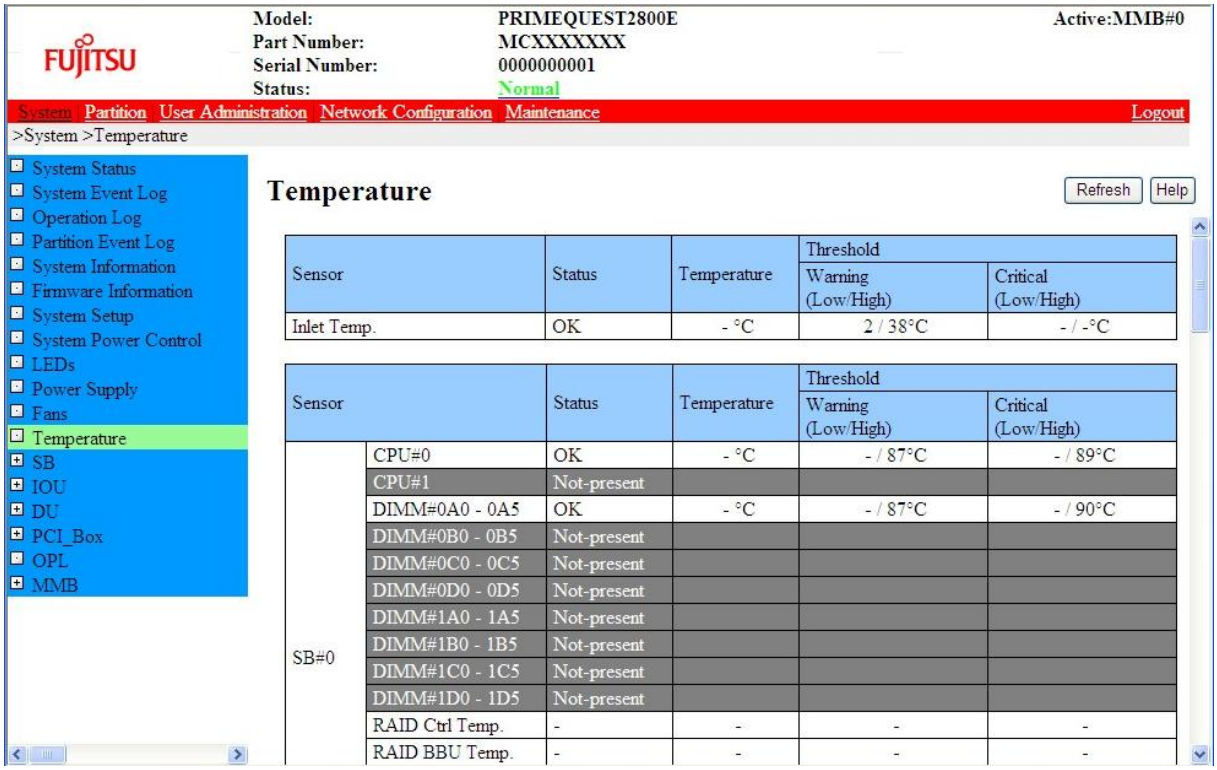


TABLE 1.42 Display Items on [Temperature] Window

Items		Description
Sensor		Displays the kind of each temperature sensor.
Status		Displays the status of each temperature sensor. • OK • Not-present • Warning • Critical
Temperature		Displays the temperature of each temperature sensor.
Threshold	Warning: Low/High	Displays the lower limit and upper limit of the warning-level temperature of each sensor. (If the temperature is lower or upper than this limit, it is considered to be abnormal)
	Critical :Low/High	Displays the lower limit and upper limit of the critical-level temperature of each sensor. (If the temperature is lower or upper than this limit, it is considered to be abnormal)

(1) Menu Operation

[System] – [Temperature]

(2) Window Operations

None

1.2.13 [SB] Menu

[SB] Menu consists of the menus in each SB unit.
The menu of uninstalled SB is not displayed.
The format of window and operating method are same for each menu, therefore only one menu is explained here.
Information on Memory Scale-up Board is displayed on this screen in the case of PRIMEQUEST 2400E3/2400E2.

☐ [SB#x] Window

[SB#x] window displays the status of SB#x board and the settings of SB#x board can be carried out.

FIGURE 1.18 [SB#x] Window (1)

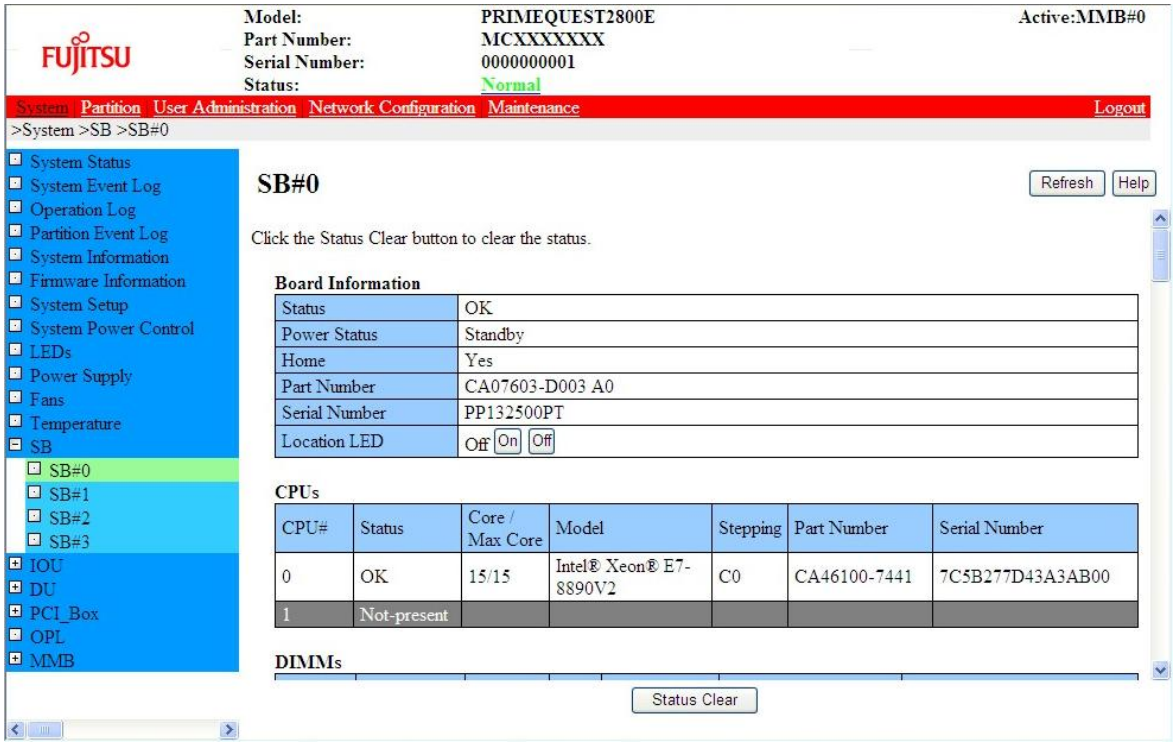


FIGURE 1.19 [SB#x] Window (2)

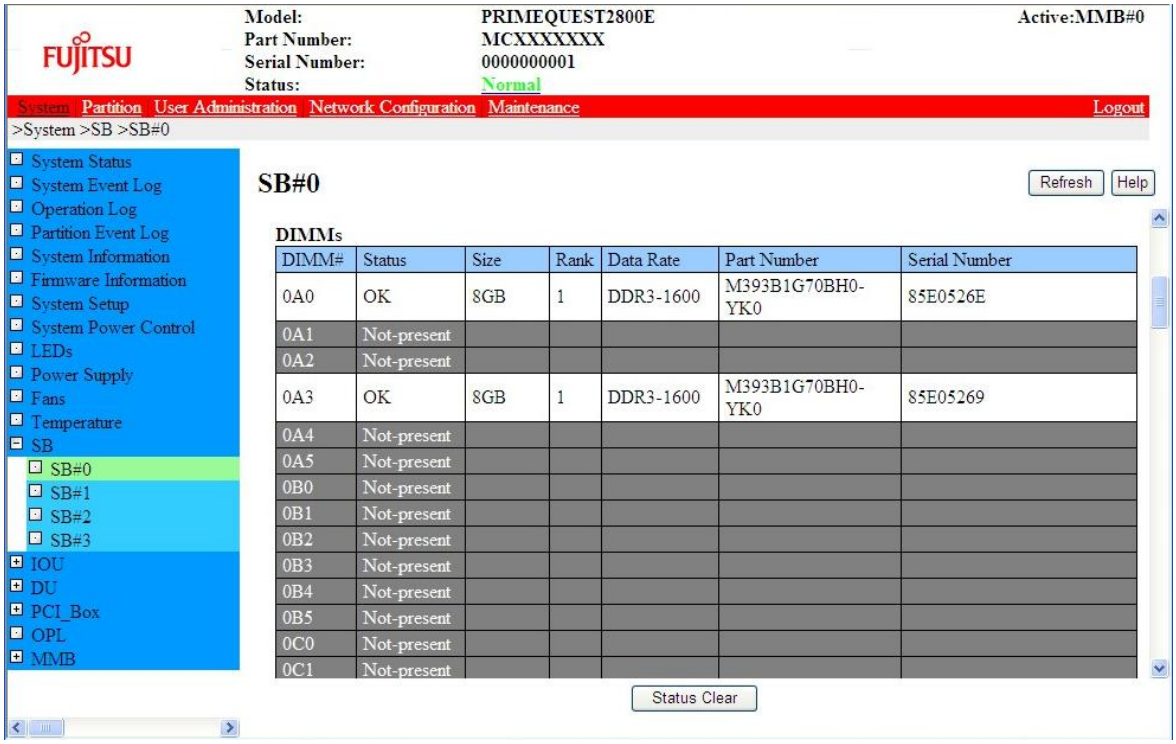


FIGURE 1.20 [SB#x] Window (3)

FIGURE 1.21 [SB#x] Window (4)

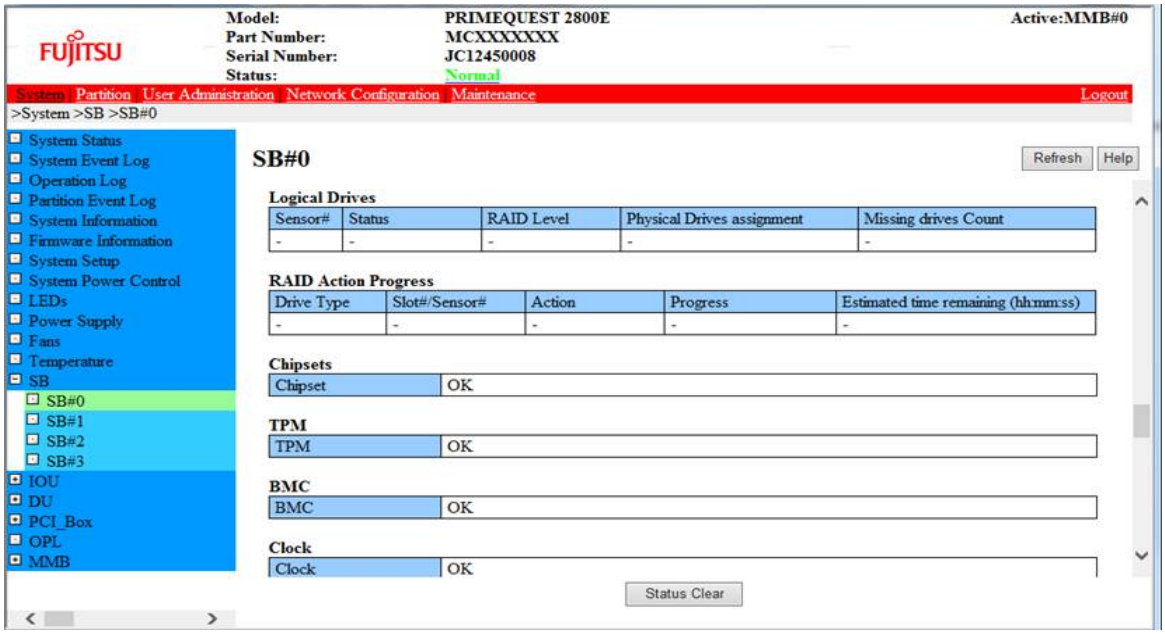


FIGURE 1.22 [SB#x] Window (5)

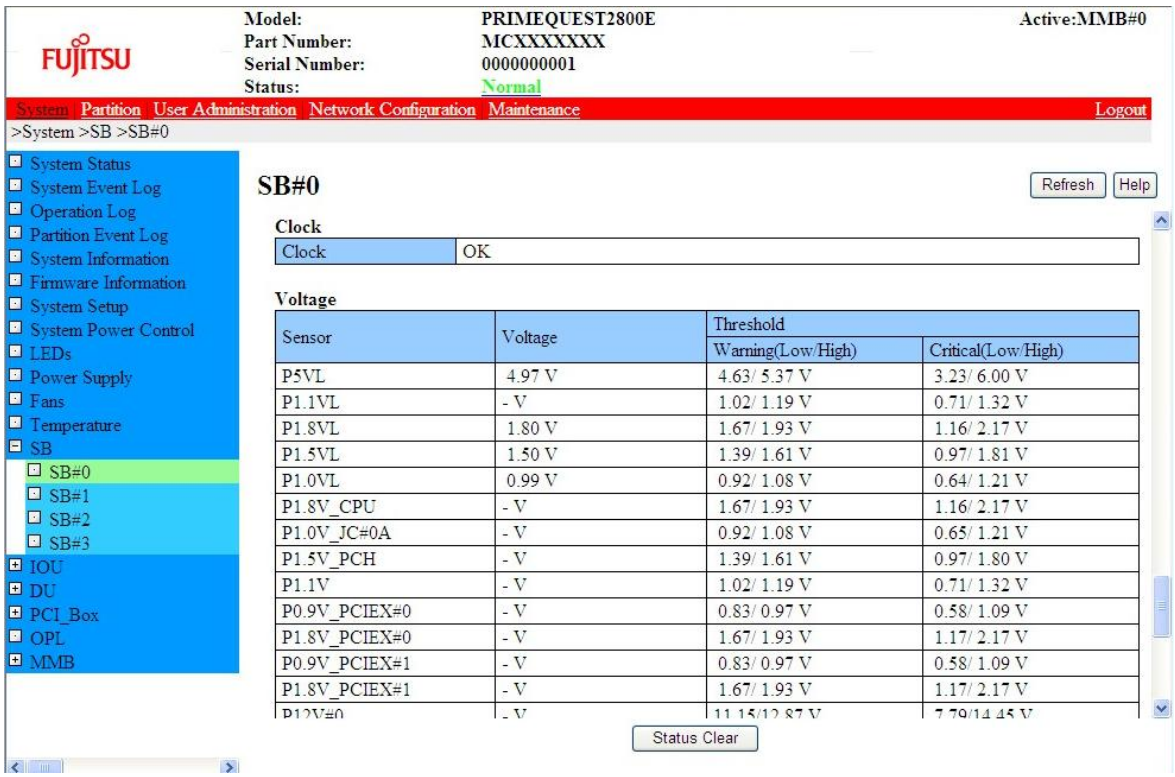


FIGURE 1.23 [SB#x] Window (6)

The CPU and DIMM row that is not mounted is displayed in gray background.
The [Status clear] button and a message [Click the Status Clear Button to clear the status.] are not displayed for a user who does not have setting privileges.

When System Progress of the partition is EFI, Boot, and OS Running, various information on RAID Card, Physical Drives, Logical Drives, and the Action Progress table is displayed.

After System Progress is changed into the state of EFI, Boot, and OS Running until information is correctly displayed, it takes one minute or less.

FIGURE 1.24 [Memory Scale-up Board] Window (1)

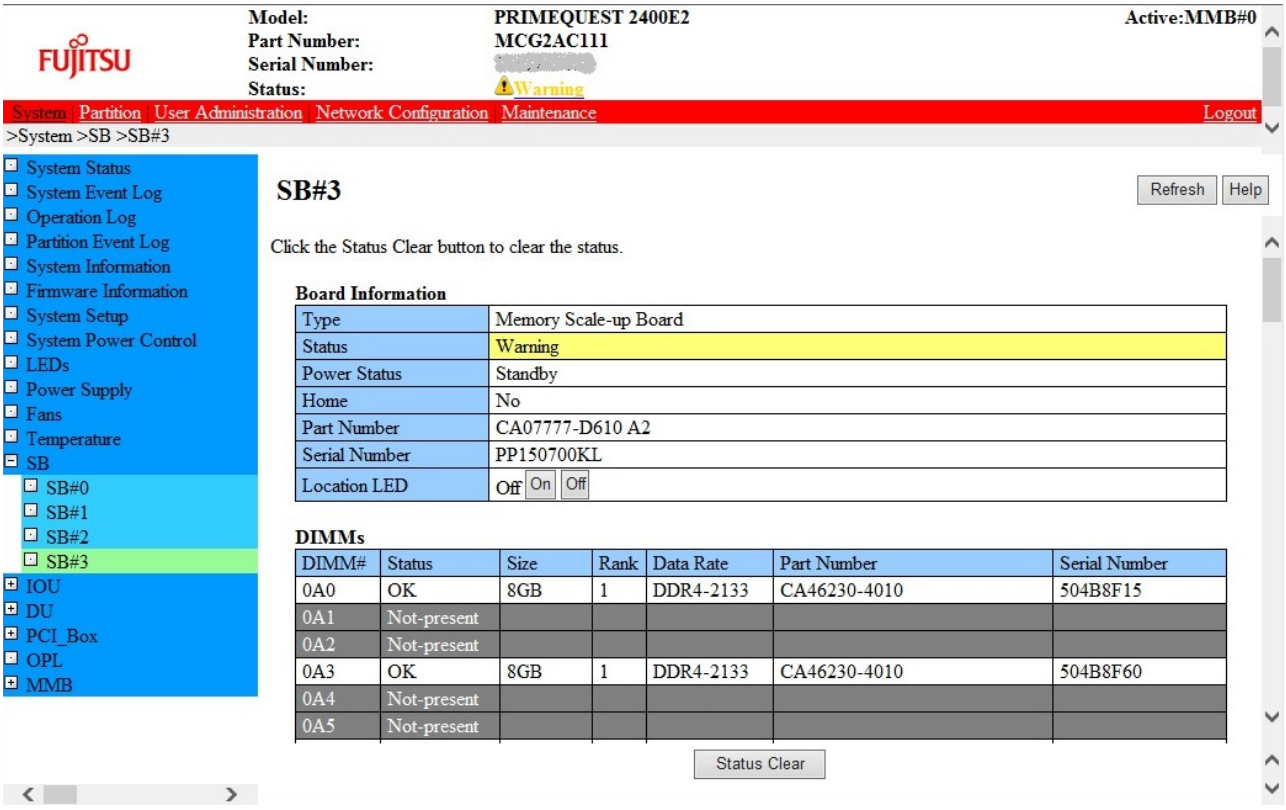


FIGURE 1.25 [Memory Scale-up Board] Window (2)

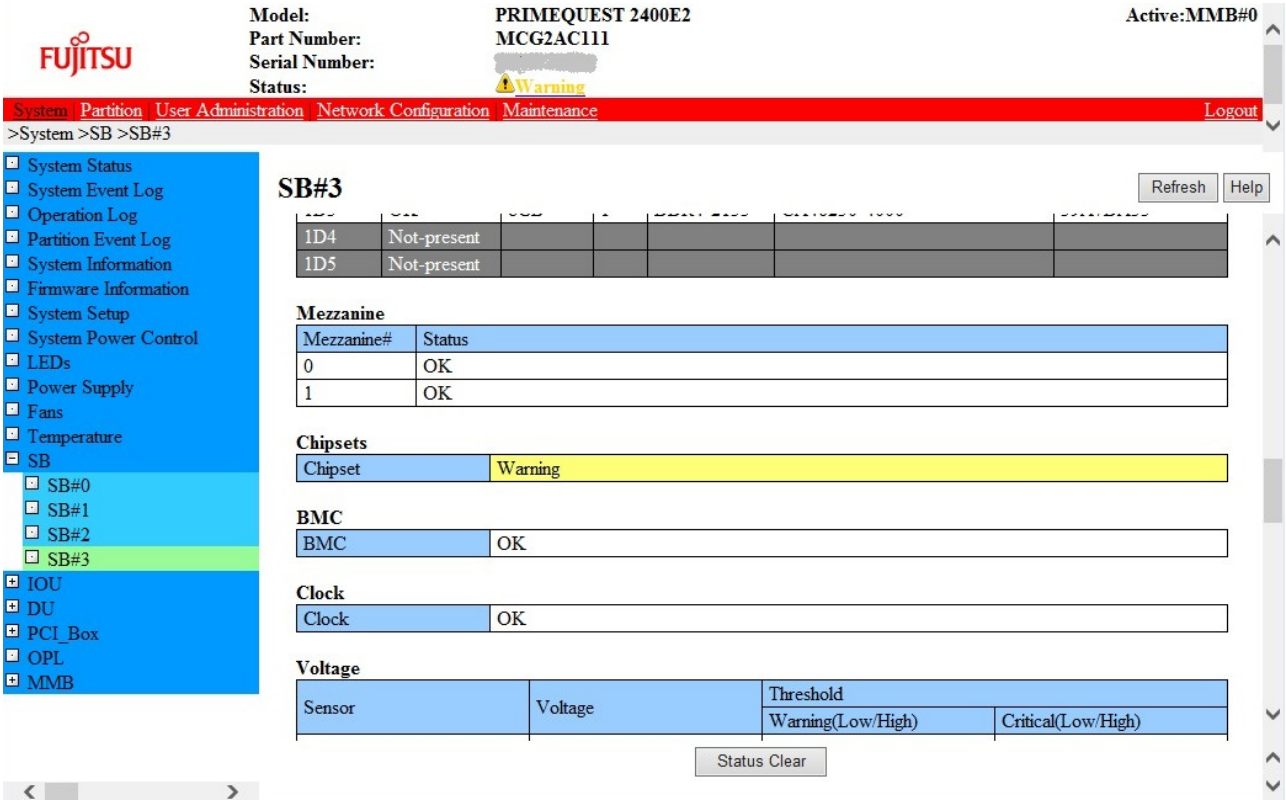


FIGURE 1.26 [Memory Scale-up Board] Window (3)

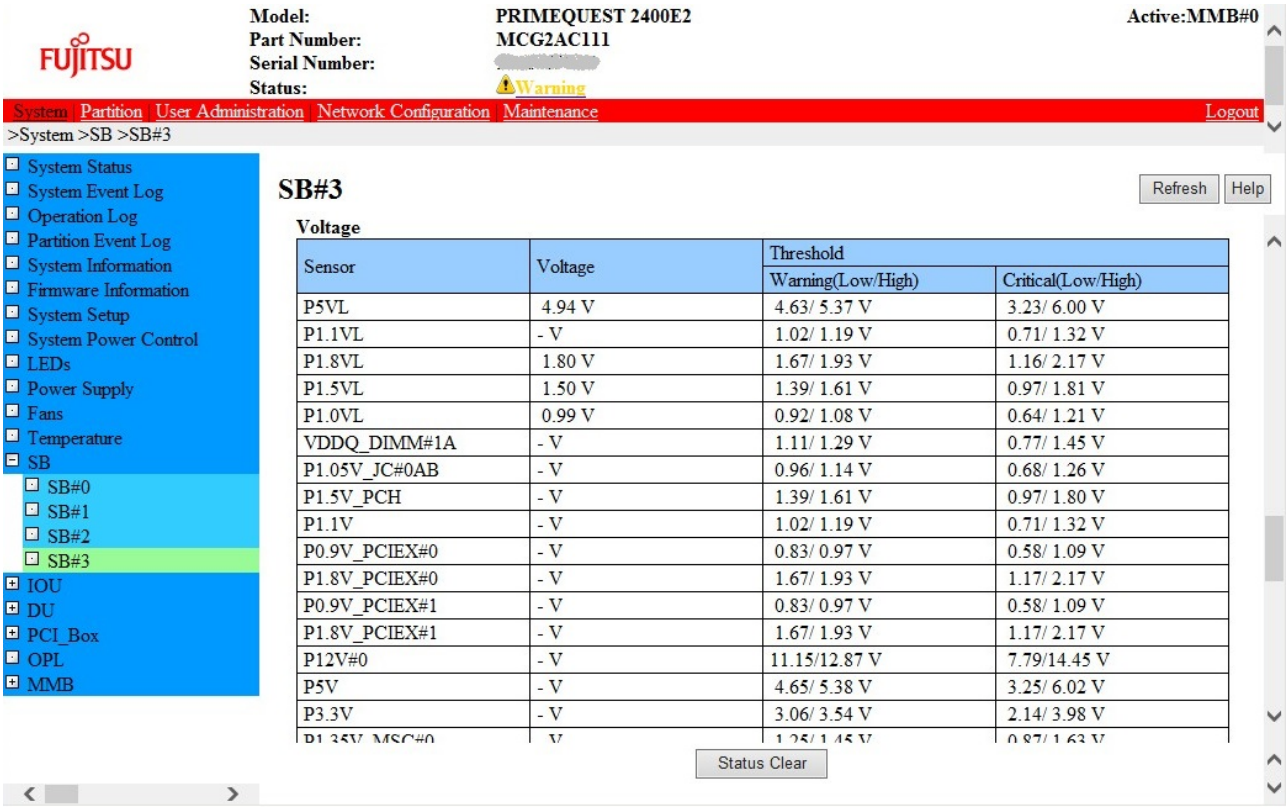


FIGURE 1.27 [Memory Scale-up Board] Window (4)

FIGURE 1.28 [Memory Scale-up Board] Window (5)

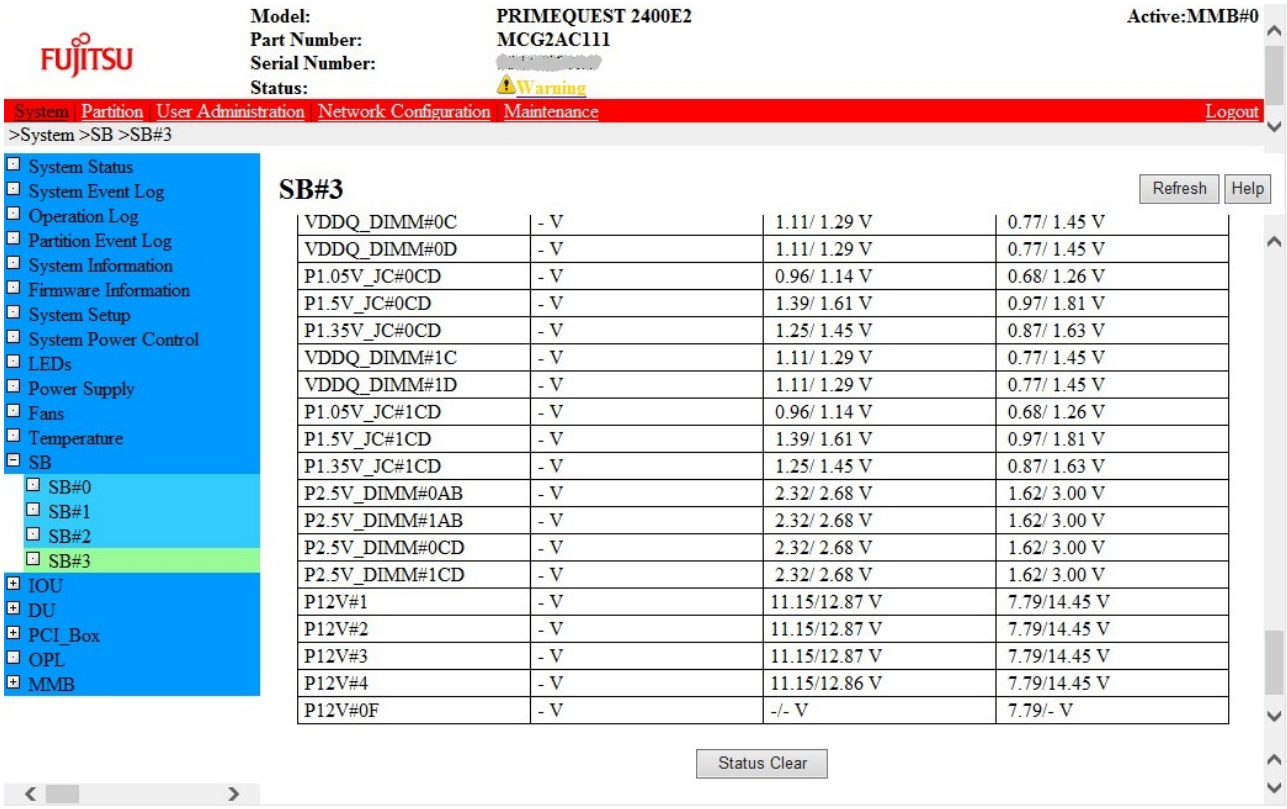


TABLE 1.43 Display and Setting items on [SB#x] Window

Items	Description	
Board Information		
Type	Displays the type of SB. However, only for Memory Scale-up Board. • Memory Scale-up Board	
Status	Displays the status of SB. • OK: No fault on the SB. • Not-present: The SB is not mounted. • Warning: Warning is detected by the voltage sensor on the SB. • Degraded: Error has occurred in a component on the SB. However, the SB can be operated by disconnecting the faulty components. • Failed: A fault has occurred in the SB, and the SB must be disconnected, or the SB has been disconnected. • Unsupported: In case there is an SB which is not supported by the MMB.	
Power Status	Displays the power status of the SB. • On: On status • Standby: Standby status	
Home	Displays whether SB is at Home status or not. • Yes: Home status • No: Not a Home status	
Part Number	Displays the part number of the SB	
Serial Number	Displays the serial number of the SB	
Location LED	Indicates the display status of the Location LED. The display status consists of the following conditions. • On: The light is on • Off: The light is off On, Off and blinking of the Location LED can be controlled by clicking the respective [On], [Off], [Blink] buttons.	
CPUs(This item is not displayed for Memory Scale-up Board)		
CPU#0 CPU#1	Status	Displays the status of the CPU. • OK • Not-present • Disabled • Warning • Failed • Configuration error • Unknown
	Core/Max Core	Displays Normal number of cores number/ maximum number of cores number. • Indicates the degeneracy status of the core. The number of cores displays the numbers except the breakdown core. The number of maximum cores contains the number of cores of Disable.
	Model	Displays the product name of the CPU.
	Stepping	Displays the version number of the CPU.
	Part Number	Displays the part number of the CPU.
	Serial Number	Displays the serial number of the CPU.
DIMMs		

Items	Description	
DIMM#0A0 ~ DIMM#1D5	Status	Displays the status of the DIMM. • OK • Not-present • Warning • Uncorrectable error • Disabled • Configuration error • Degraded Configuration • Unknown
	Size	Displays the size of the DIMM. • 8GB • 16GB • 32GB • 64GB • 128GB (For PRIMEQUEST 2400E3/2800E3) There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Rank	Displays number of DIMM Ranks(1 or 2 or 4). There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Data Rate	Displays Data Rate of DIMM. • DDR3-1066, 1333, 1600 (For PRIMEQUEST 2400E/2800E) • DDR4-1333, 1600, 1866 (For PRIMEQUEST 2400E3/2800E32400E2/2800E2) There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Part Number	Displays the part number of DIMM. There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Serial Number	Displays the serial number of DIMM. There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
Mezzanine		
Mezzanine#0 Mezzanine#1	Status •	Displays the status of the Mezzanine board. • OK • Not-present • Failed
RAID Slot(This item is not displayed for Memory Scale-up Board)		
Power Status	Displays the power status of the RAID slot. • On • Standby	
Slot Status	Displays the status of the RAID slot. • OK • Warning • Not-present • Failed • Disabled	

Items	Description
Link Width	Displays Link Width of the RAID slot format. • x1 • x2 • x4 • x8
Seg/Bus/Dev	Displays Segment#, Bus#, Device# of the RAID device. When RAID Slot is used in Extended Partition, information of Segment#, Bus# and Device# allocated in Extended Partition displays it by the addition in parentheses. Example of display: 0/135/0 (0/27/0)
RAID Card(This item is not displayed for Memory Scale-up Board)	
BBU Status	The state of RAID BBU(Battery Backup Unit) is displayed. • Online • On Battery • Charging • Discharging • Battery Low • Relearn Required • Failed • Not-present
Vendor ID	Vendor ID of RAID Card is displayed. Remarks: ID uniquely allocated in manufacturer of card. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)
Device ID	Device ID of RAID Card is displayed. Remarks: ID uniquely allocated in device of manufacturer. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)
Physical Drives Count	The number of physical drives connected with RAID Card is displayed.
Logical Drives Count	The number of logical drives composed under the control of RAID Card is displayed.
Serial Number	The serial number of RAID Card is displayed.
Firmware Version	The firmware version of RAID Card is displayed.
Physical Drives(This item is not displayed for Memory Scale-up Board)	
Slot#	The slot number equipped with a physical drive is displayed.
Status	The state of a physical drive is displayed. • Operational • Available • Failed • Hot Spare • Rebuilding • SMART err • Shielded • Bad Block • Not-present
Vendor	The vendor name of a physical drive is displayed.
Model	The model name of a physical drive is displayed.

Items	Description
Capacity	The capacity of a physical drive is displayed.
Logical Drives(This item is not displayed for Memory Scale-up Board)	
Sensor#	The sensor number of a logical drive is displayed.
Status	The state of a logical drive is displayed.
RAID Level	The RAID level of a logical drive is displayed.
Physical Drives assignment	The slot number of a physical drive that composes a logical drive is displayed.
Missing drives Count	The number of physical drives missed to compose a logical drive at the RAID level is displayed.
RAID Action Progress(This item is not displayed for Memory Scale-up Board)	
Drive Type	The drive type that the RAID action is executed is displayed. • Physical : Hardware RAID • Logical : Software RAID
Slot#/Sensor#	Slot# from which the RAID action is executed is shown when Drive Type is Physical, and Sensor# from which the RAID action is executed is shown when Drive Type is Logical.
Action	The RAID action under execution is displayed. • Rebuilding : It is shown for a physical drive to execute the rebuild of the RAID drive. • Copyback Running : It is shown for a physical drive to execute the copy backing. • MDC Running : It is shown for a logical drive to execute MDC (Make Data Consistent).
Progress	The progress rate of the RAID action under execution is displayed by the percentage.
Estimated time remaining (hh:mm:ss)	The remaining time that will be expected by the time the RAID action under execution is completed is displayed.
Chipsets	
Chipset	• OK • Warning • Failed
TPM(This item is not displayed for Memory Scale-up Board)	
TPM	Displays the status of the TPM. • OK • Warning • Failed Notes When the SB is ‘without TPM mode’, this field is not displayed.
BMC	
BMC	Displays the status of the BMC. • OK • Warning • Failed
Clock	
Clock	Displays the status of the System Clock. • OK • Failed
Voltage	

Items	Description
Sensor (For PRIMEQUEST 2400E/2800E/2800B)	Displays the Voltage sensor type. P5VL P1.1VL P1.8VL P1.5VL P1.0VL P1.8V_CPU VDDQ_DIMM#1A P1.0V_JC#0A P1.5V_PCH P1.1V P0.9V_PCIEX#0 P1.8V_PCIEX#0 P0.9V_PCIEX#1 P1.8V_PCIEX#1 P12V#0 P5V P3.3V P1.35V_CPU#0 P1.35V_CPU#1 VCC_CPU#0 VSA_CPU#0 VTT_CPU#0 VDDQ_DIMM#0A VDDQ_DIMM#0B P1.0V_JC#0B P1.5V_JC#0AB P1.35V_JC#0AB VCC_CPU#1 VSA_CPU#1 VTT_CPU#1 VDDQ_DIMM#1B P1.0V_JC#1A P1.0V_JC#1B P1.5V_JC#1AB P1.35V_JC#1AB VDDQ_DIMM#0C VDDQ_DIMM#0D P1.0V_JC#0C P1.0V_JC#0D P1.5V_JC#0CD P1.35V_JC#0CD VDDQ_DIMM#1C VDDQ_DIMM#1D P1.0V_JC#1C P1.0V_JC#1D P1.5V_JC#1CD P1.35V_JC#1CD

Items		Description
Sensor (For PRIMEQUEST 2400E3/2800E3/ 2400E2/2800E2)		P5VL P1.1VL P1.8VL P1.5VL P1.0VL VDDQ_DIMM#1A P1.05V_JC#0AB P1.5V_PCH P1.1V P0.9V_PCIEX#0 P1.8V_PCIEX#0 P0.9V_PCIEX#1 P1.8V_PCIEX#1 P12V#0 P5V P3.3V P1.35V_CPU#0 *1 P1.35V_CPU#1 *1 VCC_CPU#0 *1 VTT_CPU#0 *1 VDDQ_DIMM#0A VDDQ_DIMM#0B P1.5V_JC#0AB P1.35V_JC#0AB VCC_CPU#1 *1 VTT_CPU#1 *1 VDDQ_DIMM#1B P1.05V_JC#1AB P1.5V_JC#1AB P1.35V_JC#1AB VDDQ_DIMM#0C VDDQ_DIMM#0D P1.05V_JC#0CD P1.5V_JC#0CD P1.35V_JC#0CD VDDQ_DIMM#1C VDDQ_DIMM#1D P1.05V_JC#1CD P1.5V_JC#1CD P1.35V_JC#1CD P2.5V_DIMM#0AB P2.5V_DIMM#1AB P2.5V_DIMM#0CD P2.5V_DIMM#1CD P12V#1 P12V#2 P12V#3 P12V#4 P12V#0F
Voltage		Displays the current power voltage.
Threshold	Warning(Low/High	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical(Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

*1: The sensor type name of the voltage displays the display name for Memory Scale-up Board, "xxx_CPU" -> and " xxx_MSC".

Example. P1.35_CPU#0 → P1.35_MSC#0

TABLE 1.44 [SB#x] Window Button

Buttons	Description
On	When the [On] button is clicked, the Location LED is ON.
Off	When the [Off] button is clicked, the Location LED is OFF.
Status Clear	Clears the status of the SB.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00048	The specified unit is not installed.
E_00123	Failed to clear the status.

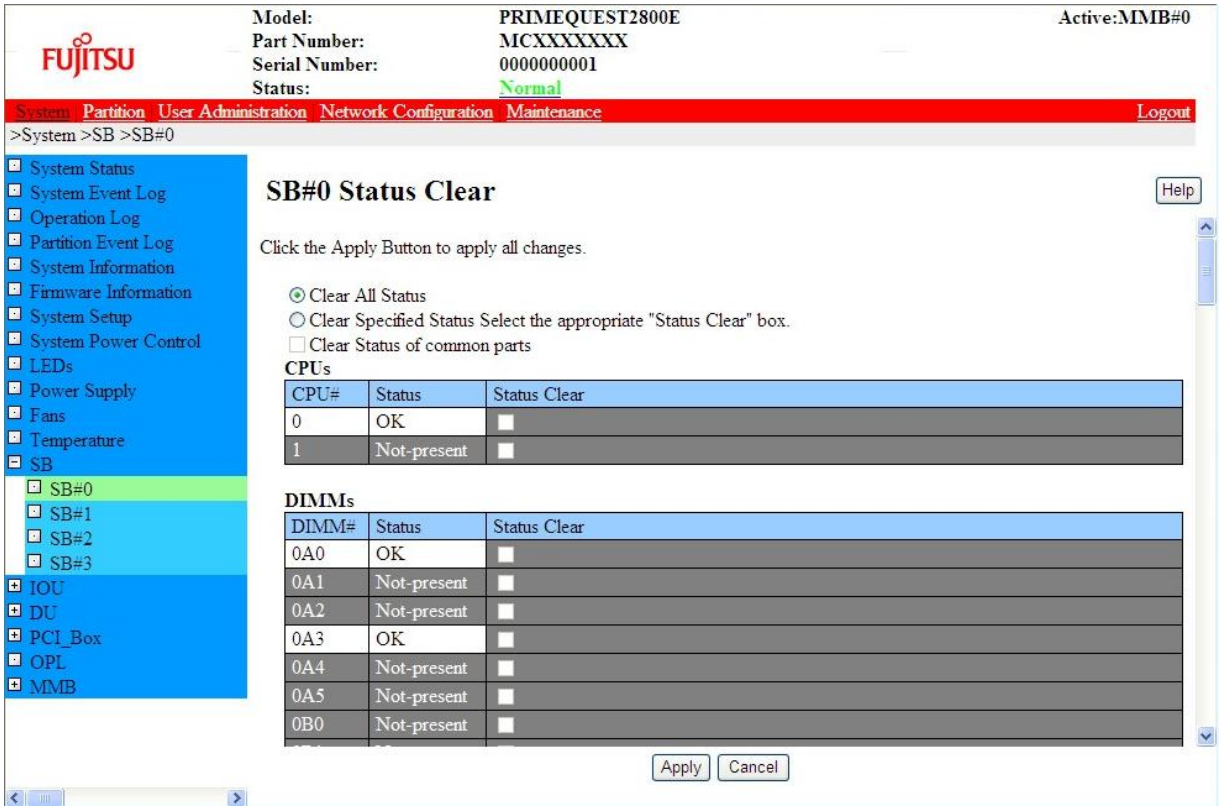
For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

☐ [SB#x Status Clear] Window

When the [Status Clear] button on the [SB#x] window is clicked, whether to clear the error status of the component can be specified.
The error status of the component in which an abnormality is detected on the SB is canceled, the relevant component can be specified so that it can be used again at the time of next reboot. If error is detected again at the time of re-boot, then the error status of that such component is registered again.

When the check box of "Clear Status of common parts" is checked, things except CPU/DIMM (Chipset system) are cleared.

FIGURE 1.29 [SB#x Status Clear] Window (Message Display)



(1) Menu Operation
[System] – [SB] – [SB#x] – [Status Clear] button

(2) Window Operations
1. Specify as given below to clear the component.

- Select [Clear All Status] to clear all the components.
- Select [Clear Specified Status] to individually clear the error status of the components, and check the [Status Clear] checkbox of the status of the components to be cleared.
- Check the [Clear Status of common parts] check box to clear the common parts.

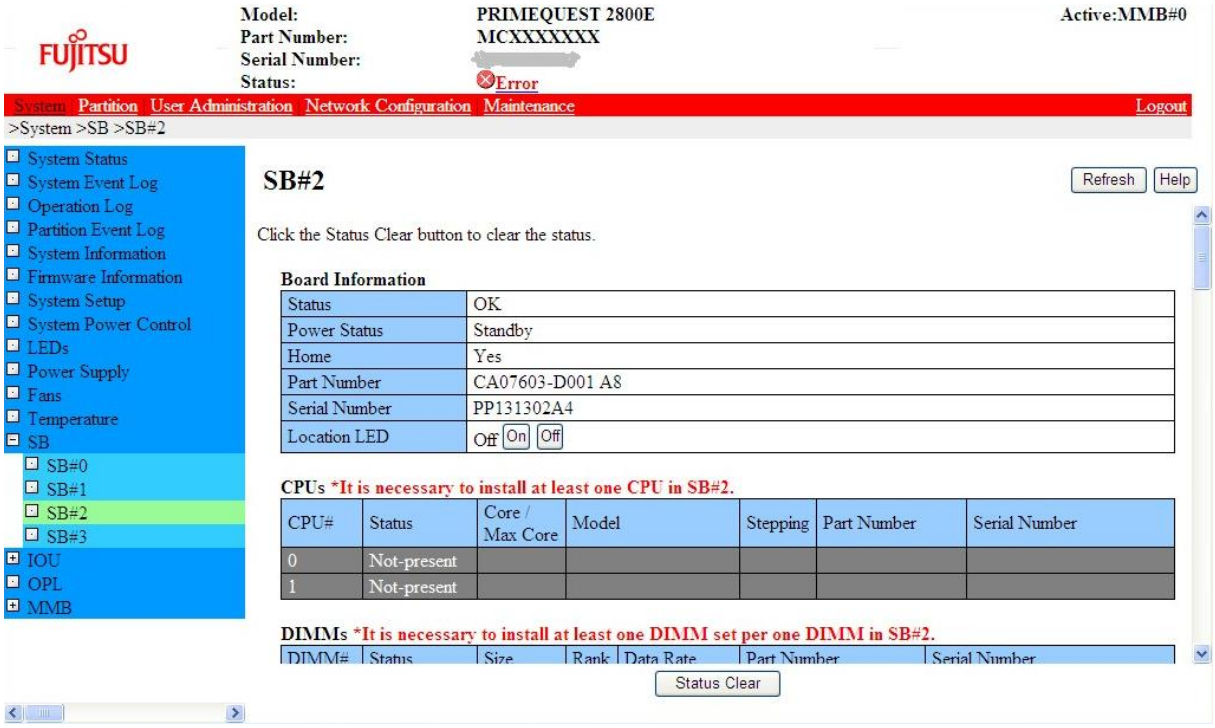
2. Click the [Apply] button.
The specified components are set to clear.

☐ Display when there is no CPU/DIMM installed

When there is no CPU or DIMM mounted, the SB is not degraded from the partition and stops the Partition start.
At that time, the following messages are displayed on the table of the composition display of CPU or DIMM respectively to make CPU or any DIMM easy to recognize not installed as follows by the deficit and the boldface character.

"*It is necessary to install at least one CPU in SB#x." (In case of CPU)
"*It is necessary to install at least one DIMM set per one DIMM in SB#x." (In case of DIMM)

FIGURE 1.30 [SB#x] Window (When there is no CPU/DIMM)



1.2.14 [IOU] Menu

The IOU menu includes the following menus for each IOU.

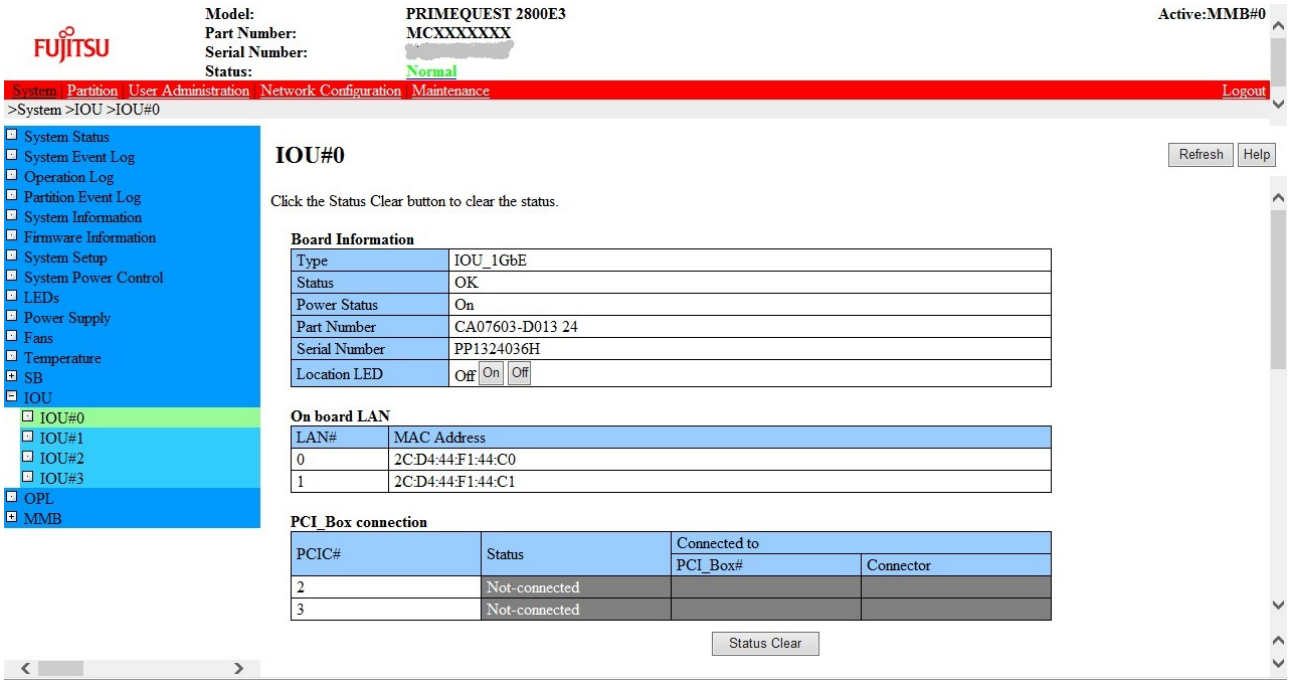
- [IOU#0] ~ [IOU#3]

The menu is not displayed for the IOU which is not installed.
Since the window and the operating method are same for each menu, only one menu is described here.

☐ [IOU#x] Window

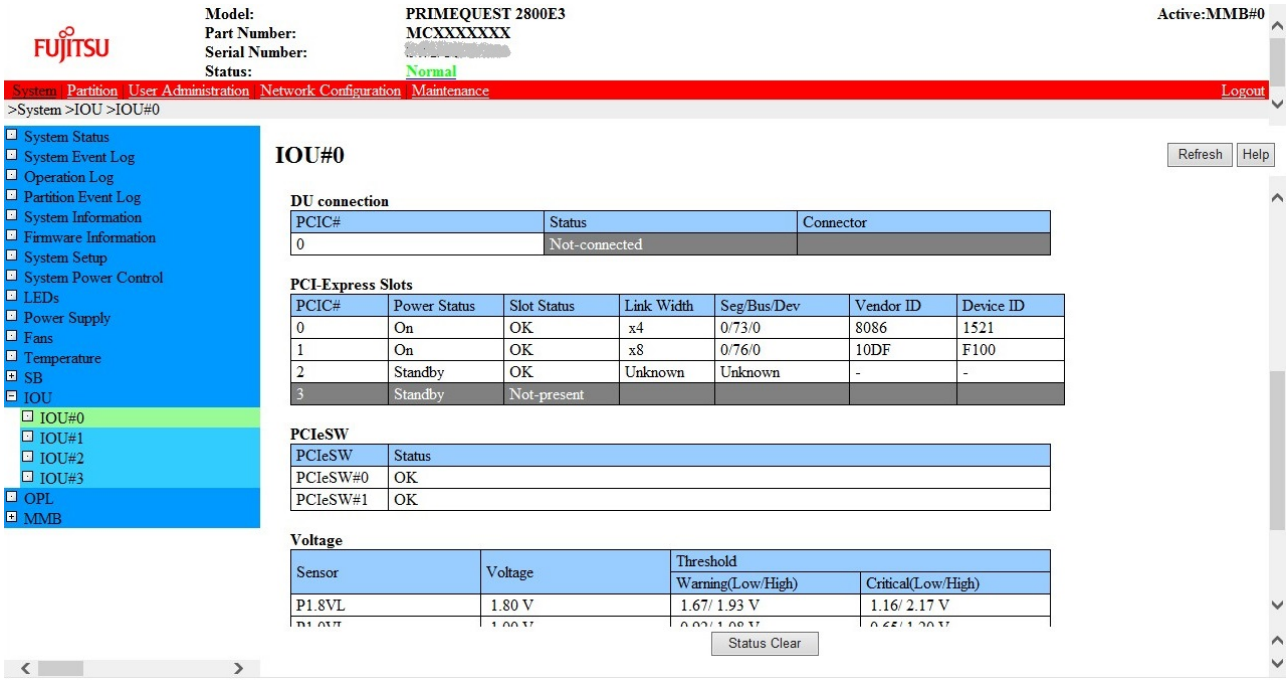
[IOU#x] window displays the status of the IOU installed in IOU#x slot. In addition, IOU can be set.

FIGURE 1.31 [IOU#x] Window (1)



PCI_Box connection is available for PRIMEQUEST 2800E3/2800E2/2800E and 2400E3/2400E2/2400E.

FIGURE 1.32 [IOU#x] Window (2)



The displays other than PCI_Box connection do not depend on the model and are the same.

FIGURE 1.33 [IOU#x] Window (3)

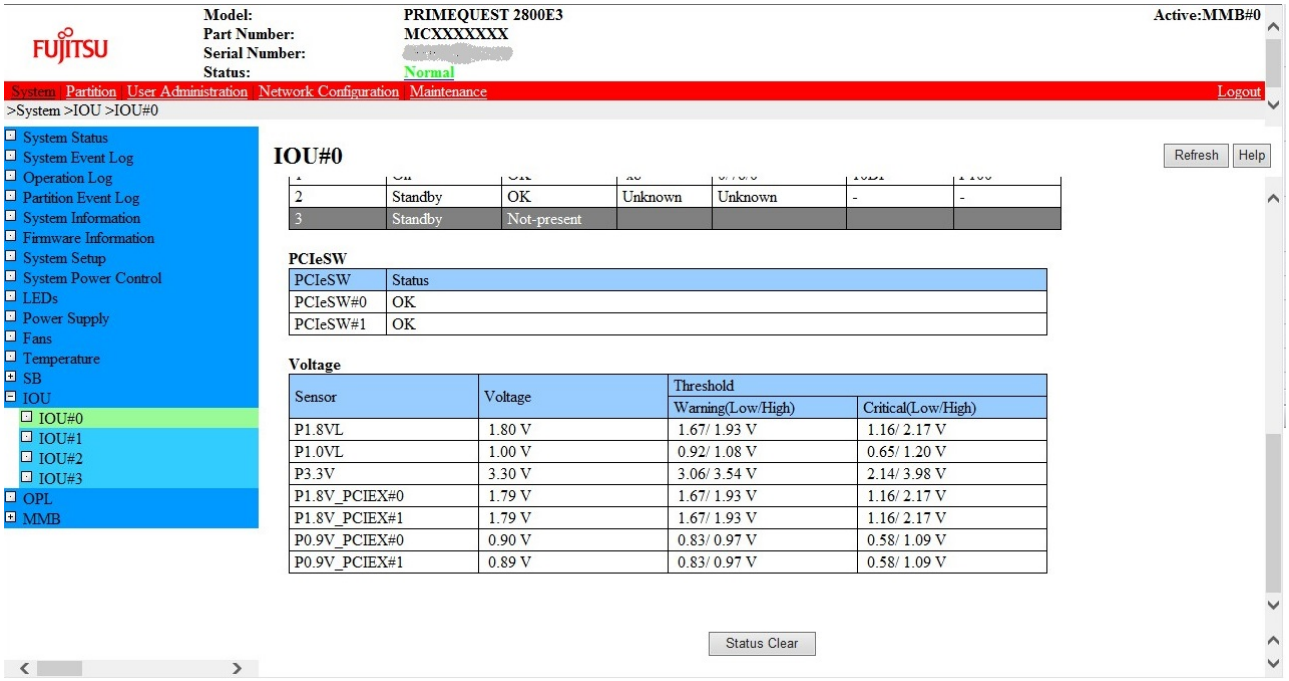


TABLE 1.45 Display Items and Setting Items in [IOU#x] Window

Items	Description	
Board Information		
Type	Displays types of IOUs. • IOU_10GbE • IOU_1GbE	
Status	Displays status of the IOU ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed	
Power Status	Displays the power status of the IOU. ・ On ・ Standby	
Part Number	Displays the part number of the IOU.	
Serial Number	Displays the serial number of the IOU.	
Location LED	Shows the display status of the Location LED. Following are the display status. ・ On: During ON ・ Off: During OFF On/Off of the Location LED can be controlled by clicking [On], [Off] button.	
On board LAN		
LAN#	Displays the LAN number.	
MAC Address	Displays the MAC Address for GbE that is being installed on the IOU. Displays “Unknown” when MAC Address is not clear.	
PCI_Box connection		
PCIC#	Displays PCIC# for PCI_Box connection on the IOU.	
Status	Displays the status of connection with the PCI_Box. ・ OK ・ Not-connected ・ Incorrect connection	
Connected to	PCI_Box#	Displays the destination PCI_Box#. When not connected, background color is displayed in gray color.
	Connector	Displays the destination Connector number of PEXU. When not connected, background color is displayed in gray.
Connector	Displays the destination Connector number of the PEXU. When not connected, background color is displayed in gray.	
DU connection		
PCIC#	Displays PCIC# for DU connection on the IOU.	
Status	Displays the status of connection with the DU. ・ OK ・ Not-connected ・ Incorrect connection	
Connector	Displays the destination Connector number of the DU. When not connected, background color is displayed in gray.	
PCI-Express Slots		
PCIC#	Displays the number of the PCI_Express slot.	
Power Status	Displays the power status of the IOU. ・ On ・ Standby	

Items	Description	
Slot Status	Displays the status of the PCI_Express slot. ・ OK ・ Not-present ・ Failed ・ Disabled	
Link Width	Displays Link Width of PCI_Express slot format. ・ x1 ・ x2 ・ x4 ・ x8	
Seg/Bus/Dev	Displays Segment#, Bus#, Device# of PCI Device. When PCI-Express Slots is used in Extended Partition, information of Segment#, Bus# and Device# allocated in Extended Partition displays it by the addition in parentheses. Example of display: 0/135/0 (0/27/0) When this device is PCNC which is shared with some Extended Partitions, Segment#, Bus#, Device# on only one Extended Partition are displayed.	
Vendor ID	Displays the Vendor ID of the PCI Card. Remarks: ID uniquely allocated in manufacturer of card. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)	
Device ID	Displays the Device ID of the PCI Card. Remarks: ID uniquely allocated in device of manufacturer. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)	
PCIeSW		
PCIeSW	Displays the number of PCIeSW.	
Status	Displays the status of PCIeSW. ・ OK ・ Warning ・ Failed	
Voltage		
Sensor	Displays the Voltage sensor type. P1.8VL(*1) P1.0VL(*1) P2.5VL(*2) P1.2VL(*2) P0.8VL(*2) P0.67VL(*2) P3.3V(*3) P1.8V_PCIEX#0(*1) P1.8V_PCIEX#1(*1) P1.8V(*2) P0.9V_PCIEX#0(*3) P0.9V_PCIEX#1(*3) *1: IOU_1GbE,*2: IOUF,*3: IOU_1GbE/IOUF commonness	
Voltage	Displays the current power voltage.	
Threshold	Warning (Low/High)	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

Items	Description	
	Critical (Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.46 Button of [IOU#x] Screen

Buttons	Description
On	Turns on the Location LED by clicking [On] button.
Off	Turns off the Location LED by clicking [Off] button
Status Clear	Clears the error status of IOU#x

When you click [Status Clear], the error message of the IOU gets cleared and it is possible to specify the IOU at the time of next reboot. If error is detected again at the time of reboot, the error status of the IOU gets registered once again.

(1) Menu Operation

[System] – [IOU] – [IOU#x]

(2) Window Operations

1. Click the [Status Clear] button.
   Confirmation dialogue box is displayed.
2. Click the [Apply] button. Click the [OK] button to clear the error status and click the [Cancel] when you do not want to clear the error status of the IOU.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00123	Failed to clear the status.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.15 [DU] Menu

In [DU#x] Window, the status of disk unit #x mounted in PRIMEQUEST 2000 series can be displayed and status of board can be controlled.

FIGURE 1.34 [DU#x] Window

For a user without setting privileges, [Status Clear] button and ‘Click the Status Clear button to clear the status.’ Message will not be displayed.

When System Progress of the partition is EFI, Boot, and OS Running, various information on RAID Card, Physical Drives, Logical Drives, and the Action Progress table is displayed. (*1)

(*1) After System Progress is changed into the state of EFI, Boot, and OS Running until information is correctly displayed, it takes one minute or less.

When Physical Drive unmounts when RAID Card and PhysicalDrives are the following installing compositions, the display of Status of Physical Drive might become no "Not-present" it and "-".

1. When RAID Card is installed only in RAID Slot#0 of DU, and the disk is not installed in Physical Drive#0 or # 1
2. When RAID Card is installed only in RAID Slot#1 of DU, and the disk is not installed in Physical Drive#2 or # 3

TABLE 1.47 Display and Setting items of [DU#x] Window

Items	Description
Board Information	
Status	Displays the status of the disk unit. ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed
Power Status	Displays the power status of the disk unit. ・ On ・ Standby
DU Part Number	Displays the part number of the disk unit. "-" is displayed whenever it Power OFFs it.
DU Serial Number	Displays the serial number of the disk unit. "-" is displayed whenever it Power OFFs it.
RAID Slot	
RAID Slot#	Displays RAID slot number.
Power Status	Displays power status of the RAID slot. ・ On ・ Standby
Slot Status	Displays the status of the RAID Slot. ・ OK ・ Not-present ・ Failed ・ Degraded
Link Width	Displays the Link Width of the DU/RAID slot format. ・ x1 ・ x2 ・ x4 ・ x8
Seg/Bus/Dev	Displays Segment#, Bus#, Device# of the DU/RAID Device. When RAID Slot is used in Extended Partition, information of Segment#, Bus# and Device# allocated in Extended Partition displays it by the addition in parentheses. Example of display: 0/135/0 (0/27/0)
RAID Card	
Slot#	The slot number equipped with the RA identification card is displayed.
BBU Status	The state of RAID BBU is displayed. • Online • On Battery • Charging • Discharging • Battery Low • Relearn Required • Failed • Not-present
Vendor ID	Vendor ID of RAID Card is displayed. Remarks: ID uniquely allocated in manufacturer of card. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)

Items	Description
Device ID	Device ID of RAID Card is displayed. Remarks: ID uniquely allocated in device of manufacturer. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)
Physical Drives count	The number of physical drives connected with RAID Card is displayed.
Logical Drives count	The number of logical drives composed under the control of RAID Card is displayed.
Serial Number	The serial number of RAID Card is displayed.
Firmware Version	The firmware version of RAID Card is displayed.
Physical Drives	
Slot#	The slot number equipped with a physical drive is displayed.
Status	The state of a physical drive is displayed. • Operational • Available • Failed • Hot Spare • Rebuilding • SMART err • Shielded • Bad Block • Not-present
Vendor	The vendor name of a physical drive is displayed.
Model	The model name of a physical drive is displayed.
Capacity	The capacity of a physical drive is displayed.
RAID Card#	The slot number of RAID Card that connects a physical drive is displayed.
Logical Drives	
Sensor#	The sensor number of a logical drive is displayed.
Status	The state of a logical drive is displayed.
Raid Level	The RAID level of a logical drive is displayed.
Physical Drives assignment	The slot number of a physical drive that composes a logical drive is displayed.
Missing drives count	The number of physical drives missed to compose a logical drive at the RAID level is displayed.
RAID Action Progress	
Drive Type	The drive type that the RAID action is executed is displayed. • Physical : Hardware RAID • Logical : Software RAID
Slot#/Sensor#	Slot# from which the RAID action is executed is shown when Drive Type is Physical, and Sensor# from which the RAID action is executed is shown when Drive Type is Logical.
Action	The RAID action under execution is displayed. • Rebuilding : It is shown for a physical drive to execute the rebuild of the RAID drive. • Copyback Running : It is shown for a physical drive to execute the copy backing • MDC Running : It is shown for a logical drive to execute MDC(Make Data Consistent).
Progress	The progress rate of the RAID action under execution is displayed by the percentage.
Estimated time remaining (hh:mm:ss)	The remainder time that will be expected by the time the RAID action under execution is completed is displayed.
Voltage	

Items	Description	
Sensor	Displays the Voltage sensor type. 12V_DU_SLOT0 12V_DU_SLOT1	
Voltage	Displays the current power voltage.	
Threshold	Warning (Low/High)	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical (Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.48 Buttons on [DU#x] Window

Button	Description
Status Clear	Clears the error message of the disk unit

When the [Status Clear] button is clicked, the error status of the disk unit will be cleared and it can be specified so that the disk unit can be used again at the time of the next reboot. When an error is detected again at the time of re-boot, the error status of the disk unit would be recorded again.

(1) Menu Operation

[System] – [DU] – [DU#x]

(2) Window Operations

1. Click the [Status Clear] button.
   A confirmation dialogue box is displayed.
2. Click the [OK] button to clear the error message and click the [Cancel] when you do not want to clear the error status of the disk unit.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00123	Failed to clear the status.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.16 [PCI_Box] Menu

The PCI_Box#x window displays the status of the PCI_Box connected with the PRIMEQUEST 2000 series.

FIGURE 1.35 [PCI_Box] Window (1)

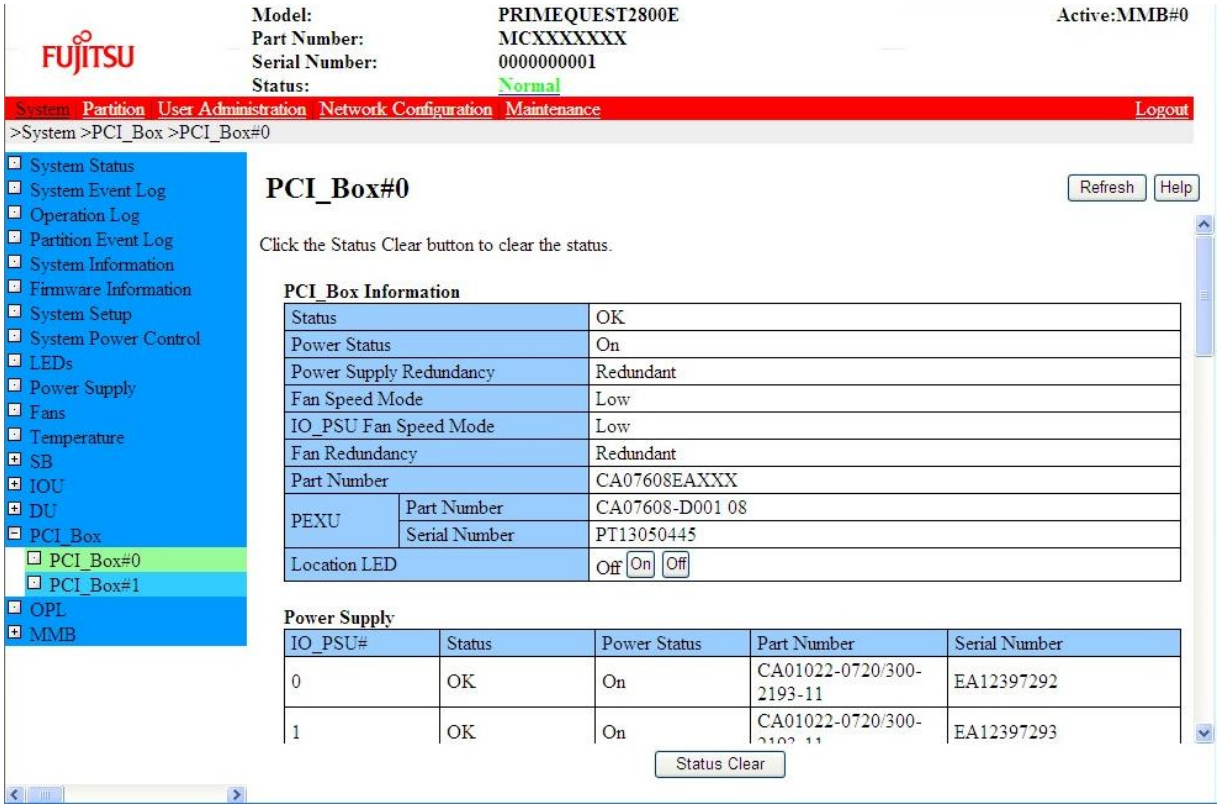


FIGURE 1.36 [PCI_Box] Window (2)

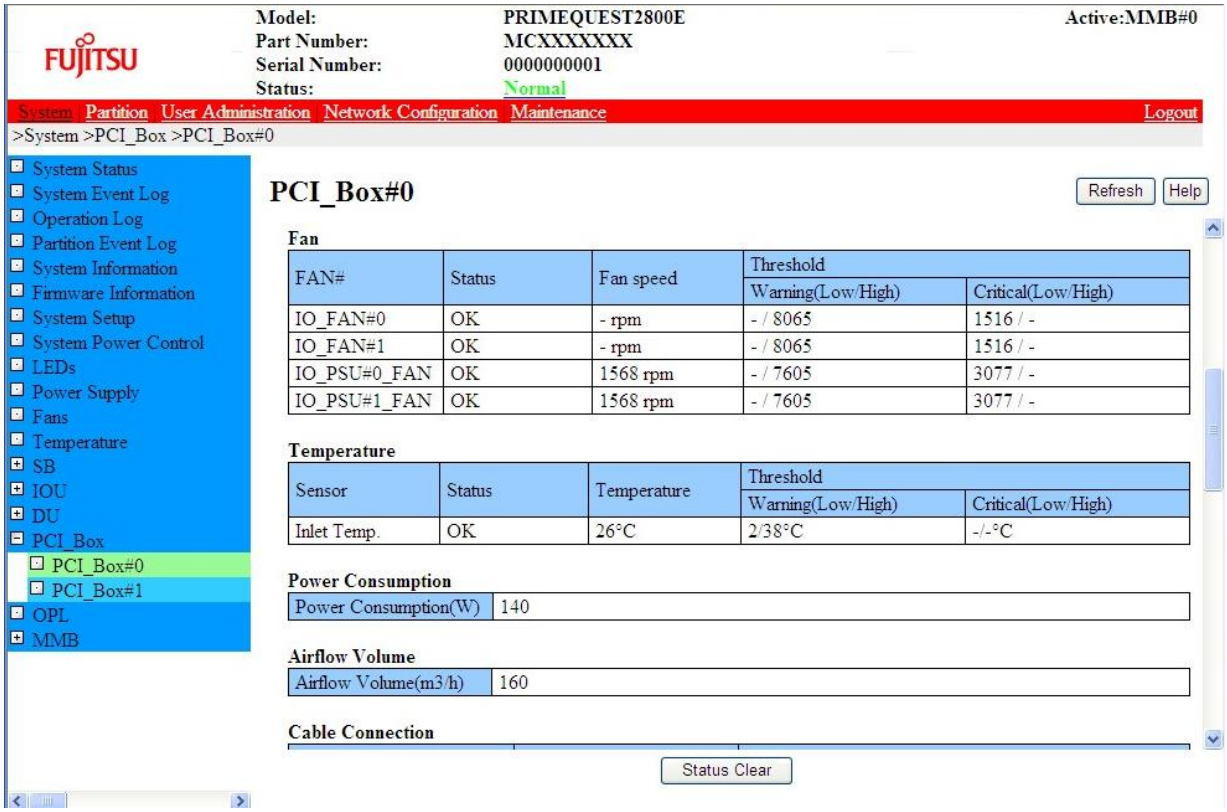


FIGURE 1.37 [PCI_Box] Window (3)

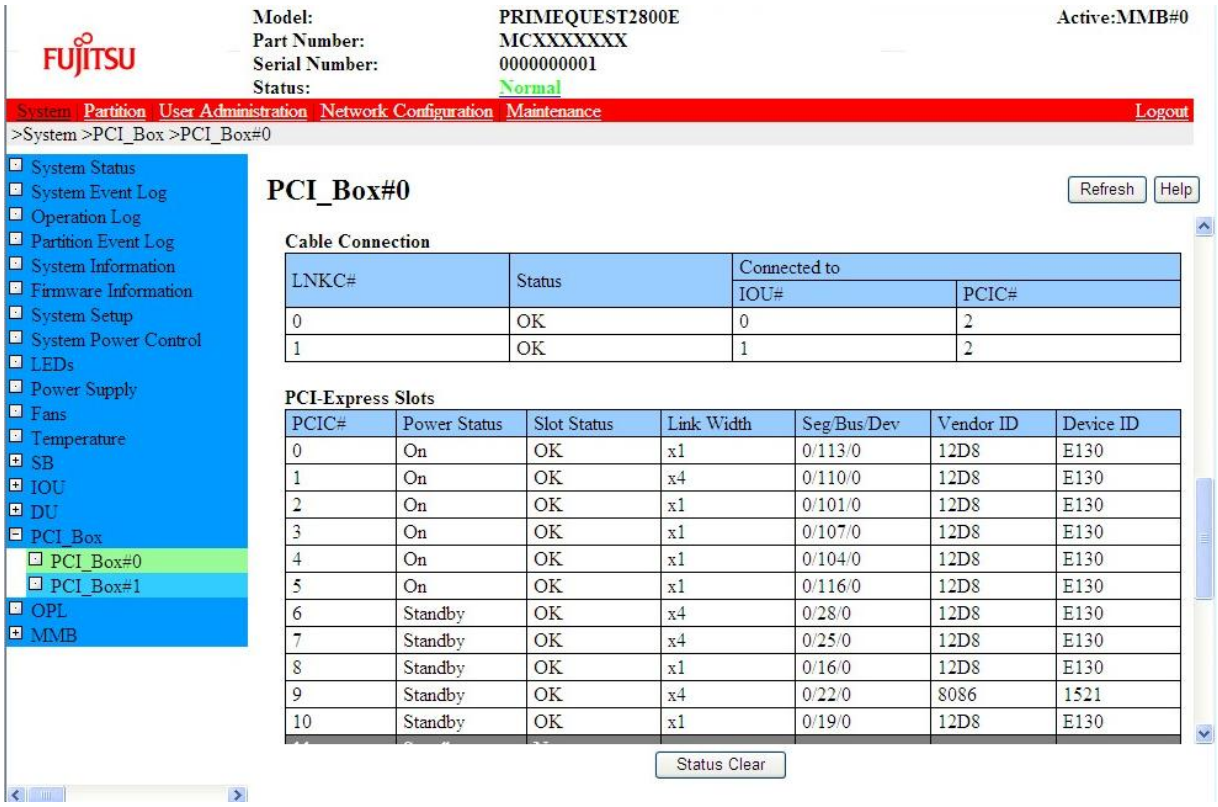


FIGURE 1.38 [PCI_Box] Window (4)

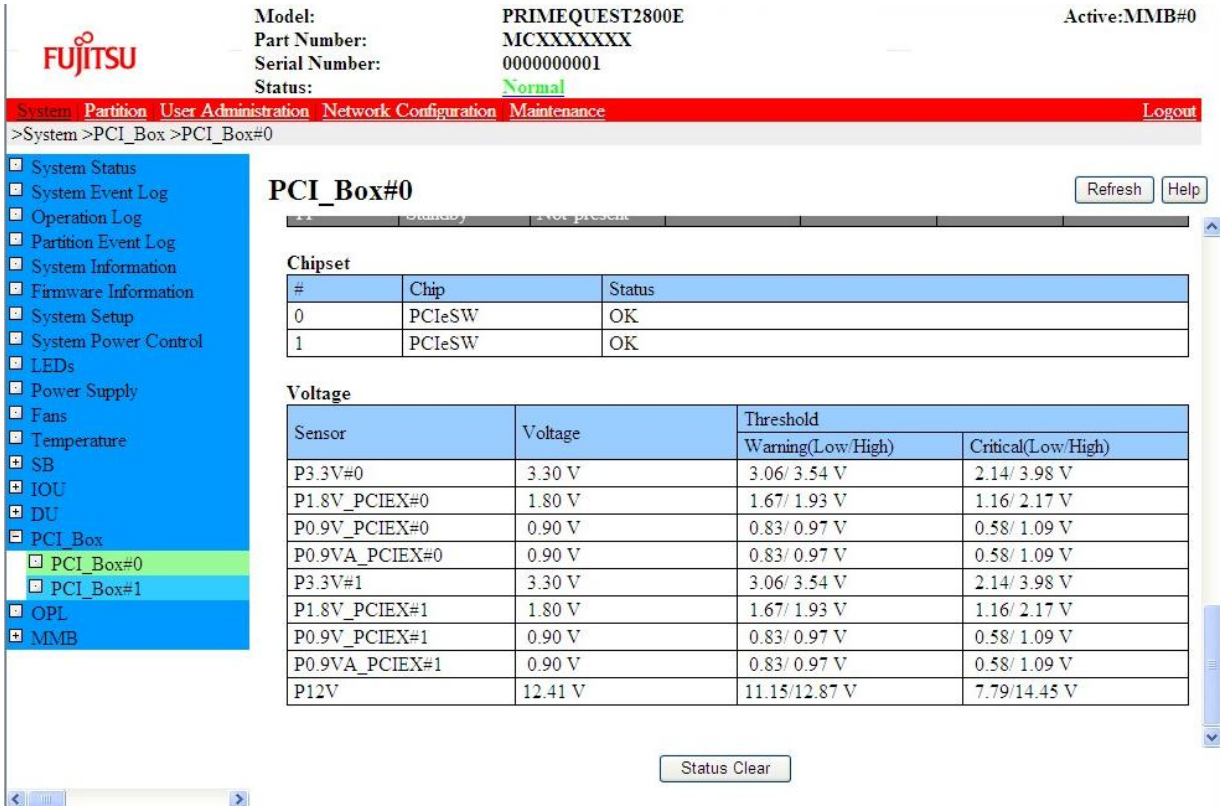


TABLE 1.49 Display Items of [PCI_Box#x] Window

Items		Description
PCI_Box Information		
Status		Displays the status of the PCI_Box. ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed
Power Status		Displays the power status of the PCI_Box. ・ On ・ Standby
Power Supply Redundancy		Displays the redundancy status of the IO_PSU ・ Redundant ・ Non-redundant: Sufficient Resources
Fan Speed Mode		Displays the rpm status of the fan. ・ Low ・ Normal ・ High ・ Full
IO_PSU Fan Speed Mode		Displays the IO_PSU Fan Speed Mode ・ Low ・ Normal ・ High ・ Full
Fan Redundancy		Displays the redundancy status of the fan. ・ Redundant ・ Non-redundant: Sufficient Resources
Part Number		Displays the part number of the PCI_Box.
PEXU	Part Number	Displays the part number of the PEXU.
	Serial Number	Displays the serial number of the PEXU.
Location LED		Displays the status of the Location LED. He following are the various display statuses. ・ On: Turn On ・ Off: Turn Off On/ Off/ of the Location LED can be controlled by clicking the [On], [Off] buttons.
Power Supply		
IO_PSU#		IO_PSU# Displays the IO_PSU number.
Status		Displays the display status of the IO_PSU. ・ OK ・ Not-present ・ Failed ・ A/C Lost ・ Configuration error
Power Status		Displays the power status of the IO_PSU. ・ On ・ Standby
Part Number		Displays the part number of the IO_PSU.
Serial Number		Displays the serial number of the IO_PSU.
Fan		
Fan#		Displays the fan number.

Items		Description
Status		Displays the status of the fan. ・ OK ・ Not-present ・ Failed
Fan speed		Displays the rpm of the fan.
Threshold		Displays the threshold of the fan.
Temperature		
Sensor		Displays the ID of the temperature sensor.
Status		Displays the status of temperature sensor.
Temperature		Displays the current temperature.
Threshold		Displays the threshold at which each temperature sensor is maintained ・ Warning: Low/High ・ Critical: Low/High
Power Consumption		
Power Consumption		Displays the power consumption.
Airflow Volume		
Airflow Volume		Displays the airflow volume.
Cable Connection		
LNKC#		Displays the Link Card number.
Status		Displays the connection status of the cable. ・ OK ・ Not-connected ・ correct connection
Connect to	IOU#	Displays the connection destination IOU#. When not connected, the display is grayed out.
	PCIC#	Displays the PCI Slot# of the connection destination IOU. When not connected, the display is grayed out.
PCI-Express Slots		
PCIC#		Displays the PCI-Express slot number.
Power Status		Displays the power status of the GPCI-Express slot. ・ On ・ Standby
Slot Status		Displays the status of PCI-Express slot. ・ OK ・ Not-present ・ Failed ・ Disabled
Link Width		Displays the Link Width of the PCI-Express slot format. ・ x1 ・ x2 ・ x4 ・ x8
Seg/Bus/Dev		Displays the Segment#, Bus# and Device# of the PCI-Express slot. When PCI-Express Slots is used in Extended Partition, information of Segment#, Bus# and Device# allocated in Extended Partition displays it by the addition in parentheses. Example of display: 0/135/0 (0/27/0)
Vendor ID		Displays the Vendor ID of the PCI Card. Remarks: ID uniquely allocated in manufacturer of card. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)

Items		Description
Device ID		Displays the Device ID of the PCI Card. Remarks: ID uniquely allocated in device of manufacturer. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)
Chipset		
#		Displays the Chipset number.
Chip		Displays the Chip name ・ PCIeSW
Status		Displays the status. ・ OK ・ Warning ・ Failed
Voltage		
Sensor		Displays the Voltage sensor type. P3.3V#0 P1.8V_PCIEX#0 P0.9V_PCIEX#0 P0.9VA_PCIEX#0 P3.3V#1 P1.8V_PCIEX#1 P0.9V_PCIEX#1 P0.9VA_PCIEX#1
Voltage		Displays the current power voltage.
Threshold	Warning(Low/High)	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical(Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.50 [MMB#x] Window button

Buttons	Description
On	The Location LED lights up when the [On] button is clicked.
Off	The Location LED light out when the [Off] button is clicked.
Status Clear	The error status of PCI_Box is cleared.

(1) Menu Operation
[System] – [PCI_Box] – [PCI_Box#x]

(2) Window Operations
1. Click the [Status Clear] button.
Clear the error status of the PCI_Box.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00123	Failed to clear the status.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.17 [OPL] Window

[OPL] Window has the following windows.

☐ [OPL] Window

The OPL Board status is displayed in the [OPL] Window.

FIGURE 1.39 [OPL] window

[Status Clear] button and 'Click the Status Clear button to clear the status.' Message is not be displayed for a user without the setting privilege.

TABLE 1.51 Display items of [OPL] Window

Items	Description
Status	Displays the status of the OPL. ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed
Power Status	Displays the Power status of the OPL. ・ On ・ Standby
Part Number	Displays the part number of the OPL.
Location LED	Displays the status of the Location LED. Following are the various display status. ・ On: Lighting ・ Off: Light out On/ Off of the Location LED can be controlled by clicking the [On], [Off] buttons.

TABLE 1.52 Button on [OPL] window

Button	Description
Part Number	Clears the error status of the OPL.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00029	Status Clear completed.
E_00123	Failed to clear the status.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

(1) Menu Operation

[System] – [OPL]

(2) Window Operations

1. Click the [Status Clear] button.
   Confirmation dialogue box is displayed.
2. Click the [OK] button to clear the error message and click the [Cancel] when you do not want to clear the error status of OPL.

1.2.18 [MMB] Menu

In [MMB] menu, each MMB Unit has menu.

- [MMB#0] ~ [MMB#1]

Since the window and the operation method are the same in all menus units, of only one unit is described here.

☐ [MMB#x] Window

In [MMB#x] Window, information related to MMB can be displayed and the Location LEDs can be set.

FIGURE 1.40 [MMB#x] Window

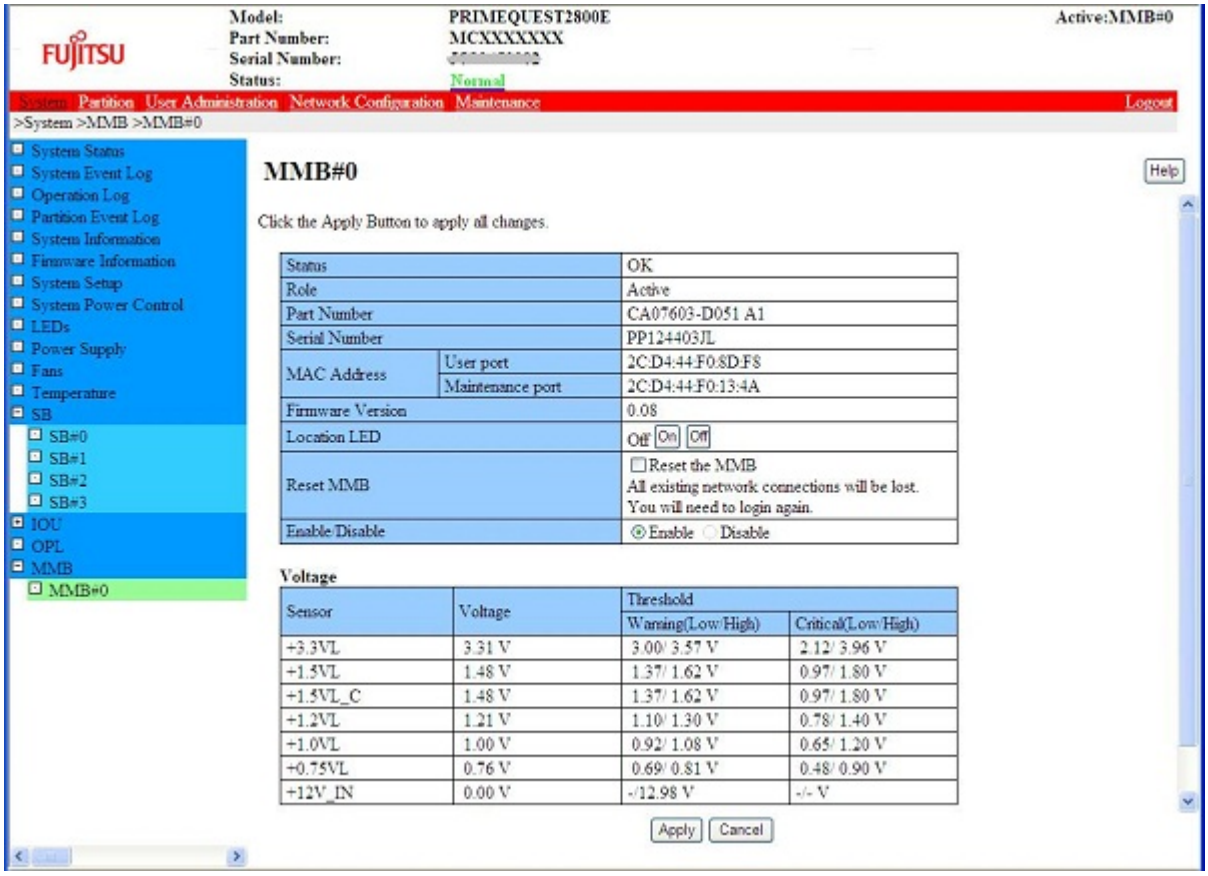


TABLE 1.53 Display of [MMB#x] Window / setting items

Items		Description
Status		Displays the status of the MMB. ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed
Role		Displays the operation status of the MMB. ・ Active ・ Standby ・ Disabled
Part Number		Displays part number of the MMB.
Serial Number		Displays the serial number of the MMB.
MAC address	User port	Displays MAC address of the MMB management port. 00:00:00:00:00:00
	Maintenance Port	Displays MAC address of the MMB port. 00:00:00:00:00:00
Firmware Version		Displays the version of the MMB firmware.
Location LED		Displays the status of the Location LED. The following are the various display status. ・ On: During power on. ・ Off: During power off On/ Off of the Location LED can be controlled by clicking [On], [Off] buttons.
Reset MMB		Resets the MMB if this check box is checked. When this check box is checked, [Switch Over to MMB] mentioned below cannot be set. **Remarks** When resetting MMB twice or more consecutively, leave an interval of about 15 minutes between each resetting of MMB.
Switch Over to MMB		Switches the Active/Standby of the MMB if this check box is checked. When this check box is checked, [Reset MMB] mentioned above cannot be set. **Remarks** When switching MMB twice or more consecutively, leave an interval of about 15 minutes between each resetting of MMB. This check box is displayed only, when two MMBs are mounted.
Enable/Disable		Controls Enable/ Disable of the MMB. Because this item is a facility used for testing, it is not possible to usually set it.
Voltage		
Sensor		Displays the Voltage sensor type. P3.3VL P1.5VL P1.5VL_CPLD P1.2VL P1.0VL P0.75VL
Voltage		Displays the current power voltage.
Threshold	Warning (Low/High)	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical (Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.54 [MMB#x] Window button

Buttons	Description
On	Turns on the Location LED when the [On] button is clicked.
Off	Turns off the Location LED when the [Off] button is clicked
Apply	Click the [Apply] button to set the specified control information.
Cancel	Click the [Cancel] button to restore the original information and not set the specified information.

(1) Menu Operation

[System] – [MMB] – [MMB#x]

(2) Window Operations

Confirmation dialogue box is displayed. Specify the information which shows the change in MMB status, click the [Apply] button. Sets the information which shows the change in MMB status.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
I_00052	MMB switch processing has started.
I_00095	The standby MMB is rebooting now. Please wait several minutes.
E_00100	Failed to set the LED
E_00125	Failed to switch over to another MMB.
E_00125	Failed to change Enable/Disable status of the MMB.
E_00125	Failed to reset the MMB.
I_00213	%aa cannot be executed because the system is under maintenance.
I_00467	The reboot is done. Login after a while.
W_00413	Nothing is selected.
W_00576	Unable to execute Enable / Disable because the firmware is updating.
W_00576	Unable to execute Switch Over to MMB because the firmware is updating.
W_00576	Unable to execute Reset MMB because the firmware is updating.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.2.19 [Disk Enclosure] Menu

The [Disk Enclosure#x] Window displays the state of Disk Enclosure and the disk connected with PRIMEQUEST 2000 series. When Disk Enclosure is connected with IOU or PCI-BOX, it is displayed in the menu.

Attention: The error of the Disk Enclosure screen is not reflected on the System Status screen.
If any Logical drive is not being mounted by the RAID controller with whom Disk Enclosure was connected, this screen might not be displayed. Please construct one or more Logical drive, and refer to the screen.

FIGURE 1.41 [Disk Enclosure#x] Window (1)

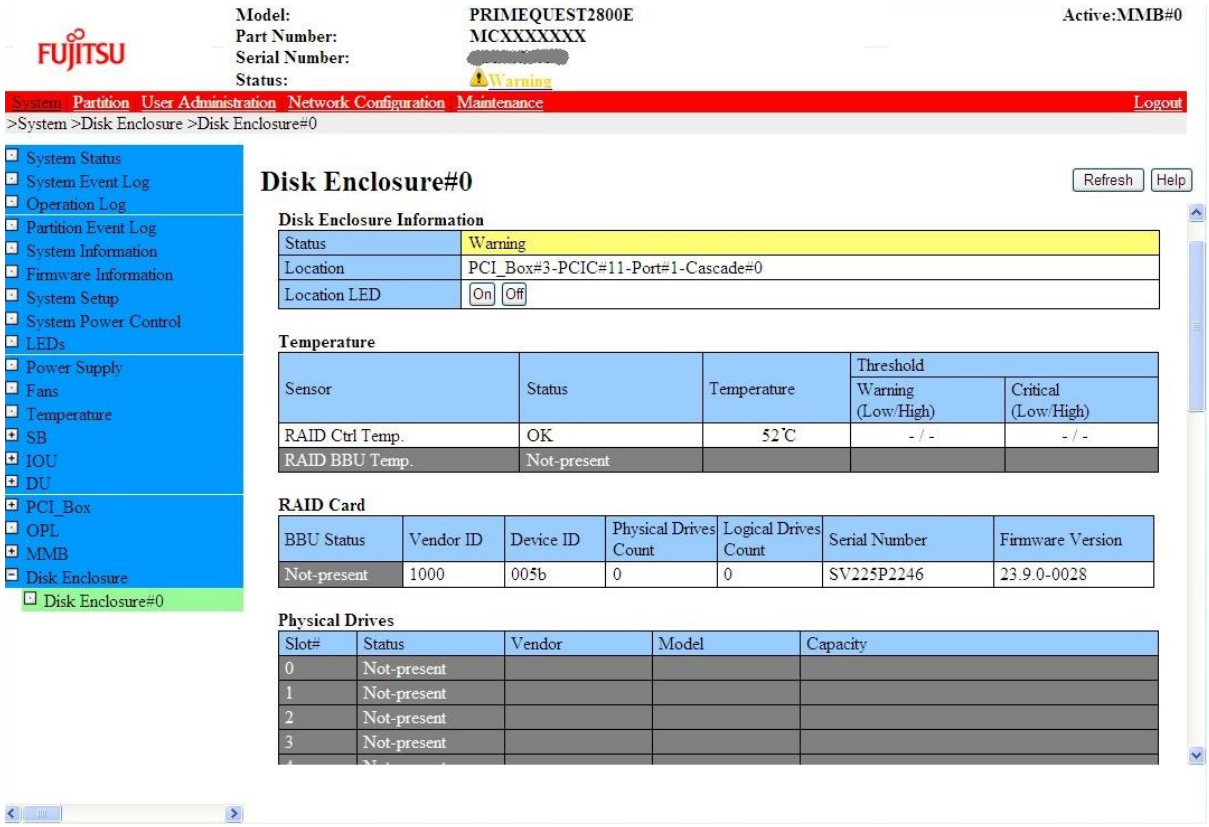
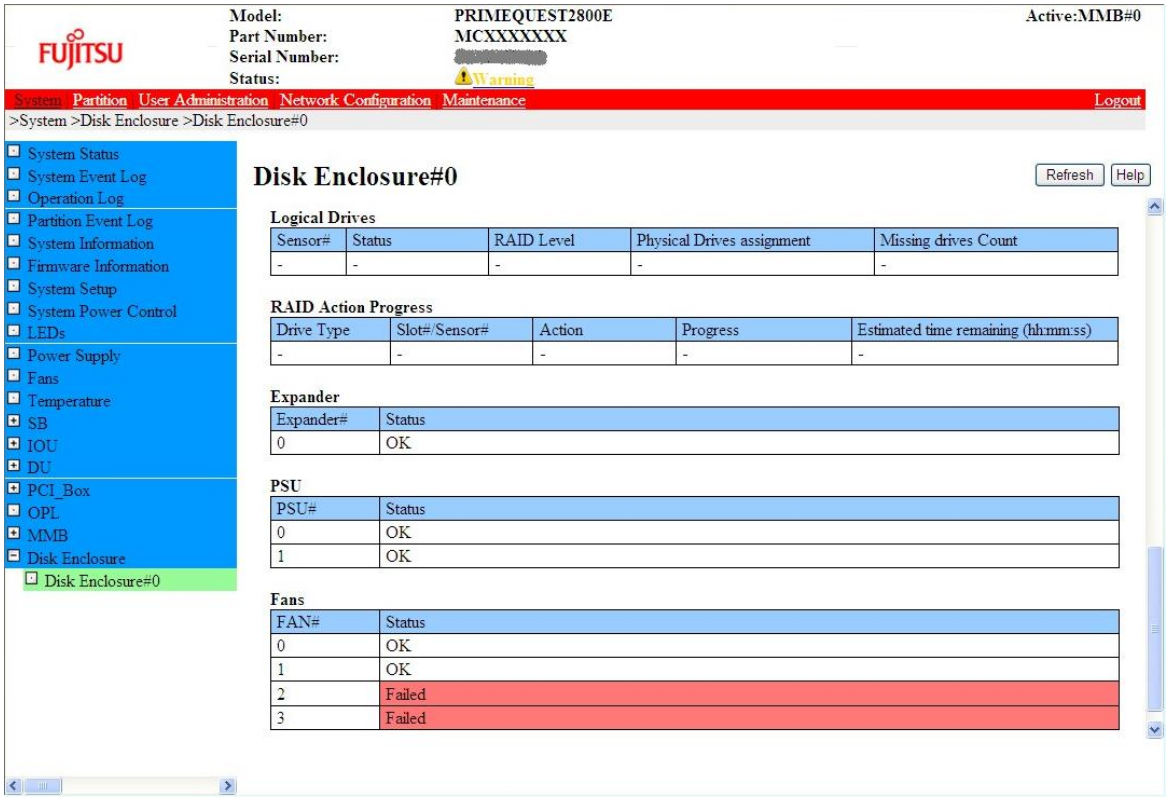


FIGURE 1.42 [Disk Enclosure#x] Window (2)



When System Progress of the partition is EFI, Boot, and OS Running, various information on RAID Card, Physical Drives, Logical Drives, and the Action Progress table is displayed. (*1)

(*1) After System Progress is changed into the state of EFI, Boot, and OS Running until information is correctly displayed, it takes one minute or less.

TABLE 1.55 Display and Setting items of [Disk Enclosure#x] Window

Items	Description
Disk Enclosure Information	
Status	Displays the status of the Disk Enclosure. ・ OK ・ Warning ・ Failed
Location	Displays the location where Disk Enclosure is connected.
Location LED	Displays the status of the Location LED. Following are the various display status. ・ □ On: Lighting ・ □ Off: Light out On/ Off of the Location LED can be controlled by clicking the [On], [Off] buttons.
Status	Displays the status of each temperature sensor. • OK • Not-present • Warning • Critical
Temperature	Displays the temperature of each temperature sensor.
Threshold	Displays the threshold which maintained the by each temperature sensor. • Warning: Low/High • Critical :Low/High
RAID Card	
BBU Status	The state of RAID BBU is displayed. • Online • On Battery • Charging • Discharging • Battery Low • Relearn Required • Failed • Not-present
Vendor ID	Vendor ID of RAID Card is displayed. Remarks: ID uniquely allocated in manufacturer of card. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)
Device ID	Device ID of RAID Card is displayed. Remarks: ID uniquely allocated in device of manufacturer. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)
Physical Drives count	The number of physical drives connected with RAID Card is displayed.
Logical Drives count	The number of logical drives composed under the control of RAID Card is displayed.
Serial Number	The serial number of RAID Card is displayed.
Firmware Version	The firmware version of RAID Card is displayed.
Physical Drives	
Slot#	The slot number equipped with a physical drive is displayed.

Items	Description
Status	The state of a physical drive is displayed. • Operational • Available • Failed • Hot Spare • Rebuilding • SMART err • Shielded • Bad Block • Not-present
Vendor	The vendor name of a physical drive is displayed.
Model	The model name of a physical drive is displayed.
Capacity	The capacity of a physical drive is displayed.
Temperature	The temperature of a physical drive is displayed.
Logical Drives	
Sensor#	The sensor number of a logical drive is displayed.
Status	The state of a logical drive is displayed.
Raid Level	The RAID level of a logical drive is displayed.
Physical Drives assignment	The slot number of a physical drive that composes a logical drive is displayed.
Missing drives count	The number of physical drives missed to compose a logical drive at the RAID level is displayed.
RAID Action Progress	
Drive Type	The drive type that the RAID action is executed is displayed. • Physical : Hardware RAID • Logical : Software RAID
Slot#/Sensor#	Slot# from which the RAID action is executed is shown when Drive Type is Physical, and Sensor# from which the RAID action is executed is shown when Drive Type is Logical.
Action	The RAID action under execution is displayed. • Rebuilding : It is shown for a physical drive to execute the rebuild of the RAID drive. • Copyback Running : It is shown for a physical drive to execute the copy backing • MDC Running : It is shown for a logical drive to execute MDC(Make Data Consistent).
Progress(%)	The progress rate of the RAID action under execution is displayed by the percentage.
Estimated time remaining (hh:mm:ss)	The remainder time that will be expected by the time the RAID action under execution is completed is displayed.
Expander	
Expander#	The number of the expander is displayed.
Status	Displays the status of the Expander. ・ OK ・ Warning ・ Failed ・ Not-Present
PSU	
PSU#	The number of the exp PSU ander is displayed.

Items	Description
Status	Displays the status of the PSU. ・ OK ・ Warning ・ Failed ・ Not-Present
Fans	
FAN#	The number of the Fan is displayed.
Status	Displays the status of the Fan. ・ OK ・ Warning ・ Failed ・ Not-Present

1.3 [Partition] Menu for PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E

Status display and partition settings of PRIMEQUEST 2400E3/2400E2/2400E and PRIMEQUEST 2800E3/2800E2/2800E can be done on [Partition] Menu.
This menu is not displayed in PRIMEQUEST 2800B3/2800B2/2800B.

1.3.1 [Power Control] Window

[Power Control] window displays the power control of the partition.

Only the partition having the SB and IOU is displayed in this window.

The display window and display conditions are different depending on the model of PRIMEQUEST 2400E3/2400E2/2400E or PRIMEQUEST 2800E3/2800E2/2800E.

The partition that satisfies the following conditions is displayed in the correction.

(1) Partition with at least one SB, and
(2) Partition with at least one IOU, and
(3) With the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E model, the partition number of Extended Partitioning is allocated on the Physical Partition that satisfies the above mentioned (1) and (2).

The partition of Extended Partitioning describes Extended Partition after this.

If with the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E model, the Extended Partitioning mode of the Physical Partition is set to Enable, the background color becomes gray and the operation is supressed. On the contrary, when the Extended Partitioning mode of the Physical Partition which becomes the parent of the Extended Partition is set to Disable, the display of the Extended Partition grays out and operation is prevented.

Remarks

When the operating system supports ACPI (Advanced Configuration and Power Interface), the power can be turned Off after the operating system is Shutdown by Power Off operation. If ACPI is not supported, power can be Off without the Shutdown of the operating system. Moreover, even if the operating system supports ACPI, and applications running on the operating system are not supported, sometimes power Off is not possible. Since these depend on the specifications of the operating system and applications, for details, refer to the operating system and application specifications.

FIGURE 1.43 [Power Control] Window

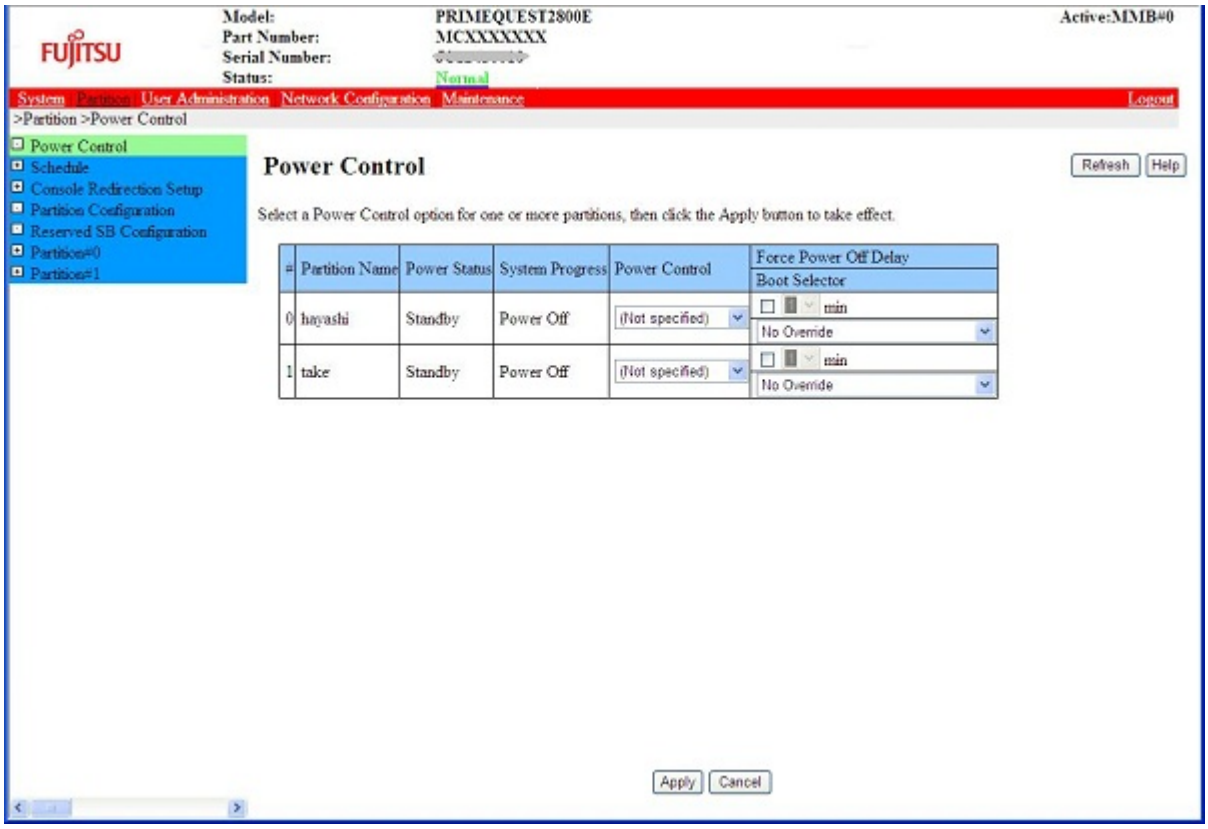
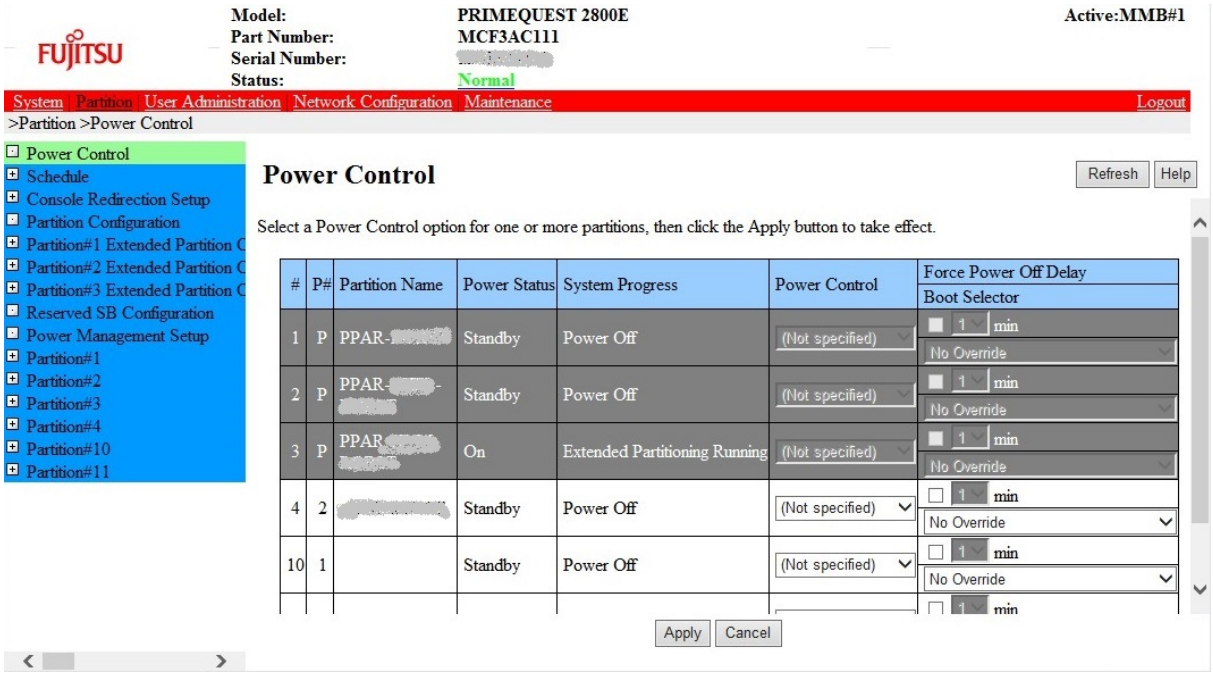


FIGURE 1.44 [Power Control] Window (When Extended Partitioning Mode is enable)



- In case of Partition Operator privilege (In case of management target Partition#0)
  Operations can be performed only for a partition which is targeted for management.
  When it is not targeted for management, Pull-down Menu and the setting items are displayed as gray out.

FIGURE 1.45 [Power Control] Window (Grayout Display)

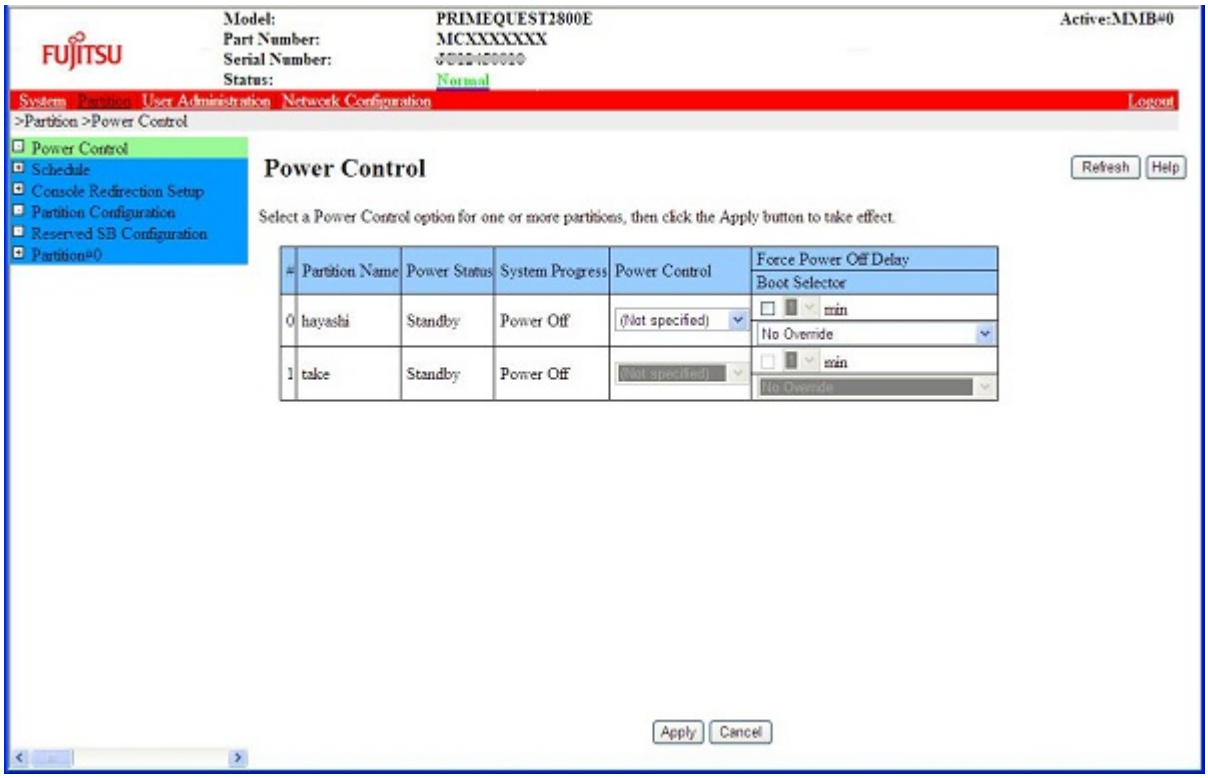
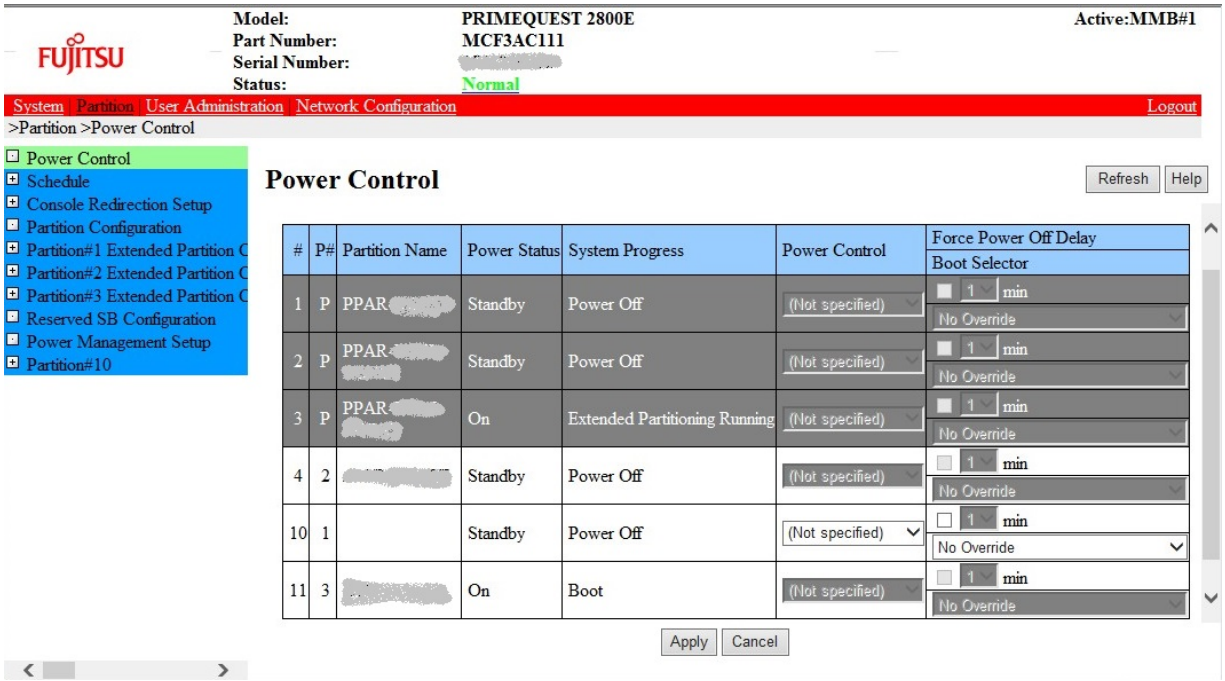


FIGURE 1.46 [Power Control] Window (Grayout Display) (When Extended Partitioning Mode is enable)



1. Select the process executed for the partition from Pull-down menu of [Power Control].
   Then, click the [Apply] button.
   Dialog box for confirmation appears.

2. Click the [OK] button to execute the process.
   Click the [Cancel] button to cancel the process.

   When Partition Power is On, or when Power is Off, and when the specified control is failed, Warning dialog box appears.

When the CPU mounted on the SB of partition is not matched at the time of specifying the Power On of partition, Warning dialog box appears. Error occurs in the Power On operation.

TABLE 1.56 Display Items and Set Items of [Power Control] Window

Items	Description
#	Displays the number by which the partition is identified. [In case of the PRIMEQUEST 2800E3/2800E2/2800E model] There are 0-11 Partitions. [In case of the PRIMEQUEST 2400E3/2400E2/2400E model] There are 0-5 Partitions. However, only the partitions with SB and IOU registration are displayed.
P#	Displays the “P” which indicates the parent Physical Partition from the physical partition wherein Extended Partitioning Mode is set to Enable. In case of Extended Partition, displays Physical Partition number of Parent Partition.
Partition Name	Displays the name of the Partition.
Power Status	Displays the Power Status of the Partition. ・ On ・ Standby
System Progress	The status of the partition progress is displayed. ・ Power Off: The partition power is off. ・ Power On In Progress: Partition power on is in process. ・ Reset: The status of the partition from the beginning of reset till the completion of the operating system boot. ・ EFI: The UEFI menu screen is displayed. ・ Boot: Operating system is being booted. ・ Operating system Running: Operating system running state ・ Operating system Shutdown: Operating system shutting down. ・ Panic: Panic (Only in RHEL) ・ Power Off In Progress: Partition power off is in process. ・ Fatal: Stopped. ・ Dumping: The dumping is being output. ・ Halt: Halting. ・ Extended Partitioning Running: The firmware of Extended Partitioning is operating. **Remarks** ・ When SVAS (Server View Agentless Service) is not installed to partition, the display is not switched over in ‘Operating system Running’ even if Operating system is working. Moreover, for ‘Operating system shutdown’, ‘Panic’ commanded by SVAS if SVAS is not installed, there is no display. SVAS : Specifies the piece of software running on the OS in managed nodes to help BMC with management. Unless SVAgent, it does not provide management interface to the outside. ・ The operation at kdump by Linux OS is as follows. RHEL : It changes to "Panic" and "Dumping". (Only when "FJSVfefpcl" package is installed.) SUSE : It does not change "Panic" and "Dumping". ・ When REMCS Option is installed on Partition of RHEL, "Panic" is displayed. It is not displayed in Windows.

Items	Description
Power Control	Selects power control specified for the partition. However, for the partition which is already in power-on state, [Power On] is not displayed. On the contrary, for the partition which is already in powered off, [Power Off], [Reset], [NMI], [Power Cycle], [Force Power Off] and [sadump] are not displayed. ・ Power On: Partition is the powered on. ・ Power Off: Partition is powered off. From the view point of Operating system, it is same as that the power button of the device is on. Therefore, when the operating system supports the ACPI, power can be turned off after the operating system is shutdown. For details, see Power Specifications (ACPI) of the operating system. When the operating system does not support the ACPI, the power can be turned off without shutting down the operating system. ・ Power Cycle: Powered on again after the partition is forcibly powered on. ・ Reset: Resets the partition. ・ NMI: Produces the NMI interruption for the partition. ・ Force Power Off: Turns off the power forcefully. ・ sadump: Specifies the SADUMP for the partition. ・ (Not specified): There is no instruction for this partition.
Force Power Off Delay	Specifies whether to enforce power off, when power off is done without proper operation of the shutdown instruction for the operating system by [Power Off] on the partition. In case enforced power off has been specified, the specified time (1~9 minutes) can be set. The partition is forcibly powered off when the specified time has lapsed. The default setting of check box is Off.
Boot Selector (For PRIMEQUEST 2400E3/ 2800E3/2400E2/2800E2 model or PRIMEQUEST 2400E/2800E model and since BA15072 the number of integrated firmware versions.)	Specifies the boot device for which the Boot Manager setting of BIOS is Override temporarily. Select the device to be boot from pull-down menu. ・ No Override: Boots by the EFI Boot Manager settings. ・ Force boot into EFI Boot Manager: Waiting for input by the EFI Boot Manager. Boot by selecting the boot device from the EFI Boot Manager ・ Force Legacy PXE/iSCSI: Overrides the EFI Boot Manager settings, forcibly tries the PXE. (BIOS Boot Type: Legacy) ・ Force boot from Legacy DVD: Overrides the EFI Boot Manager settings, and forcibly tries the booting from the System DVD.(BIOS Boot Type: Legacy) ・ Force UEFI PXE/iSCSI: Overrides the EFI Boot Manager settings, forcibly tries the PXE. (BIOS Boot Type: UEFI) ・ Force boot from UEFI DVD: Overrides the EFI Boot Manager settings, and forcibly tries the booting from the System DVD.(BIOS Boot Type: UEFI) Default setting is 'No Override'. This setting is applied only for the first partition boot setting the value. After the partition boots, this setting automatically returns to 'No Override'. Therefore, it is necessary to set the boot for each partition. In case of constant setting, it is set in the Boot Manager of the UEFI.

Items	Description
Boot Selector (For PRIMEQUEST 2400E/ 2800E model and before BA15065 the number of integrated firmware versions.)	Specifies the boot device for which the Boot Manager setting of BIOS is Override temporarily. Select the device to be boot from pull-down menu. ・ No Override: Boots by the EFI Boot Manager settings. ・ Force boot into EFI Boot Manager: Waiting for input by the EFI Boot Manager. Boot by selecting the boot device from the EFI Boot Manager ・ Force PXE/iSCSI: Overrides the EFI Boot Manager settings, forcibly tries the PXE. Remarks Only PXE of the Legacy setting and iSCSI : boot according to this menu. Neither PXE of EFI Aware nor iSCSI are booted. ・ Force boot from DVD: Overrides the EFI Boot Manager settings, and forcibly tries the booting from the System DVD. Remarks Only the medium of Legacy : boot according to this menu. The medium of EFI Aware is not booted. Default setting is 'No Override'. This setting is applied only for the first partition boot setting the value. After the partition boots, this setting automatically returns to 'No Override'. Therefore, it is necessary to set the boot for each partition. In case of constant setting, it is set in the Boot Manager of the UEFI.

TABLE 1.57 [Power Control] Window Buttons

Buttons	Description
Apply	When you click the [Apply] button, the information of power control items is set. Confirm the setting contents if dialog box prompts for Confirmation.
Cancel	When you click the [Cancel] button, returns to source without setting the information of power control items corresponding to partition,.

Remarks

When the operating system supports the ACPI, the operating system can be shutdown by the above mentioned Power Off operation and the power can be turned off. When the operating system is not supported by the ACPI, the power is turned off without shutting down the operating system. Moreover, when the application which is operating in the operating system is not supported even if the operating system is supported by the ACPI, the power cannot be turned off. Since this is according to the operating system and application specifications, for details, see the Operating System and Application Manual.

☐ "Error Display"

Even if there is no bootable partition configured, the window mentioned below appears.

FIGURE 1.47 Display of Errors of [Power Control] Window

(1) Menu Operation

[Partition] – [Power Control]

(2) Window Operations

1. Click the [Status Clear] button. Selects the power control items related to each partition from the pull-down list of [Power Control]. Then click the [Apply] button.
   Dialog box for setting confirmation appears.

2. Click [OK] button to execute the settings.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00075	Partition#aa cannot execute sadump
E_00077	Partition#aa cannot execute Power On.
E_00078	Partition#aa cannot execute Power Off.
E_00079	Partition#aa command failed
E_00080	Partition#%aa cannot execute Power Cycle.
E_00081	Partition#%aa cannot execute Reset.
E_00082	Partition#%aa cannot execute NMI.
E_00084	Partition#%aa cannot execute Force Power Off.
E_00091	Force Power Off Delay setting failed.
E_00101	Unable to power on the partition#%aa due to CPU mismatch between SBs.
I_00214	Unable to Power On the Partition#%aa because this Partition is under maintenance.
I_00222	Unable to %aa the Partition#%aa because this Partition is under maintenance.
E_00422	Unable to power on the partition#%aa due to CPU composition abnormal.
E_00154	Unable to power on due to mismatch between supply voltage and input voltage.
E_00482	Unable to power on the partition#%aa due to DIMM composition abnormal.
E_00491	Unable to power on the partition#%aa due to DIMM does not satisfy requirements of Mode.
W_00504	The Power On failed, because of switching the Home SB. Please execute it after a while again.
E_00517	Unable to power on the partition#%d due to abnormal SB composition.
E_00543	Unable to power on the partition#%d due to abnormal Extended Partitioning composition.
W_00587	Unable to execute Power Control because the firmware is updating.
W_00588	Unable to execute command because the power control operating.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.2 [Schedule] Menu

The [Schedule] menu has the [Schedule Control] and [Schedule List] windows. This section describes the windows and the operation.

Note

As mentioned below, there may be a delay in the time recorded in SEL compared to the time reserved for scheduled operations.

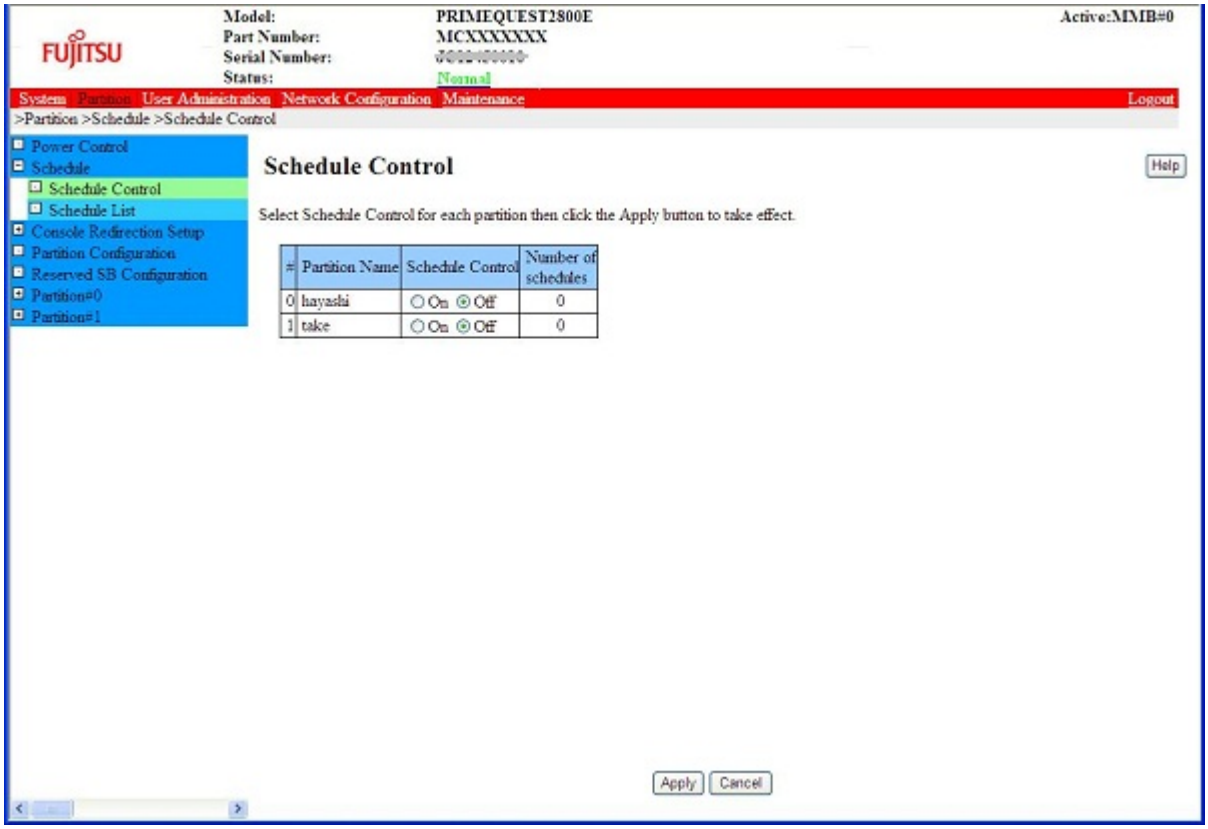
- After checking the configuration and after performing the start up preparation process, it takes some time until the power is ON. In this case, the SEL display is delayed about from six seconds up to 8 seconds than the time reserved for the scheduled operations.
- The shutdown instructions from MMB to OPERATING SYSTEM take certain time from the set time. However, the following interval times may be changed under the various conditions like setting and the configuration.
- Interval time until shutdown instructions reaches OS from MMB.
- Interval time until MMB notifies SEL begin shutdown after OS begins shutdown.
- Even if the [Power on Delay] is 0 seconds, it takes about 30 seconds ~ 70 seconds from starting the power on up to the reset.

1.3.2.1 [Schedule Control] window

In the [Schedule Control] window, the setting related to the schedule can be set for each partition.

If the Extended Partitioning Mode of Physical Partition is set to Enable, then the background color is shown in gray and schedule drive is disabled. On the other hand, when Extended Partitioning Mode of Physical Partition which becomes the parent of Extended Partition, is set to Disable, then background color of Extended Partition is displayed in gray and schedule drive is enabled.

FIGURE 1.48 [Schedule Control] Window



If the maintenance work (either Hot Partition Maintenance, Warm System Maintenance or Cold System Maintenance) of the targeted partition is executed in the schedule execution time, the scheduled operation does not execute the power operation of the partition.

If the schedule overlaps on the same day, it is processed according to the following priority levels.

Special > Monthly > Weekly > Daily

- Daily: Schedule executed every day
- Weekly: Schedule executed every week
- Monthly: Schedule executed every month
- Special: Schedule executed on specific day every year

Moreover, if the Power On and Power Off is specified at the same time, the priority is given to Power Off.

In case of Partition Operator, only the management target partition can be operated.

Because Partition does not do Power On in Power On Delay, Schedule Power Off is disregarded. Moreover, when OS does not accept the Shutdown demand, Power Off is not done.

TABLE 1.58 Display Items and Setting Items of [Schedule Control] Window

Items	Description
#	Displays the number that identifies the partition (0~3). However, only the partition to which SB/IOU is registered is displayed.
Partition Name	Displays the partition name.
Schedule Control	Sets whether schedule operation is done for every partition. ・ On ・ Off Default setting is Off.
Number of schedules	Displays the number of schedules that are set.

TABLE 1.59 [Schedule Control] Window Buttons

Buttons	Description
Apply	When the [Apply] button is clicked, the schedule operation information for the specified partition is set.
Cancel	When the [Cancel] button is clicked, the browser returns to the original status without setting the schedule operation information for the partition.

(1) Menu Operation

[Partition] - [Schedule] - [Schedule Control]

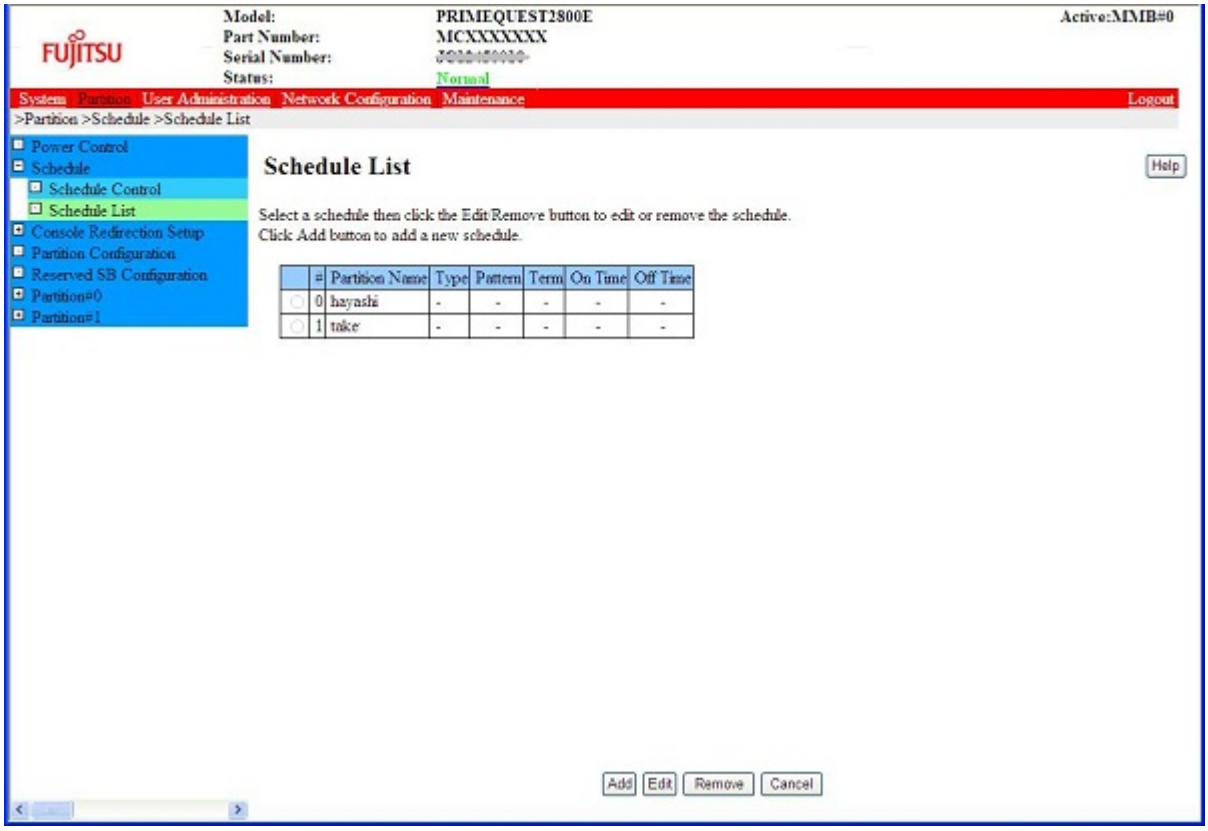
(2) Window Operations

1. Specifies whether schedule operation has to be carried out by Radio button for every partition.
2. Click the [Apply] button.

1.3.2.2 **[Schedule list] Window**

Up to 1000 instances of partition power On / Off schedule can be recorded in the [Schedule list] Window.

FIGURE 1.49 [Schedule List] Window



Schedule will appear in the order of the partition number.
Partition, will appear in chronological order of the start date of the period.
If the partition and the start date are the same, the schedule appears in the sequence in which it is listed.

Remarks
If the Type is Weekly, the start date is considered to be “Oneday”.
Only the partition to be managed can be operated for Partition Operator.

TABLE 1.60 Display Items and Set Items of [Schedule List] Window

Items	Description
#	Displays the number to identify the partition (0~3). However, only the partition to which SB/IOU is registered is displayed.
Partition Name	Displays the partition name.
Type	Displays the type of schedule set in the partition. ・ Daily: Select when you want to execute every day ・ Weekly: Select when you want to execute every week ・ Monthly: Select when you want to execute every month ・ Special: Select when you want to execute on a particular day every year. If the schedule overlaps on the same day, it is processed according to the following priority order. Special > Monthly > Weekly > Daily
Pattern	Displays the schedule pattern corresponding to the type of the schedule. Days of week in Weekly (Sun ~ Sat) The period in Monthly The specific month and day in Special
Term	Displays the period of the schedule according to the type and the pattern of the schedule. ・ Daily: Starting month and date and ending month and date. ・ Weekly: Starting month and ending month. ・ Monthly: Starting month and ending month. Default setting is as follows ・ Daily: From: Jan / 1 To: Jan / 1 Note --- It is executed only on January 1. ・ Weekly: From: Jan To: Jan Note --- It is executed only in January. ・ Monthly: From: Jan To: Jan Note --- It is executed only in January.
On Time	Displays the time when the process of Power On is executed on the specified execution day. Time specifies 24 hours. Minute indicates the interval of 10 minutes, as 00, 10, 20, 30, 40, and 50.
Off Time	Displays the time when the process of Power Off is executed on the specified execution day. Time indicates 24 hours. Minute indicates the interval of 10 minutes, as 00, 10, 20, 30, 40, and 50.

TABLE 1.61 [Schedule List] Window Buttons

Buttons	Description
Add	If [Add] button is clicked, [Add Schedule] window appears and the schedule can be added.
Edit	If [EDIT] button is clicked, [Edit Schedule] window appears and the schedule can be changed.
Remove	If [Remove] button is clicked, the selected schedule can be deleted.
Cancel	If [Cancel] button is clicked, the browser returns to the previous window.

(1) Menu Operation

[Partition] - [Schedule] - [Schedule List]

(2) Window Operations

・ If the schedule is to be added newly

1. Click [Add] button.
   [Add/Edit Schedule] window appears.
2. Add the schedule to the [Add/Edit Schedule] window.

・ If the schedule is to be changed

1. Select an existing schedule with [Radio] button.
2. Click [Edit] button.
   [Add/Edit Schedule] window appears.
3. Changes an existing schedule in [Add/Edit Schedule] window.

・ If the schedule is to be deleted

1. Select the schedule with [Radio] button.
2. Click [Remove] button.
   The confirmation dialog box appears.
3. Click [OK] button.
   Deletes the schedule.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
E_00412	You need an empty entry.
W_00413	Nothing is selected.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.2.3 [Add Schedule] window/ [Edit Schedule] window

In [Add Schedule] window, the schedule of Power On / Off for each partition, can be added newly.
In [Edit Schedule] window, an existing schedule can be changed.

The window items of [Add Schedule] window and [Edit Schedule] window are common.

In this section, an explanation is given by using the [Add Schedule] window.

FIGURE 1.50 [Schedule List] Window

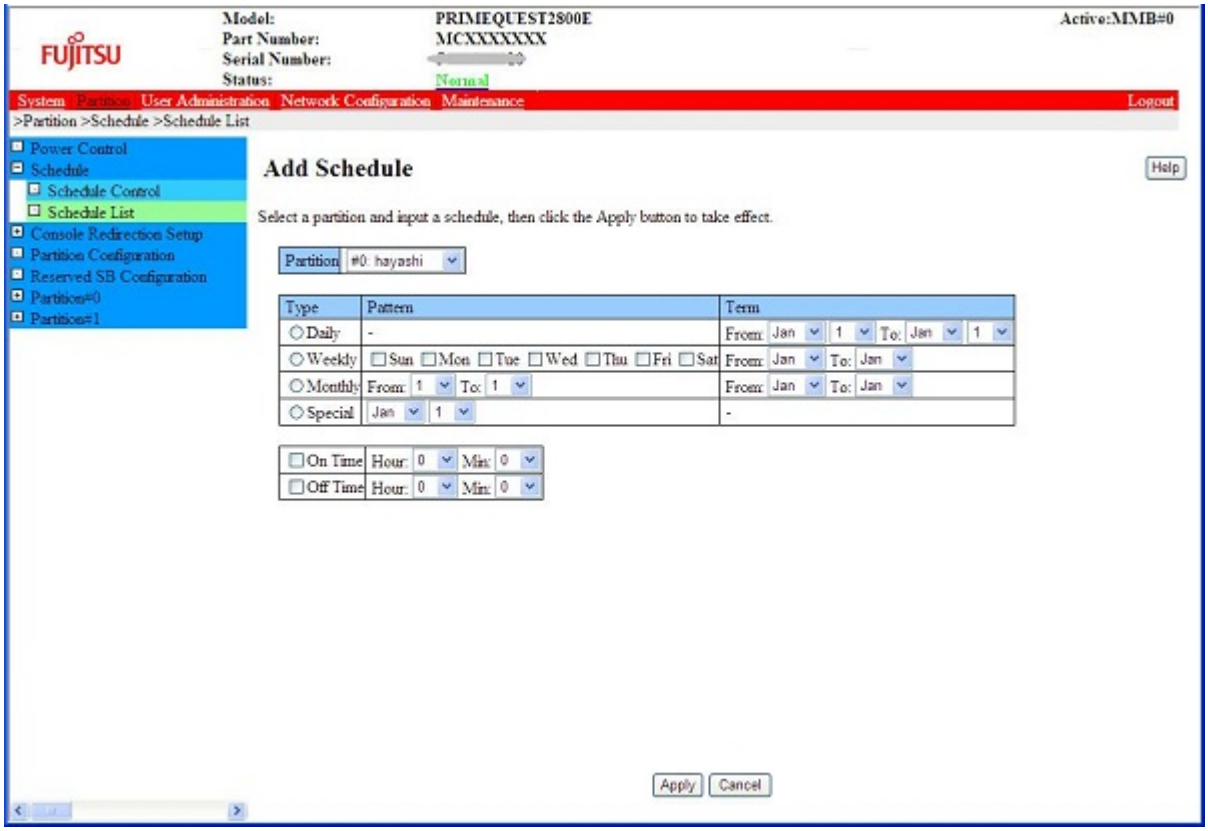


TABLE 1.62 Display Items and Set Items of [Add Schedule] Window

Items	Description
#	Displays the number to identify the partition (0~3). However, only the partition to which SB/IOU is registered is displayed.
Pattern	Select the partition to be added or edited. Default setting is the defined partition with the smallest number.
Type	Select the types of schedule to be set in the partition. ・ Daily: Select when you want to execute every day ・ Weekly: Select when you want to execute every week ・ Monthly: Select when you want to execute every month ・ Special: Select when you want to execute on a particular day every year. (The useful range of Special becomes only a specified day.) If the schedule overlaps on the same day, it is processed according to the following priority order. Special > Monthly > Weekly > Daily By default, it is not selected.
Pattern	Specify the schedule pattern corresponding to the types of the schedule. ・ Weekly : Day in a week (Sun ~ Sat) ・ Monthly: Period in a month ・ Special: Specified month Default settings are as follows. ・ Day in a week: Not selected ・ Period: From : 1 To: 1 ・ Specified date: Jan/1
Term	Specify the period of the schedule according to the type and pattern of the schedule. ・ Daily: Starting month and date, and ending month and date ・ Weekly: Starting month and ending month ・ Monthly: Starting month and ending month Default settings are as follows. ・ Daily: From: Jan / 1 To: Jan / 1 ・ Weekly: From: Jan To: Jan ・ Monthly: From: Jan To: Jan
On Time	On the specified execution date, set whether the power-supply is to be turned ON. If the power-supply is to be ON, set the time. Time is specified in24 hours. Minute specifies the interval of 10 minutes as 00, 10, 20, 30, 40, and 50.
Off Time	Set whether the power-supply is OFF on the specified execution date. If the power-supply is OFF, set the time. Time is specified in 24 hours. Minute is specified in the interval of 10 minutes, as 00, 10, 20, 30, 40, and 50.

TABLE 1.63 [Add Schedule] Window Buttons

Buttons	Description
Apply	If the [Apply] button is clicked, the schedule information specified in each item is applied to the partition.
Cancel	If the [Cancel] button is clicked, returns to the original sate without applying the schedule information specified in each item.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
W_00414	Invalid Date Format
W_00415	The duplicate On/Off Time is found.
W_00416	Both On/ Off Time are disabled.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.3 [Console Redirection Setup] window

There are following windows in the [Console Redirection Setup] menu.
☐[IPv4 Console Redirection Setup] window
☐[IPv6 Console Redirection Setup] window

1.3.3.1 [IPv4 Console Redirection Setup] window

The IP address settings for accessing Console Redirection Setup of IPv4, subnet mask, video redirection and enable/disable settings of virtual media can be done in the [IPv4 Console Redirection Setup] window.

In the Extended Partitioning mode, the background color of Physical Partition having Enable setting is displayed in scarlet and the operations are restrained.
The background color of the Extended Partition to which VGA/USB2/rKVMS is not allocated, is displayed in gray and the operations are restrained.

FIGURE 1.51 [IPv4 Console Redirection Setup]

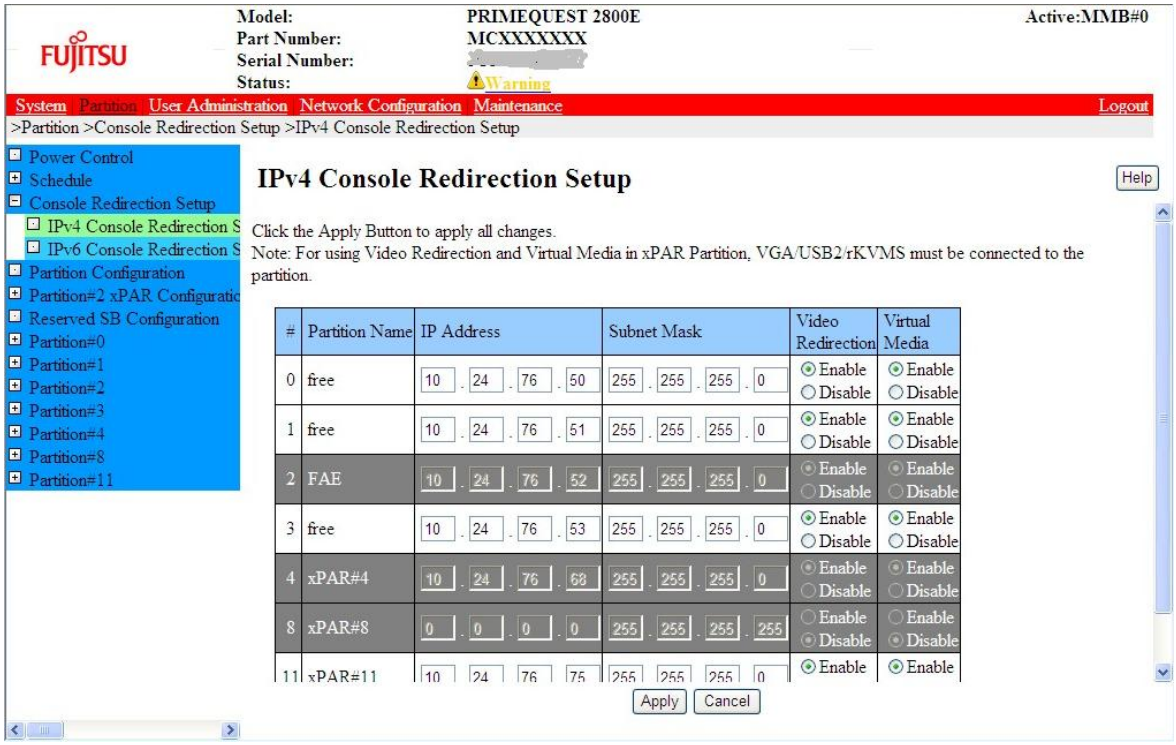


TABLE 1.64 Display Items and Set Items of [IPv4 Console redirection Setup] Window

Items	Description
#	Displays the number for identifying the Partition. 0~11 Partitions exist.
Partition Name	Displays name given to the Partition.
IP Address	Enters the IP address for the Console Redirection of the partition. Specify an IP address of the same segment as the virtual IP address used to access the MMB Web-UI (see "1.5.2 [Network Interface] Menu"). Note that this IP address must be different from that virtual IP address. Default is 0.0.0.0.
Subnet Mask	Enters the subnet mask for the Console Redirection IP of the partition. Default is 255.255.255.255.
Video Redirection	Sets whether video redirection can be used. ・ Enable: Video redirection can be used. ・ Disable: Video redirection cannot be used. Default is Disable. Video Redirection is not possible to use it even if set to Enable that VGA/USB2 is not allocated for Extended Partition.
Virtual Media	Sets whether virtual media can be used. ・ Enable: Virtual media can be used. ・ Disable: Virtual media cannot be used. Default is Disable. Virtual Media is not possible to use it even if set to Enable that VGA/USB2 is not allocated for Extended Partition.

TABLE 1.65 [IPv4 Console redirection Setup] Window Buttons

Buttons	Description
Apply	When [Apply] button is clicked, video redirection, virtual media settings of the specified Partition are applied.
Cancel	When [Cancel] button is clicked, video redirection, virtual media settings are not applied and it returns to the original state.

(1) Menu Operation

[Partition] - [Console Redirection Setup] - [IPv4 Console Redirection Setup]

(2) Window Operations

1. IP address and the subnet mask are entered and it is set whether video redirection, virtual media can be used.
2. [Apply] button is clicked.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00432	Invalid IP Address specified
W_00433	The duplicate IP address was found.
I_00539	The settings for the Console Redirection IP are changed. All existing network connections about this settings will be lost. You will need to login again. If you want to continue, please click OK button. If not, click Cancel button. Are you sure?
W_00595	It is IP address that duplicates with MMB IP address.
W_00597	A subnet differs from MMB IP address. When you change a setup of Console Redirection IP address or you change a subnet, please change MMB IP address first.

1.3.3.2 [IPv6 Console Redirection Setup] window

The IP address settings for accessing Console Redirection LAN of IPv6, prefix length settings, video redirection and enable/disable settings of virtual media can be done in the [IPv6 Console Redirection Setup] window.

In the Extended Partitioning mode, the background color of the Physical Partition which works in Enable settings, is displayed in gray and the operations are restrained.
The background color of Extended Partition to which VGA/USB2/rKVMS is not allocated is displayed in gray and the operations are restrained.

In case of automatic settings, when [Auto] button is clicked, IP address, prefix length are automatically acquired.

FIGURE 1.52 [IPv6 Console Redirection Setup] Window

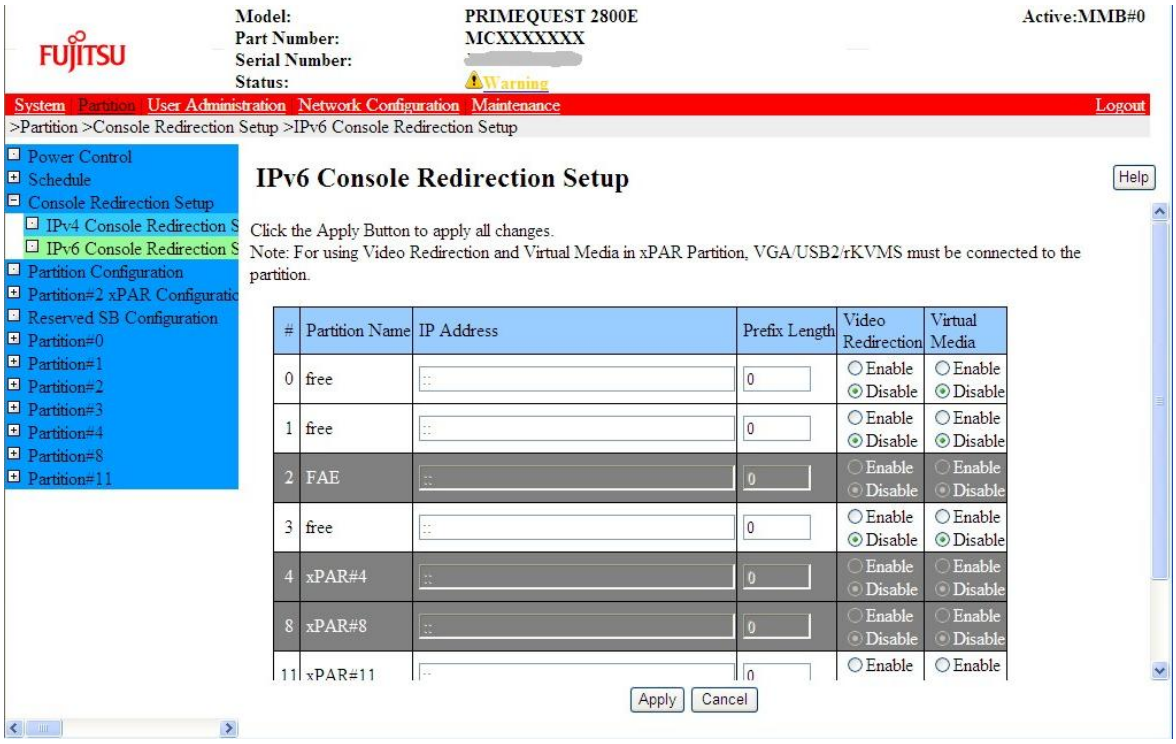


TABLE 1.66 Display Items and Set Items of [IPv6 Console redirection Setup] Window

Items	Description
#	Displays the number for identifying the Partition. 0~11 Partitions exist.
Partition Name	Displays the name given to the Partition.
IP Address	Enters the global address for IPv6 which can be connected. In case of automatic acquisition, the acquired IP Address is displayed.
Prefix Length	Enters the prefix length for IPv6. In case of automatic acquisition, the acquired prefix length is displayed.
Video Redirection	Sets whether video redirection can be used. ・ Enable: Video redirection can be used. ・ Disable: Video redirection cannot be used. Default is Disable. Video Redirection is not possible to use it even if set to Enable that VGA/USB2 is not allocated for Extended Partition.
Virtual Media	Sets whether the virtual media can be used or not. ・ Enable: Virtual media can be used. ・ Disable: Virtual media cannot be used. Default is Disable. Virtual Media is not possible to use it even if set to Enable that VGA/USB2 is not allocated for Extended Partition.
Automatic acquisition	When IPv6 address is automatically acquired, the "Auto" button is clicked. IP address and prefix length are automatically acquired and overwritten.

TABLE 1.67 [IPv6 Console redirection Setup] Window Buttons

Buttons	Description
Auto	When you Click [Auto] button IP address and prefix length is automatically displayed.
Apply	When you click the [Apply] button, video direction of the specified partition, virtual media setting is applied.
Cancel	When you click the [Cancel] button, virtual media setting, video redirection is not applied and it returns to the original state.

(1) Menu Operation

[Partition] - [Console Redirection Setup] - [IPv6 Console Redirection Setup]

(2) Window Operations

1. Input the IP address, prefix length and sets whether video redirection and virtual media should be used.
2. Click the [Apply] button.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00432	Invalid IP Address specified
W_00433	The duplicate IP address was found.
I_00539	The settings for the Console Redirection IP are changed. All existing network connections about this settings will be lost. You will need to login again. If you want to continue, please click OK button. If not, click Cancel button. Are you sure?
W_00595	It is IP address that duplicates with MMB IP address.
W_00597	A subnet differs from MMB IP address. When you change a setup of Console Redirection IP address or you change a subnet, please change MMB IP address first.

1.3.4 [Partition Configuration] Menu

The SB and IOU which configure the partition can be set on [Partition Configuration] window.

In case of PRIMEQUEST 2400E3/2400E2/2400E model, only 0 and 1 are displayed for partition.

Attention of operation

- Do not start two or more Web screen when you change Extended Partitioning and change on a single Web screen.

FIGURE 1.53 [Partition Configuration] Window

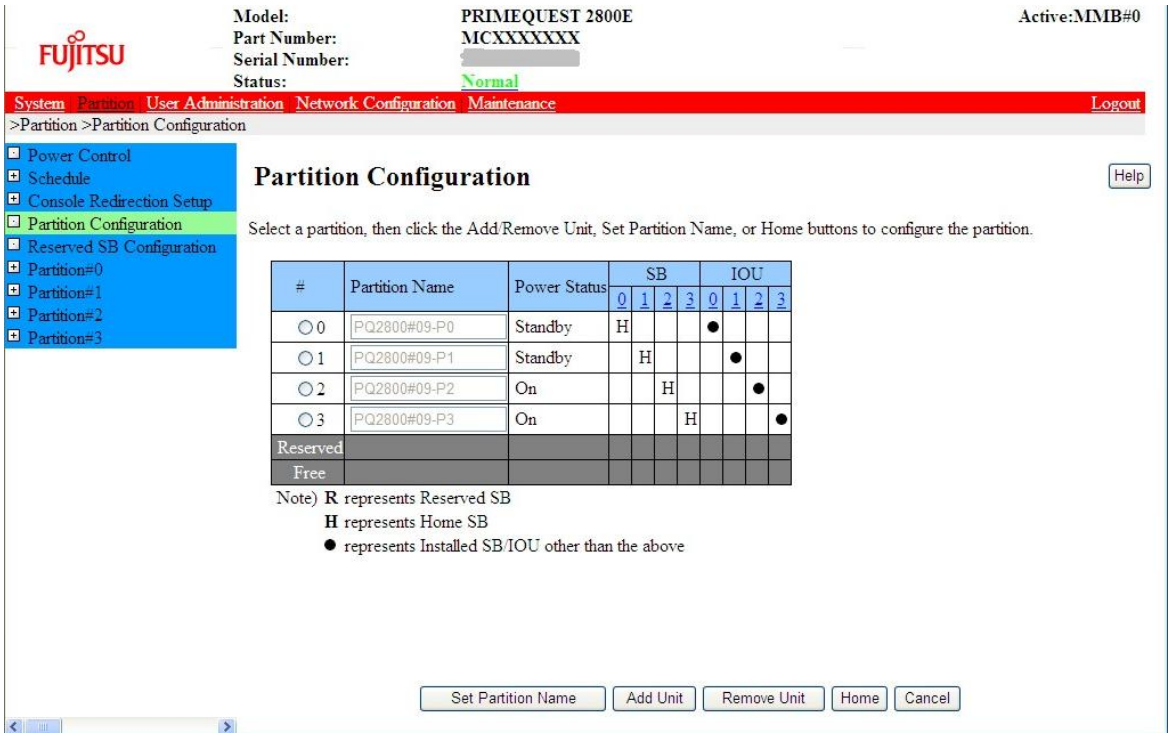
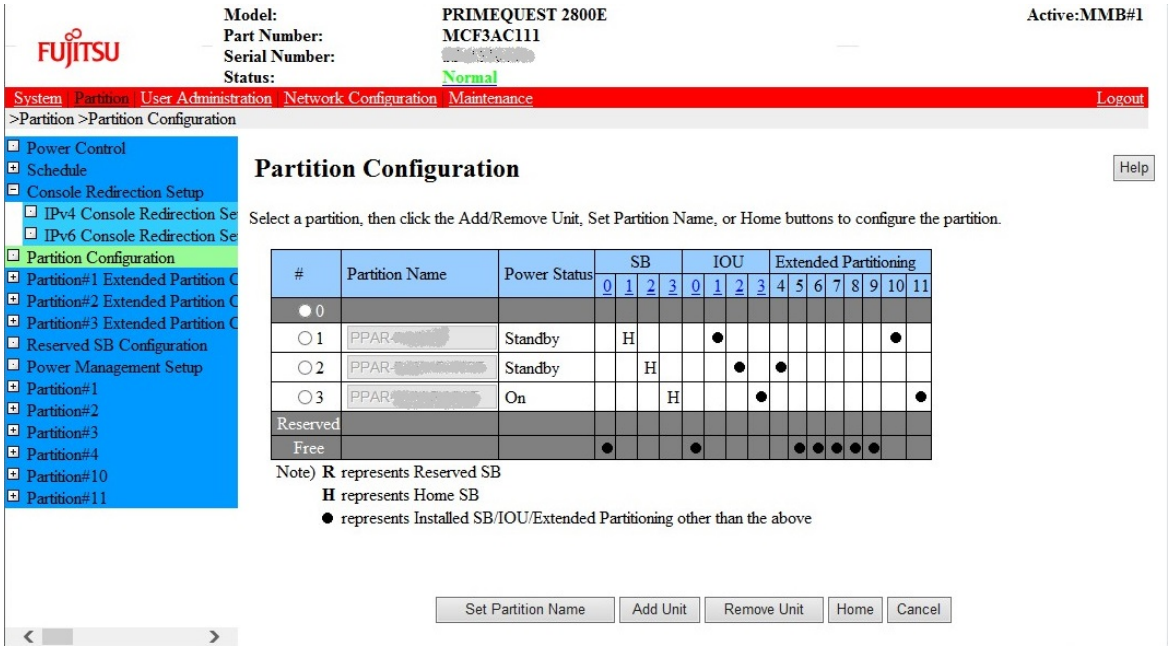


FIGURE 1.54 [Partition Configuration] Window (When Extended Partitioning Mode is enable)



For the series of SB and IOU which are not installed, the background color is displayed in the gray.

Select the set partition by using the left radio button, and select the button corresponding to set process from [Add Unit], [Remove Unit] and [Home].

"Unit" of Add Unit, Remove Unit button means SB, IOU or Extended Partitioning.

If SB/IOU link is clicked, [SB#x] window, [IOU#x] window are displayed respectively.

If the maintenance mode (Hot Partition Maintenance, Warm System Maintenance or Cold system Maintenance) is set, only the user (Maintenance person, Administrator privilege) who sets the maintenance mode can operate this mode. If the partition is selected other than the maintenance target, a message is displayed and operation is disabled.

TABLE 1.68 Display Items and Set Items of [Add Schedule] Window

Items	Description
#	It displays the number for identifying the partition. Exists up to 0~11 Partition. The Extended Partition is added to the display. SB/IOU which does not belong to the partition is displayed as follows. ・ Reserved: Reserved SB ・ Free: Free SB/IOU/Extended Partitioning
Partition Name	Displays/sets the name attached to the partition. The name can be entered up to 16 characters. It is possible to use alphanumeric characters, single bytes spaces, # (Sharp), _ (Underline), - (Hyphen) in the Partition Name. By default, there are no settings.
Power Status	Displays the Power status of the partition ・ On ・ Standby
SB	Displays the partition to which the SB belongs.
IOU	Displays the partition to which the IOU belongs.
Extended Partitioning	Displays the partition to which the Extended Partitioning belongs.

TABLE 1.69 [Partition Configuration] Window Buttons

Buttons	Description
Set Partition Name	Sets the name in the partition.
Add Unit	Displays the [Add Unit] window for incorporating the unit.
Remove unit	Displays the [Remove Unit] window for deleting the unit.
Home	Displays the [Partition Home] window for setting the Home of Partition.
Cancel	Returns to original status without setting the information.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00217	Unable to set Partition Name of Partition#%aa because this partition is under maintenance.
I_00218	Unable to add SB/IOU/Extended Partitioning to Partition#%aa because this partition is under maintenance.
I_00219	Unable to remove SB/IOU/Extended Partitioning from Partition#%aa because this partition is under maintenance.
I_00220	Unable to set Home on Partition#%aa because this partition is under maintenance.
I_00427	Select a partition.
I_00429	The partition is not defined.
W_00428	Only the alphanumeric character can be input to Partition Name area.
W_00575	Unable to change partition configuration because this partition is powered on.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

The operation method in the [Partition Configuration] window is described as follows.

1.3.4.1 [Set Partition Name] Button

The partition name is entered in each cell of [Partition Name], and when [Set Partition Name] button is clicked, the name for each partition is set.

1.3.4.2 [Add SB/IOU to Partition] Window

When the partition is selected by using radio button of [Partition Configuration] window and when [Add Unit] button is clicked, [Add SB/ IOU to Partition] window appears.

FIGURE 1.55 [Add SB/IOU to Partition] Window

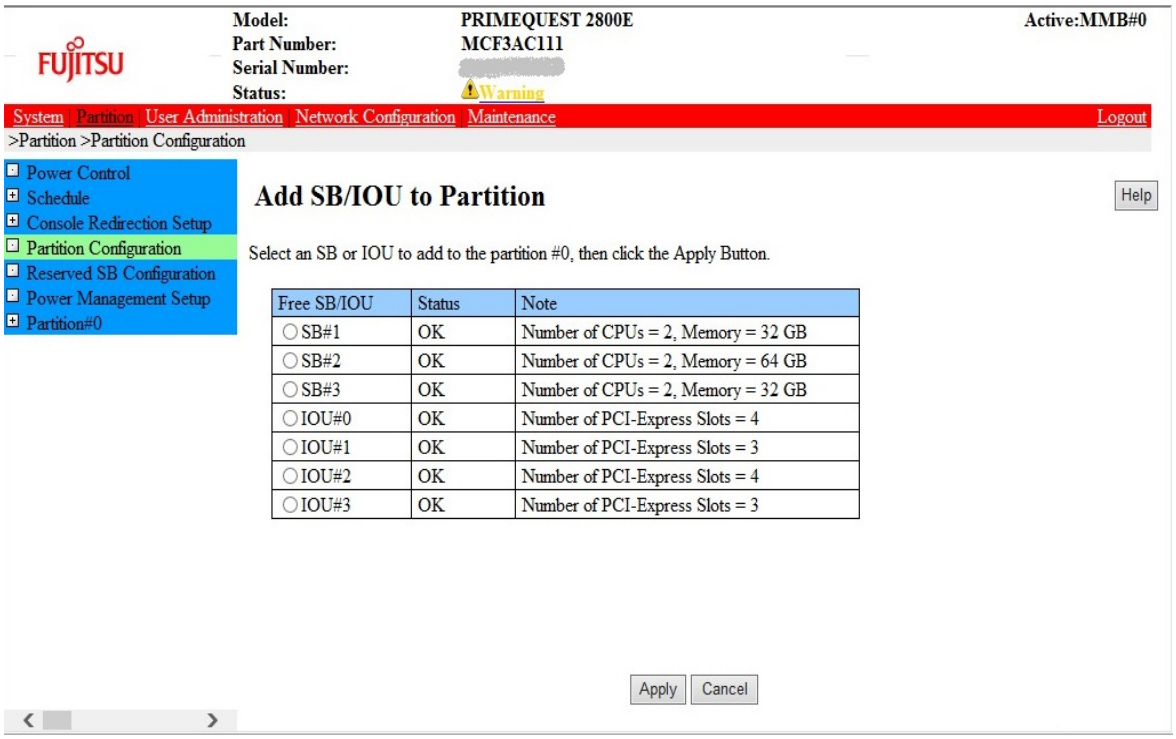
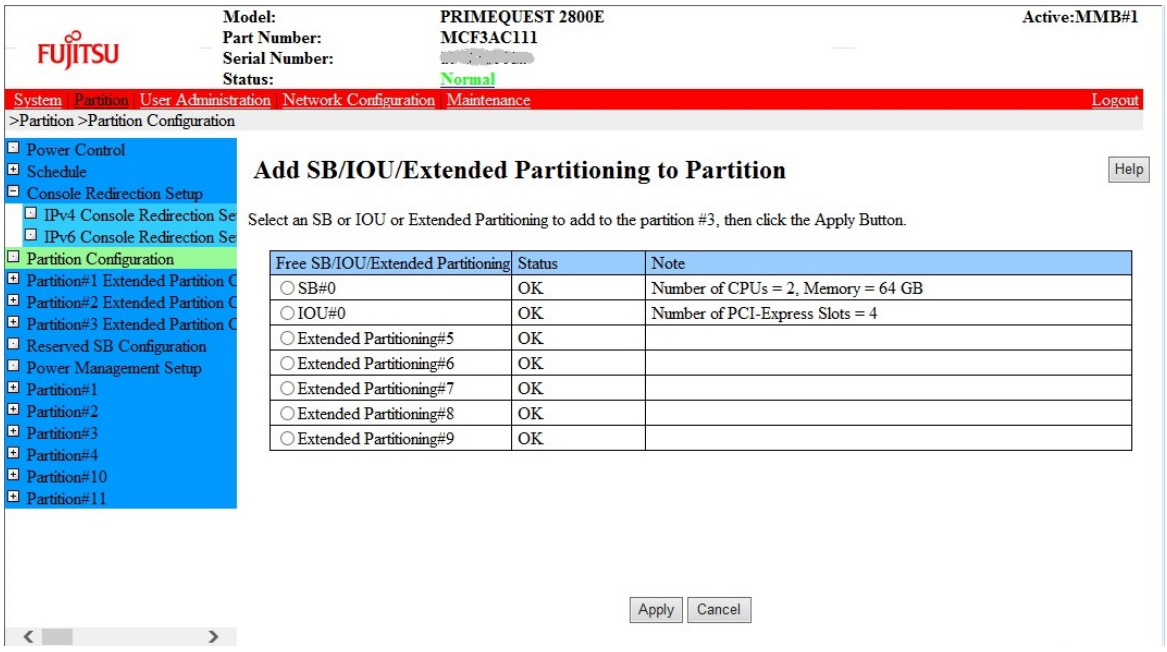


FIGURE 1.56 [Add SB/IOU/ Extended Partitioning to Partition] Window (When Extended Partitioning Mode is enable)



Remarks

Radio button is attached for the display of each Free SB, IOU and Extended Partitioning, and it is not possible to select more than one at the same time.

In case of PRIMEQUEST 2800E3/2800E2/2880E model, check whether SB in which one CPU can be mounted, is not mounted in the partitions of two or more SBs.

- Only when one partition is configured by one SB, one CPU can be mounted for one SB.
- When one partition is configured by multiple SBs, it is mandatory to mount two CPUs for each SB in the partition.

When Memory Scale-up Board is built into the partition, it is necessary to build one or more SB into the partition.

If the maintenance mode (Hot Partition Maintenance, Warm System Maintenance or Cold system Maintenance) is set, only the user (Maintenance person, Administrator privilege) who sets the maintenance mode can operate this mode.

In case of the partition other than the maintenance target, a message is displayed and operation is not possible.

The addition of Memory Scale-up Board to Partition that Dynamic Reconfiguration Mode is effective cannot be set by warning Dialog box being displayed.

TABLE 1.70 Display Items and Set Items of [Add SB/IOU to Partition] Window

Items			Description
Free SB/IOU/Extended Partitioning			Displays the SB/IOU/ Extended Partitioning in the free status (Status which does not belong to any partition)
Status			Displays the status of the SB/IOU/Extended Partitioning.
Note	SB	Number of CPUs	Displays the number of CPU mounted on the SB. This item is not displayed for Memory Scale-up Board.
		Memory	Displays the amount of memory mounted on the SB.
	IOU	Number of PCI-Express slots	Displays the number of PCI-Express slots of the IOU.
	Extended Partitioning	There is no display.	

(1) Menu Operation

[Partition] - [Partition Configuration] - [Add Unit] button

(2) Window Operations

1. Select the SB or IOU to be incorporated in the partition, and then click the [Apply] button.
   A confirmation dialog box appears.
2. Click [OK] button.
   The SB or IOU will be incorporated.
3. Click the [Apply] or [Cancel] button.
   Return to [Partition Configuration] window.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00045	Free node doesn't exist.
E_00110	Failed to add the SB, IOU or Extended Partitioning to the partition.
E_00112	Unable to add the specified SB#%aa to the partition due to CPU mismatch between SBs.
E_00424	Unable to add the specified SB to the partition due to CPU composition abnormal.
E_00425	Unable to add the specified SB to the partition due to DIMM composition abnormal.
E_00490	Unable to add the specified SB to the partition due to DIMM does not satisfy requirements of Mode.
W_00505	Unable to set configuration because the power on/off is processing. Please execute it after a while again.
E_00519	Unable to add the specified SB to the partition due to SB composition abnormal.
W_00593	Unable to add the specified SB to the partition due to Dynamic Reconfiguration Mode.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

When multiple errors are detected, multiple errors are displayed in the dialog box.

1.3.4.3 [Remove SB/IOU from Partition] Window

Select the partition by using radio button of [Partition Configuration] window, and when [Remove Unit] button is clicked, [Remove SB/ IOU from Partition] window appears.

FIGURE 1.57 [Remove SB/IOU from Partition] Window

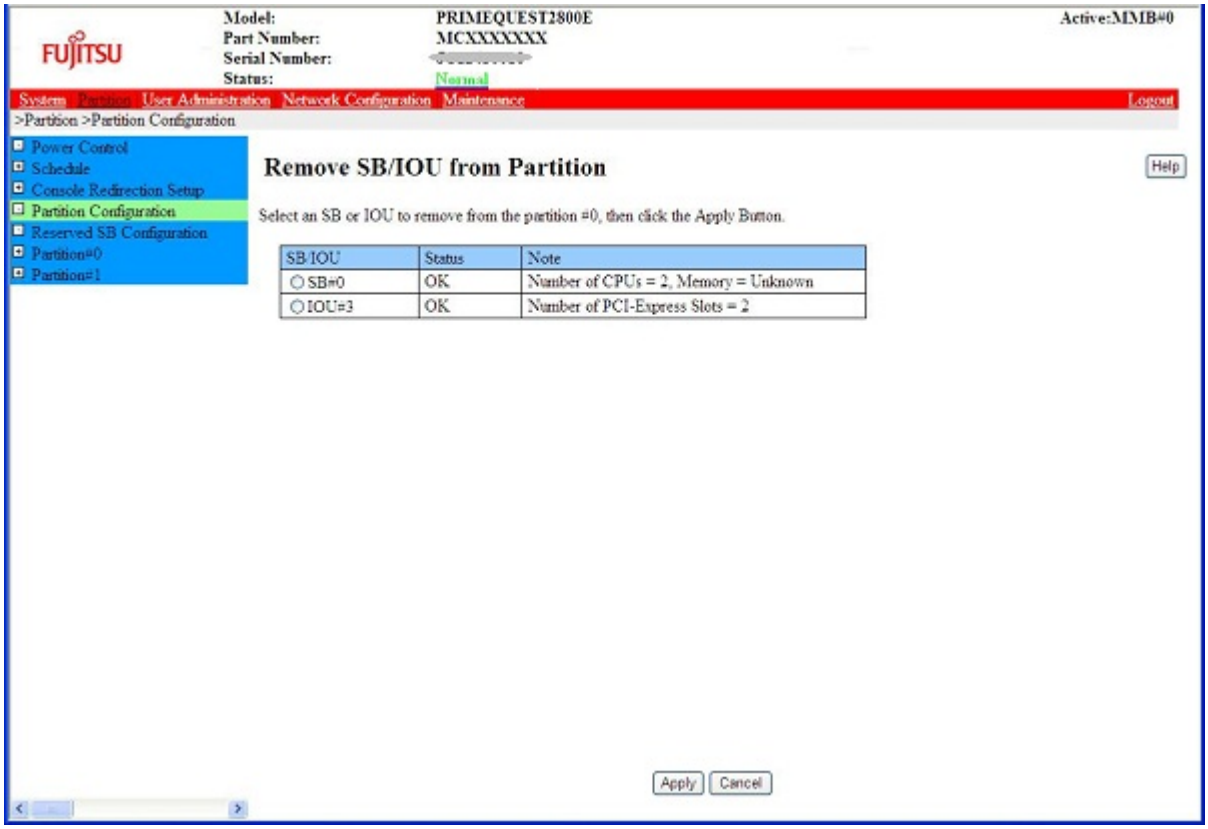
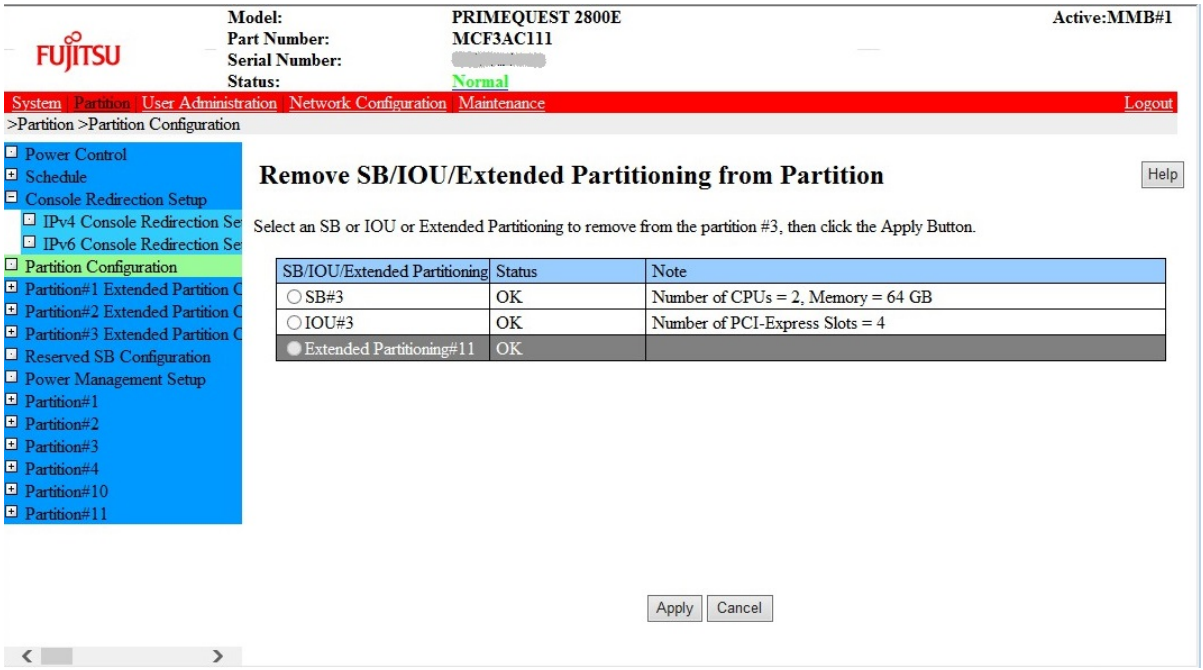


FIGURE 1.58 [Remove SB/IOU/ Extended Partitioning from Partition] Window (When Extended Partitioning Mode is enable)



When maintenance mode (Hot Partition Maintenance, Warm System Maintenance, or Cold System Maintenance) is set, only the user (Maintenance person, Administrator privilege) who sets the maintenance mode can operate this mode.

If the partition is selected other than the maintenance target, message is displayed and operation is not possible.

TABLE 1.71 Display Items and Set Items of [Remove SB/IOU to partition] Window

Items			Description
SB/IOU/Extended Partitioning			Displays SB which belongs to partition
Status			Displays the status of SB/IOU/Extended Partitioning.
Note	SB	Number of CPUs	Displays the number of CPUs mounted on the SB. This item is not displayed for Memory Scale-up Board.
		Memory	Displays the amount of memory mounted on the SB.
	IOU	Number of PCI-Express slots	Displays the number of PCI-Express slots of the IOU.
	Extended Partitioning	There is no display	

(1) Menu Operation

[Partition] - [Partition Configuration] - [Remove Unit] button

(2) Window Operations

1. Select the SB or IOU which is to be removed from the partition and click the [Apply] button.
   Confirmation dialog box is displayed.
2. Click [OK] button.
   SB or IOU is removed.
3. Click the [Apply] or [Cancel] button.
   Back to [Partition Configuration] window.

[Message]

This section describes the messages to be displayed on this window.

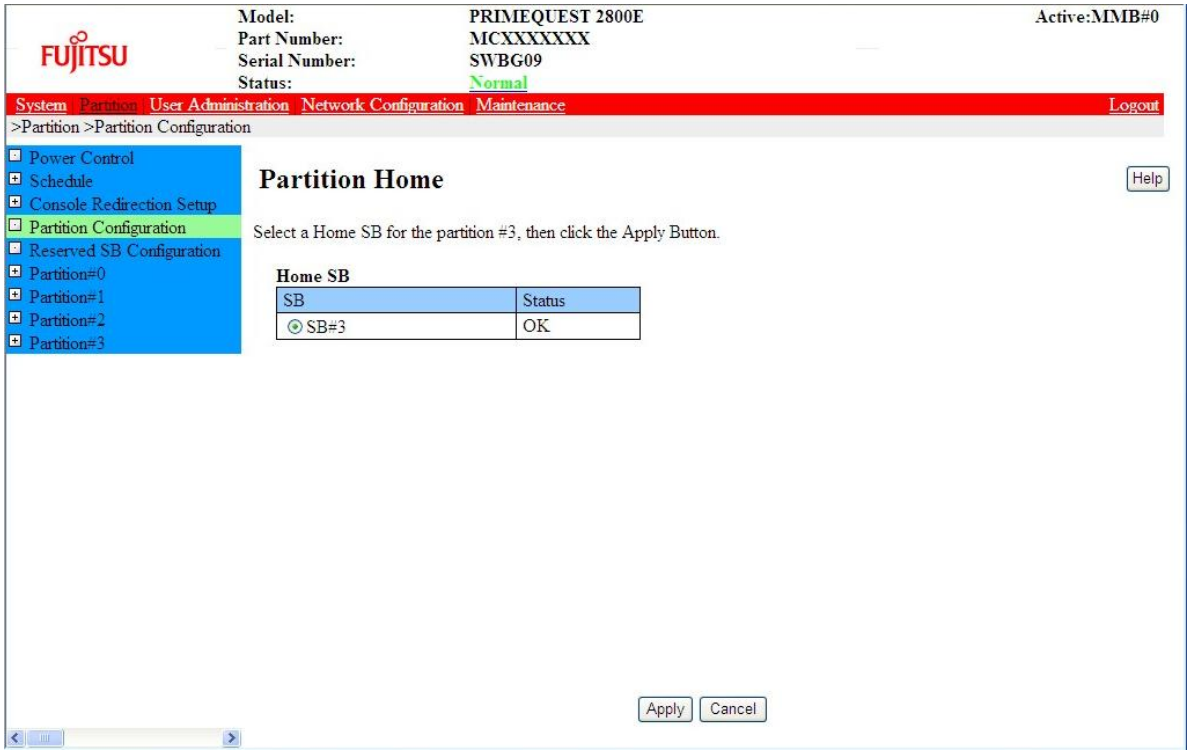
Message Number	Message
E_00022	The partition doesn't have a node.
E_00111	Failed to remove the SB, IOU or Extended Partitioning from the partition.
W_00505	Unable to set configuration because the power on/off is processing.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.4.4 [Partition Home] window

If you select the partition using the radio button on the [Partition Configuration] window and click the [Home] button, [Partition Home] window is displayed.

FIGURE 1.59 [Partition Home] window



1. Select the SB which is considered as the Home SB, by using the radio button.
   When SB (Memory Scale-up Board is excluded) which is set as Home SB is not mounted, the background color is displayed in gray.
   You can switch from the selected radio button on a grayed row to a radio button on a row that is not grayed. However, if the selection on the row displayed in gray is removed once, it is not possible to select the original radio button again.
   When the Home SB is not set, the SB (Memory Scale-up Board is excluded) which is initially installed in the partition by default is considered as the Home SB. However, when the Home SB is removed and degenerated, SB (Memory Scale-up Board is excluded) with smallest number is the Home SB.
2. Click the [Apply] button.
   Confirmation dialogue box is displayed.
3. Click the [OK] button when you want to continue the processing.
   Click the [Cancel] button when you want to cancel the processing.
4. Click the [Apply] or the [Cancel] button.
   Return to [Partition Configuration] window.
   When the [Apply] button is clicked and the power supply of the target partition is ON, change of [Home] is not possible. A warning dialogue box is displayed.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00022	The partition doesn't have a node.
W_00423	The partition home cannot be changed while the partition is running. Please try to change the partition home after the partition is shutdown.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.5 [Partition #x Extended Partition Configuration] Menu

[Partition #x Extended Partition Configuration] Menu consists of [SB], [IOU] and [PCI_Box] windows. Explanation regarding windows and operations are given here.

Partition #x Extended Partition Configuration menu is displayed when the Extended Partitioning mode of Physical Partition is set to Enable in Partition ->Partition#x -> Mode. The configuration of Extended Partition can be changed.

Attention of operation

- Do not do the configuration change (setting) in Power On of Partition.
- Do not start two or more Web screens when you change Extended Partitioning and change on a single Web screen.

1.3.5.1 [SB] window

The resource allocation setting window of SB related to Extended Partition is displayed; when Partition#x Extended Partition Configuration -> SB Menu is selected.

Click the "Apply" button after various setting changes.

FIGURE 1.60 [Extended Partition Configuration of SB Resources] Window (1)

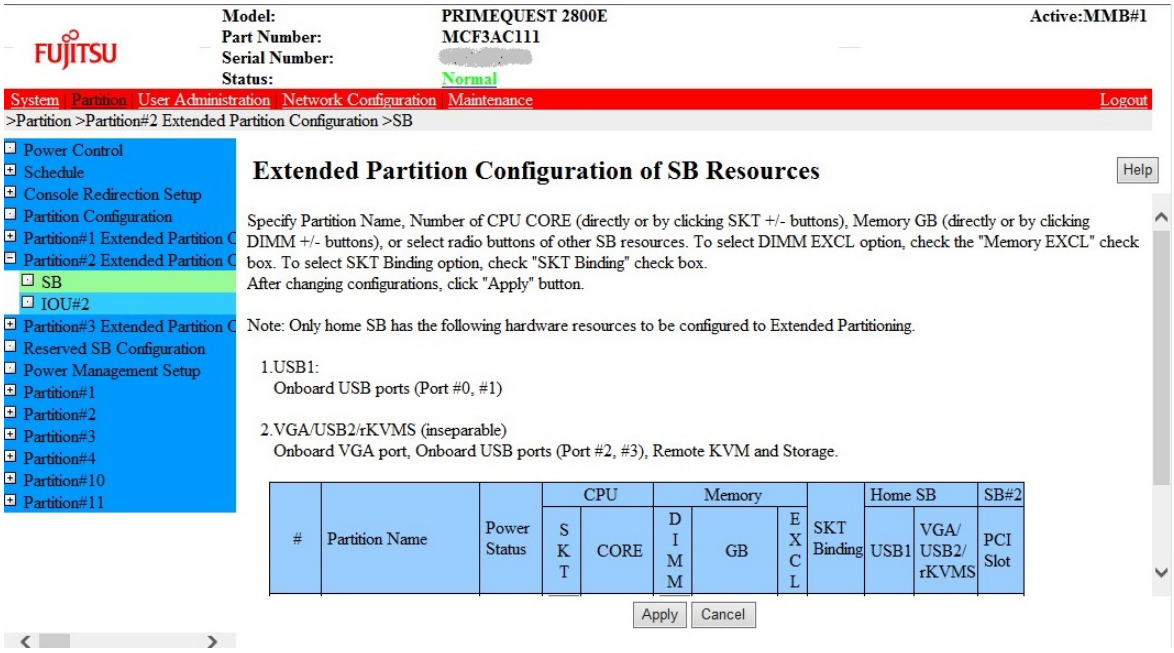
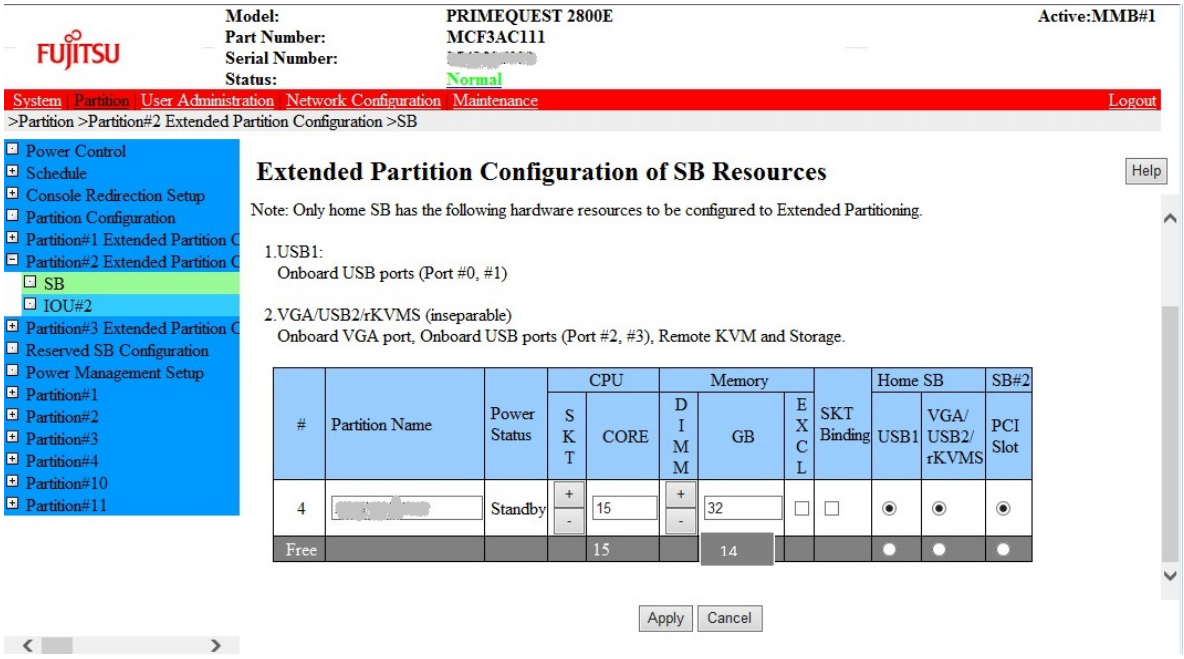


FIGURE 1.61 [Extended Partition Configuration of SB Resources] Window (2)



Input the Partition Name for Extended Partitions. Then, click the [Apply] button. The name of the specified Partition appears.

You can directly input the CPU core number to be allocated for Extended Partitions or you can set the CPU core number in Socket unit by clicking CPU SKT +/- button. Then, click the [Apply] button. Allocated CPU Core Number for specified Partition appears.

To manage the commonness part independently without influencing the performance of Extended Partition, the Extended Partition firmware occupies one core.
Therefore, the number of CPU cores that can be allocated in Extended Partition becomes a number in which one is subtracted from the number of all CPU cores of Physical Partition that become parents of Extended Partition.

You can directly input the memory to be allocated in GB unit for Extended Partitions or can set the Memory GB number in the memory group(two DIMMs with maximum capacity in the Extended Partition) unit by clicking Memory DIMM +/- button. Then click the [Apply] button. The allocated memory for the specified Partition appears.

Check the Memory EXCL check box for one or multiple Partitions. Then, click the [Apply] button. DIMMs are exclusively allocated and physical DIMMs are not shared by other Extended Partitions.. Although exclusive control of memory is performed by the total memory capacity under a CPU, memory capacity which can be used by OS is the capacity specified by the GB unit.Check the SKT Binding check box for Extended Partitions. Then, click the [Apply] button. CPU and Memory are assigned from some two CPU Sockets and DIMM under those CPUs for the checked Partition.

Select the radio button to allocate USB1, VGA/USB2/Remote KVMS and PCI Slot. Then, click the [Apply] button. Source for specified Partition allocates.

To recommend the user operation that does not allocate VGA/USB2/rKVMS when VGA/USB2/rKVMS is changed, message dialog (I_00604) is displayed.

Allocation is not possible when CPU CORE and Memory GB become Free or 0.

There is a limitation in the setting when multiple Extended Partition exist on the same physical partition.
Only the setting change of Partition Name is possible in the Extended Partition in Power On.
The setting changes other than Partition Name are possible in the Extended Partition in Power Off.

You can change the Partition Name only when the relevant partition is Physical Partition and under maintenance. Error message is displayed if you change anything except the Partition Name.

If you click 'Cancel' button, process is cancelled and the changes for contents are discarded.
After you click Apply or Cancel button, the browser returns to Partition Configuration page.

Degenerated CPU core and Memory decrease from Free and are displayed. When the resource that exceeds the total of Free is degenerated, Free is displayed as 0. In this case, the resource is allocated from Extended Partition that the number is the smallest by priority. Therefore, the resource actually allocated is decreased in the partition with large number.

Memory allocated in Extended Partition decreases when Memory Operation Mode is changed in either of "Partial Mirror Mode", "Full Mirror Mode" or "Spare Mode" state after the memory is allocated in Extended Partition in the state of "Normal Mode" or "Performance Mode". Therefore, the resource actually allocated is decreased in the partition with large number. In this case, set it again after setting the allocation to 0 once.

The memory capacity that increases and decreases automatically with the "Memory DIMM +/-" button is different according to operating Memory Operation Mode. The allocation granularity that increases and decreases in each Mode is as follows.

TABLE 1.72 Allocation granularity of Memory by Memory Operation Mode

Memory Operation Mode	SMI Channel Mode	DIMM Error Isolation	Allocation granularity of Memory (*)	remarks
Performance Mode	Independent Mode	DIMM 1 piece	As much as two capacity of DIMM in the maximum capacity in Partition.	The total capacity that can be allocated is a value in which 2GB is pulled from actual capacity.
Normal Mode (Default)	Lockstep Mode	DIMM 2 pieces		
Partial Mirror Mode				The total capacity that can be allocated with Home SB is a value in which 2GB is pulled from the value in which the memory capacity installed in non-Home SB is added to the half of the memory capacity installed in Home SB.
Full Mirror Mode				The total capacity that can be allocated is a value in which 2GB is pulled from the half of actual capacity.
Spare Mode				The total capacity that can be allocated is a value in which 2GB is pulled from 2/3 of the actual capacity. Install DIMM of the same capacity with all Channel when you use Extended Partition in the Spare mode.

* For the DIMM can not be used DIMM fractional occurs by mixed of DIMM, it is recommended that you not mix DIMM When Memory EXCL is enabled.

* The total capacity of Memory that can be allocated in Extended Partition decreases to the extent that used because Extended Partitioning Firmware uses 2GB in Memory.

The total capacity of Memory that can be allocated in the partition reaches the value pulled from actual capacity by 4GB so that the firmware of Extended Partition may use the memory of 4GB when Address Range Mirror Mode is used.

TABLE 1.73 Display Items and Set Items of [Extended Partition Configuration of SB Resources] Window

Items	Description
#	Shows the number required for identifying the Extended Partition. Shows only the Extended Partitioning number allocated in the Physical Partition.
Partition Name	Displays and sets the name of Extended Partition. Up to 16 characters can be entered for the Name. It is possible to use the alphanumeric characters, single byte spaces, # (Sharp), _ (Underline), - (Hyphen) in the Partition Name. **(Remarks)** It is easy to understand with the same name as the Host Name set on the operating system. Default value: Default value of the Partition Name is not set.
Power Status	Displays the Power supply status of the partition ・ On ・ Standby
CPU (SKT)	Displays the button by which CPU Core allocated in Extended Partition is increased or decreased by Socket unit. ・ "+" increases the value of the CPU Core by the CPU Socket unit. ・ "-" decreases the value of the CPU Core by CPU Socket unit.
CPU (CORE)	Displays and sets the number of CPU Cores that are allocated in Extended Partition.
Memory (DIMM)	Displays the button by which Memory allocated in Extended Partition is increased or decreased by DIMM group unit. ・ "+" increases the value of Memory GB by DIMM group unit. ・ "-" decreases the value of Memory GB by DIMM group unit.
Memory (GB)	Displays and sets the GB of memory that was allocated to the Extended Partition.
Memory (EXCL)	Sets DIMM Exclusive Allocation mode. At the time of failure, in order to limit the extent of impact to one Partition, the Option is selected, which exclusively allocates the DIMM for Extended Partitioning. When this Option is selected, and when the value specified in the Memory GB is less than the capacity of the DIMM group unit, the capacity that is rounded to the DIMM group unit will be allocated. However, only the specified capacity is shown to OS.
SKT Binding	Sets CPU Socket Binding mode. CPU and Memory resources are allocated only from a DIMM which exists under a certain two CPU Sockets, since it is corresponding to the licensed software which is charged according to the number of CPU Sockets (Partition not exclusive). When this option is selected and when the value specified by the CPU Core or Memory GB exceeds the actual resource, only the actually existing resources are allocated.
HOME SB (USB1)	Displays the Extended Partition to which the USB1 of the Home SB (Onboard USB Port #0/1) belongs and sets it.
Home SB(VGA/USB2/rKVMS)	Displays the Extended Partition to which, VGA/USB2/rKVMS (Onboard VGA Port, Onboard USB Port#2/3, Remote KVMS of Home SB) belongs and sets it.
SB#x (PCI Slot)	Displays the Extended Partition to which, PCI Slot(SB RAID) of SB#x belongs and sets it.
Free	Displays the resource not allocated in any Extended Partition

When the Extended Partitioning number is not allocated on Partition->Partition Configuration window, following window is displayed.

FIGURE 1.62 [Extended Partition Configuration of SB Resources] no Extended Partitioning window

(1) Menu Operation

[Partition] - [Partition#n Extended Partition Configuration] - [SB] button

(2) Window Operations

1. When there is change in "Partition Name", change in "CPU CORE" and "Memory GB" allocation, change in "Memory EXCL" and "SKT Binding" option, change in "USB1", "VGA/ USB2/ Remote KVMS", "PCI Slot" allocation, click the [Apply] button after changing each setting.
   And then, confirmation dialog box appears.
2. Click the [OK] button.
   The allocation of the resource is changed.
3. Click the [Apply] or [Cancel] button.
   Return to [Extended Partition Configuration of SB Resources].

[Message]

This section describes the messages to be displayed on this window.

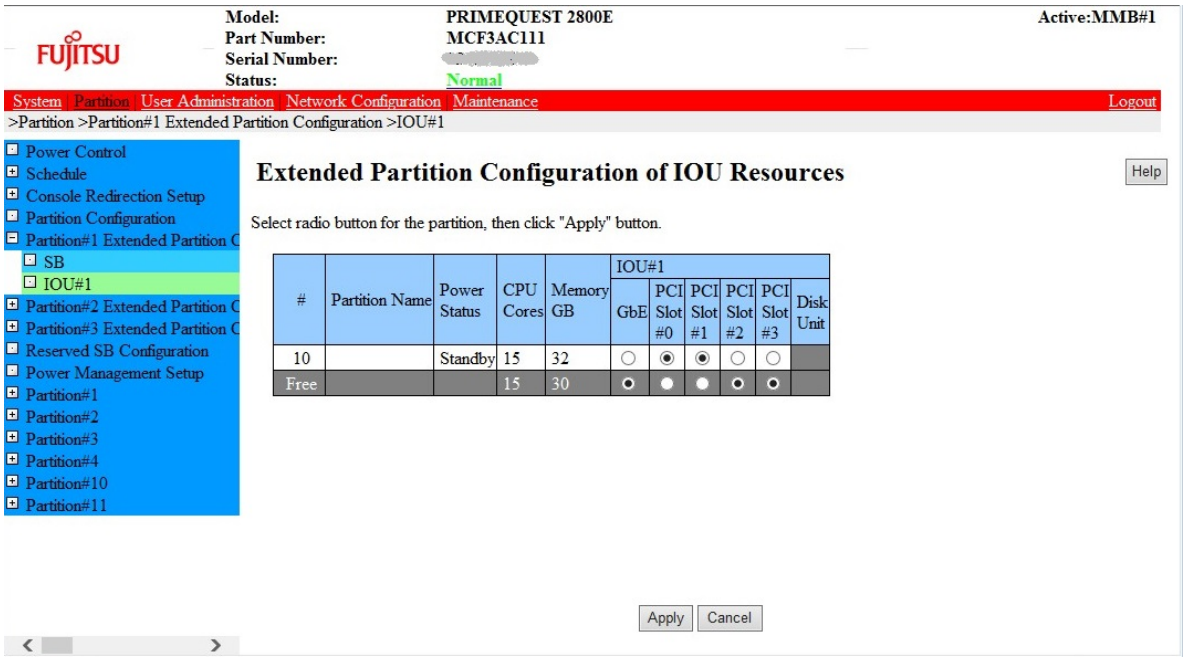
Message Number	Message
E_000544	Unable to change Extended Partitioning Configuration to Partition#%aa because this partition is under maintenance.
W_00545	Unable to change Extended Partitioning Configuration to Partition#%aa because this partition is power on.
W_00589	Unable to change Resources, because this partition is powered on.
I_00604	Setting completed. !!! CAUTION!!! Assignment of "VGA/USB2/rKVMS" cannot be changed if the Extended Partition is powered on. Please release "VGA/USB2/rKVMS" after the operation. Note: "IP Address", "Video Redirection" and "Virtual Media" for all Extended Partitions must be enabled in "Partition -> Console Redirection Setup" menu.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.5.2 **[IOU] window**

When you select Partition#x Extended Partition Configuration ->IOU# page, resource allocation set window of the IOU to Extended Partition is displayed.

FIGURE 1.63 [Extended Partition Configuration of IOU Resources] Window



PCI Slot#3 is not displayed for the IOUF.

When the allocation of GbE, PCI Slot#0~3, Disk Unit is selected by using the radio button and when "Apply" button is clicked, the resource is allocated to the specified Partition.

Only the CPU Cores and the Memory GB are displayed.

When “Cancel” button is clicked, process is cancelled.

When PCNC to connect the PCI_Box with PCI Slot#2 and #3 is mounted, background color is displayed in gray and the operation is suppressed .

When the Disk Unit is not mounted, or when card is not mounted, background color is displayed in gray and the operation is suppressed.

While Power On or while parent Physical Partition is maintaining, Extended Partition cannot change, setting, (Error message is displayed).

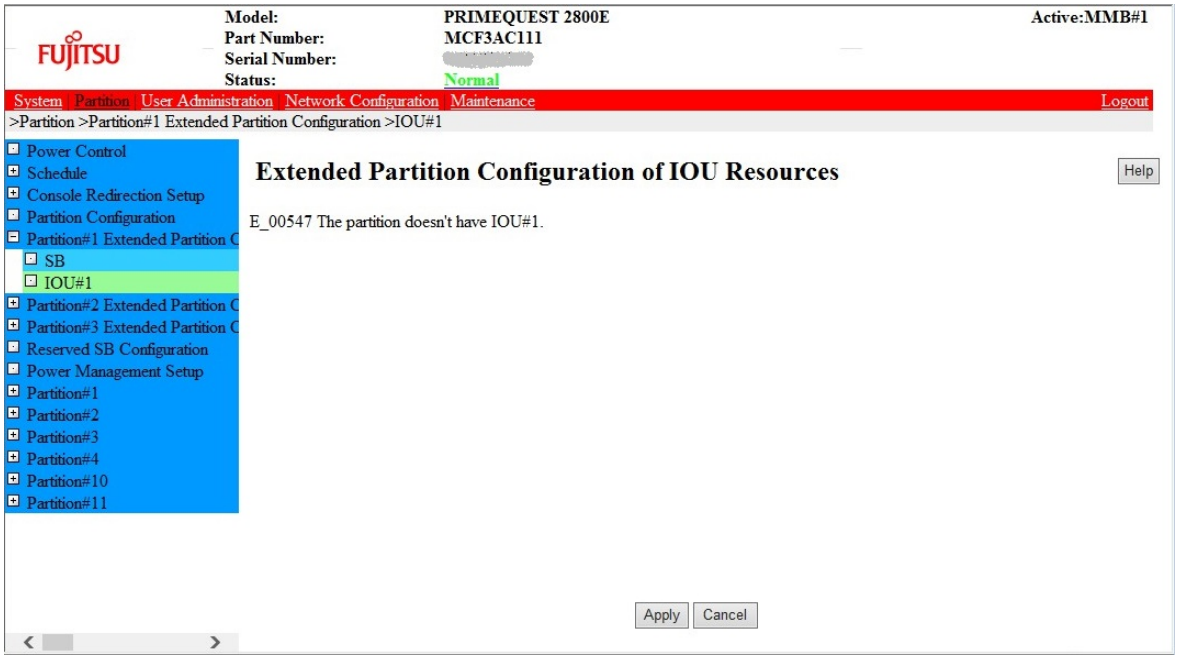
When any of GbE, PCI Slot#0~3, Disk Unit on IOU is allocated to the specified Partition, all PCI Slots on the IOU are shown in the Partition. But the PCI Slots which are not selected by radio button are shown as empty slots in the Partition.

TABLE 1.74 Display Items and Set Items of [Extended Partition Configuration of IOU Resources] Window

Items	Description
#	Displays the number identifying the Extended Partition. Displays only the Extended Partition number allocated to the Physical Partition.
Partition Name	Displays the name attached to the Extended Partition.
Power Status	Displays power supply state of the Partition. ・ On ・ Standby
CPU CORE	Displays the number of CPU Cores allocated to the Extended Partition.
Memory GB	Displays the Memory GB that is allocated to the Extended Partition.
IOU#x (GbE)	Displays and sets the Extended Partition, to which GbE of IOU#x belongs.
IOU#x (PCI Slot #y)	Displays and sets the Extended Partition to which PCI slot#y of IOU#x belongs.
IOU#x (Disk Unit)	Displays and sets which Extended Partition to which Disk Unit of IOU#x belongs.

The following windows are displayed when the Extended Partitioning number is not allocated in the Partition->Partition Configuration Window.

FIGURE 1.64 [Extended Partition Configuration of IOU Resources] no EXTENDED PARTITIONING windows



(1) Menu Operation

[Partition] - [Partition#n Extended Partition Configuration] - [IOU#] button

(2) Window Operations

1. Select the Partition by the radio button of the resource to be allocated and click the [Apply] button.
   A confirmation dialogue box is displayed.
2. Click the [OK] button.
   Change the allocation of resources.
3. Click the [Apply] or [Cancel] button.
   Return to [Extended Partition Configuration of IOU Resources] Window.

[Message]

This section describes the messages to be displayed on this window.

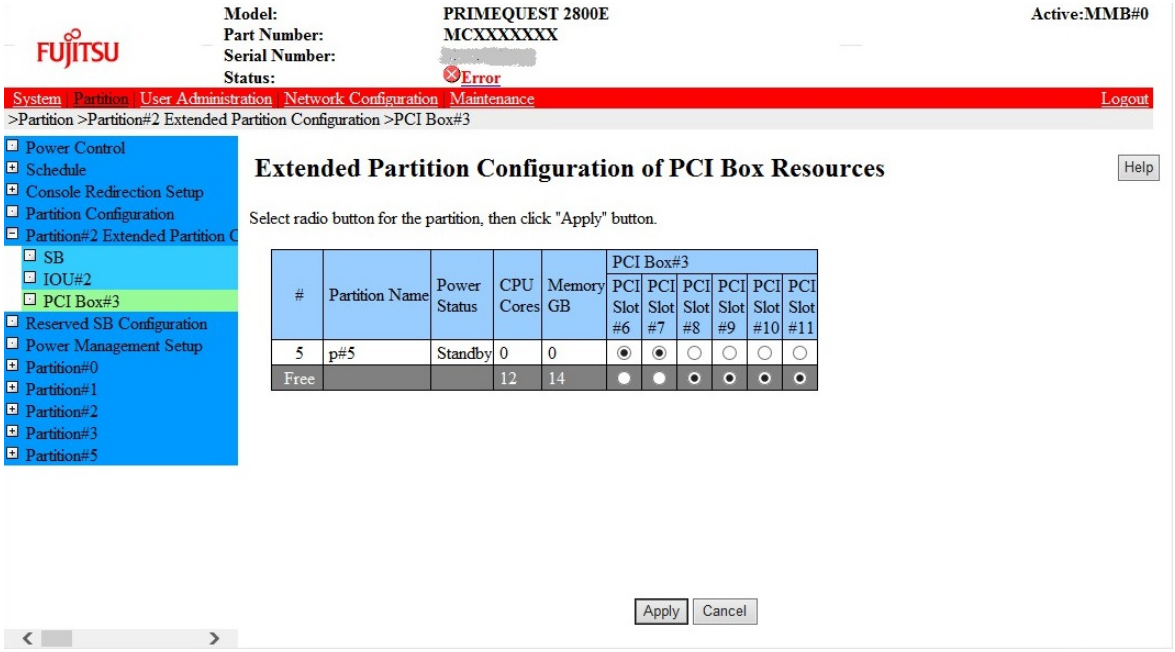
Message Number	Message
E_000544	Unable to change Extended Partitioning Configuration to Partition#%aa because this partition is under maintenance.
W_00545	Unable to change Extended Partitioning Configuration to Partition#%aa because this partition is power on.
W_00589	Unable to change Resources, because this partition is powered on.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.5.3 [PCI_Box] window

When selection is possible, resource allocation set screen of PCI_Box is displayed for the Extended Partition, when Partition#x Extended Partition Configuration-> PCI_Box# page is selected.

FIGURE 1.65 [Extended Partition Configuration of PCI_Box Resources] windows



Allocation of PCI Slot is selected by radio button. If “Apply” button is clicked, the resources for the specified Partition are allocated.

When the PCNC used for connecting the PCI_Box to PCI Slot#2, #3 of the IOU, is mounted, six PCI Slots can be allocated for each PCNC.

Only the information regarding CPU Cores, Memory GB is displayed.

When “Cancel” button is clicked, the process is cancelled.

The Extended Partition settings cannot be changed (error message is displayed) during Power On or during maintenance of a new Physical Partition.

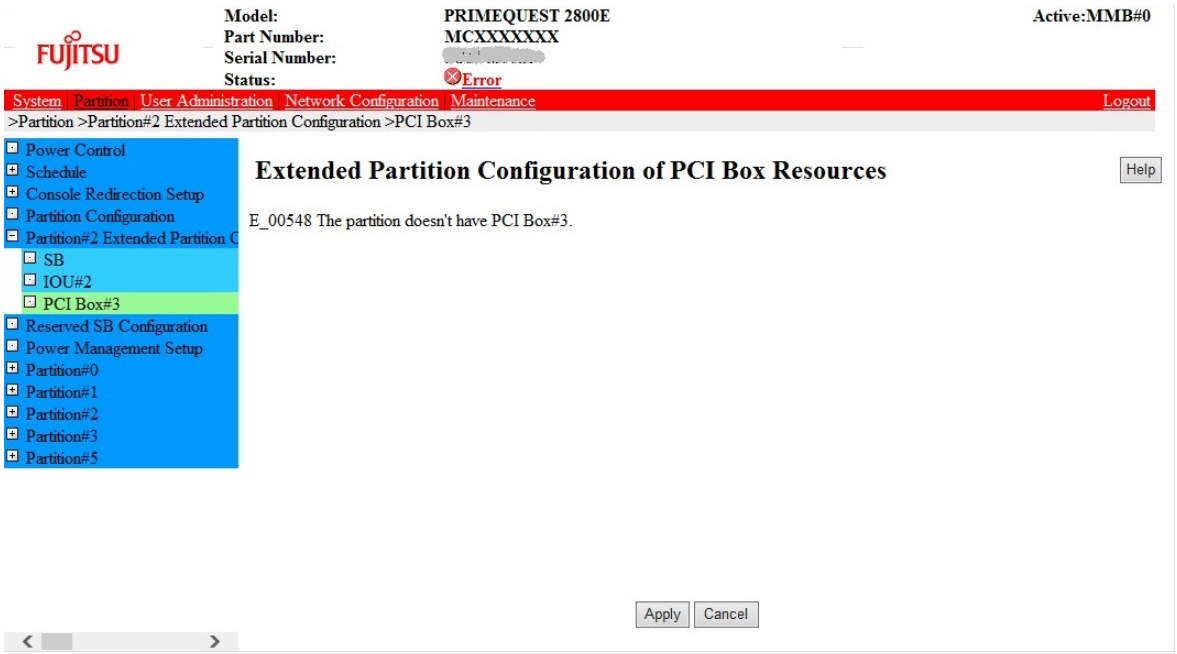
When a PCI Slot is allocated to the specified Partition, all PCI Slots on the same PCNC are shown in the Partition. But the PCI Slots which are not selected by radio button are shown as empty slots in the Partition.

TABLE 1.75 Display Items and Set Items of [Extended Partition Configuration of PCI_Box Resources] Window

Items	Description
#	Displays number to identify the Extended Partition. Displays the Extended Partition number only which was allocated to the Physical Partition.
Partition Name	Displays the name given to the Extended Partition.
Power Status	Displays the power status of the partition ・ On ・ Standby
CPU CORE	Displays the number of CPU Cores allocated to the Extended Partition.
Memory GB	Displays the Memory of GB that was allocated to Extended Partition.
PCI_Box#x (PCI Slot#y)	Displays the Extended Partition to which PCI Slot#y of PCI_Box#x belongs and sets it.

The following window is displayed when Extended Partitioning number is not allocated in the Partition -> Partition Configuration window.

FIGURE 1.66 [Extended Partition Configuration of PCI_Box Resources] no Extended Partitioning Window



(1) Menu Operation

[Partition] - [Partition#n Extended Partition Configuration] - [PCI_Box#] button

(2) Window Operations

1. Select the Partition by radio button of the resource which is to be allocated and click “Apply” button.
   The dialog box for confirmation appears.
2. Click the [OK] button.
   Allocation of the resource is changed.
3. Click the [Apply] or [Cancel] button.
   Returns to the [Extended Partition Configuration of PCI_Box Resources] window.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_000544	Unable to change Extended Partitioning Configuration to Partition#%aa because this partition is under maintenance.
W_00545	Unable to change Extended Partitioning Configuration to Partition#%aa because this partition is power on.
W_00589	Unable to change Resources, because this partition is powered on.

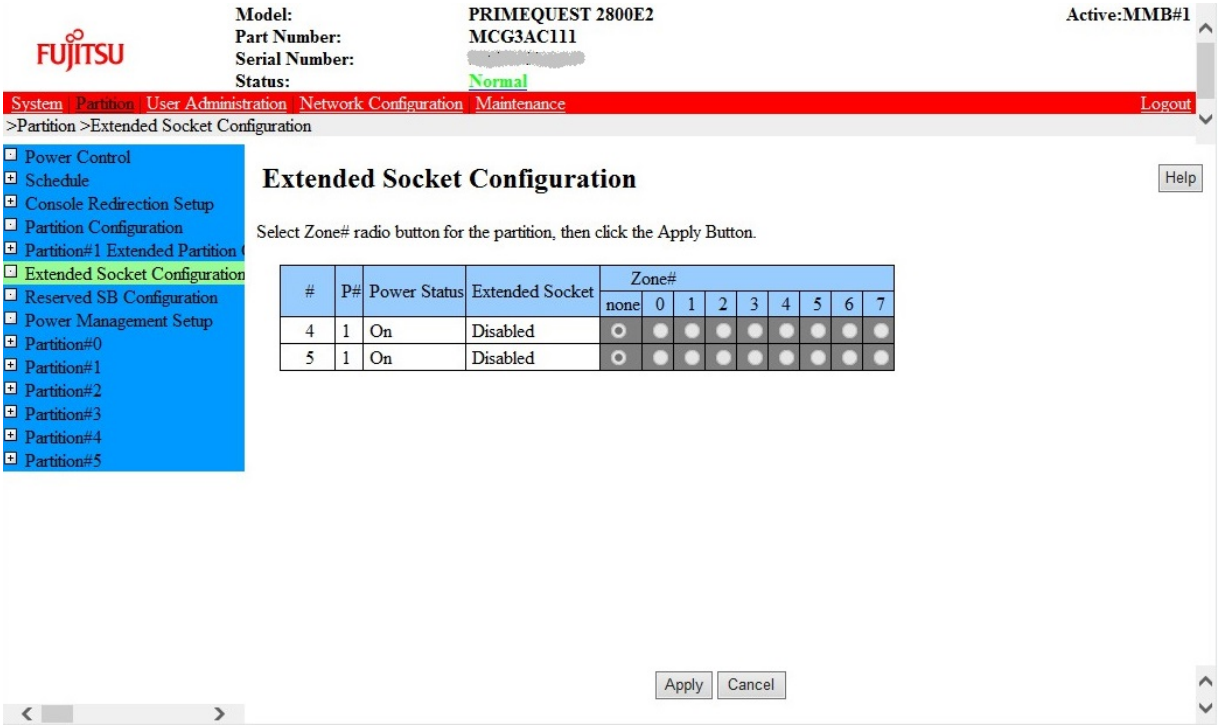
For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.6 [Extended Socket Configuration] Window

In the [Extended Socket Configuration] window, the setting concerning Extended Socket is possible.

Remarks
- Please change on not two or more Web screens but single Web screens at the change of Extended Socket.

FIGURE 1.67 [Extended Socket Configuration] window



The Zone setting is reflected by clicking the "Apply" button after the setting of Zone is changed by the radiobutton.
Even if the power supply of Extended Partition is On, this setting can be changed.

Sharing Zone between Extended Partition is possible only for same physical partition the division origin.
When Zone that tried to be set has already been set to Zone of the Extended Partition with another physical partition in the division origin, the setting change cannot be done.

TABLE 1.76 Display Items and Set Items of [Extended Socket Configuration] Window

Items	Description
#	The number to identify Extended Partitioning is displayed. Only the Extended Partitioning number allocated in Physical Partition is displayed.
#P	The Physical Partition number of division origin of Extended Partition is displayed. Common Zone can be set only between Extended Partition to which this number is corresponding.
Power Status	The state of the power supply of partition is displayed. ・ On ・ Standby
Extended Socket	Displays whether Extended Socket function is Enabled or Disabled. ・ Enabled ・ Disabled
Zone#	Zone that Extended Socket connects is selected. Zone of the connection destination is up to Zone0-3 for PRIMEQUEST 2400E3/2400E2/2400E model, and Zone0-Zone7 for PRIMEQUEST 2800E3/2800E2/2800E model. One Zone of each Extended Partition can be selected. The selection of Zone is selected by the radiobutton. When Zone is not allocated, none is selected. Default is none.

When the Extended Partitiong number is not allocated on the screen of "Partition ->Partition Configuration", the following window is displayed.

FIGURE 1.68 Display of Errors of [Extended Socket Configuration] window

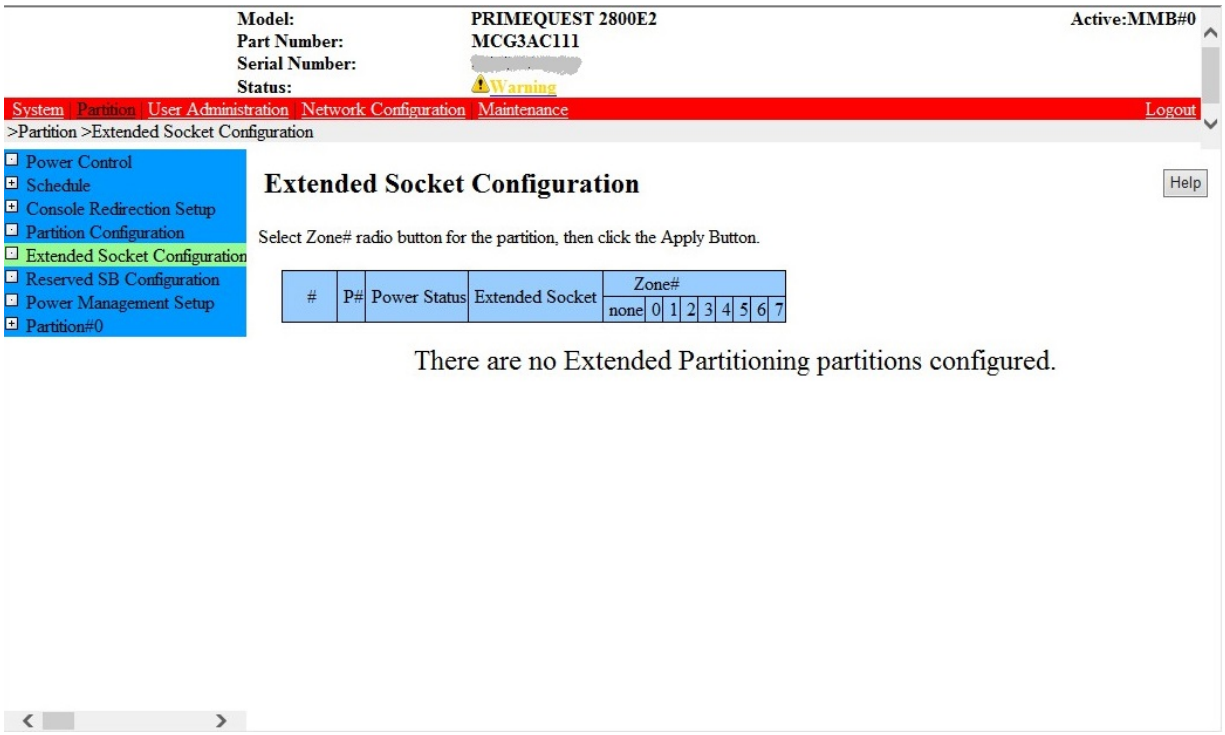


TABLE 1.77 [Extended Socket Configuration] Window Buttons

Buttons	Description
Apply	The setting of the Extended Socket Configuration is changed.
Cancel	Returns to the original state without changing the setting of the Extended Socket Configuration.

(1) Menu Operation

[Partition] - [Extended Socket Configuration]

(2) Window OperationsExtended Socket Configuration

1. Set the items for changing the settings of the Extended Socket Configuration and click the [Apply] button.
   Set the connection.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00598	Unable to change Extended Socket configuration because this zone is already connected to other Extended Partitions on another Partition.

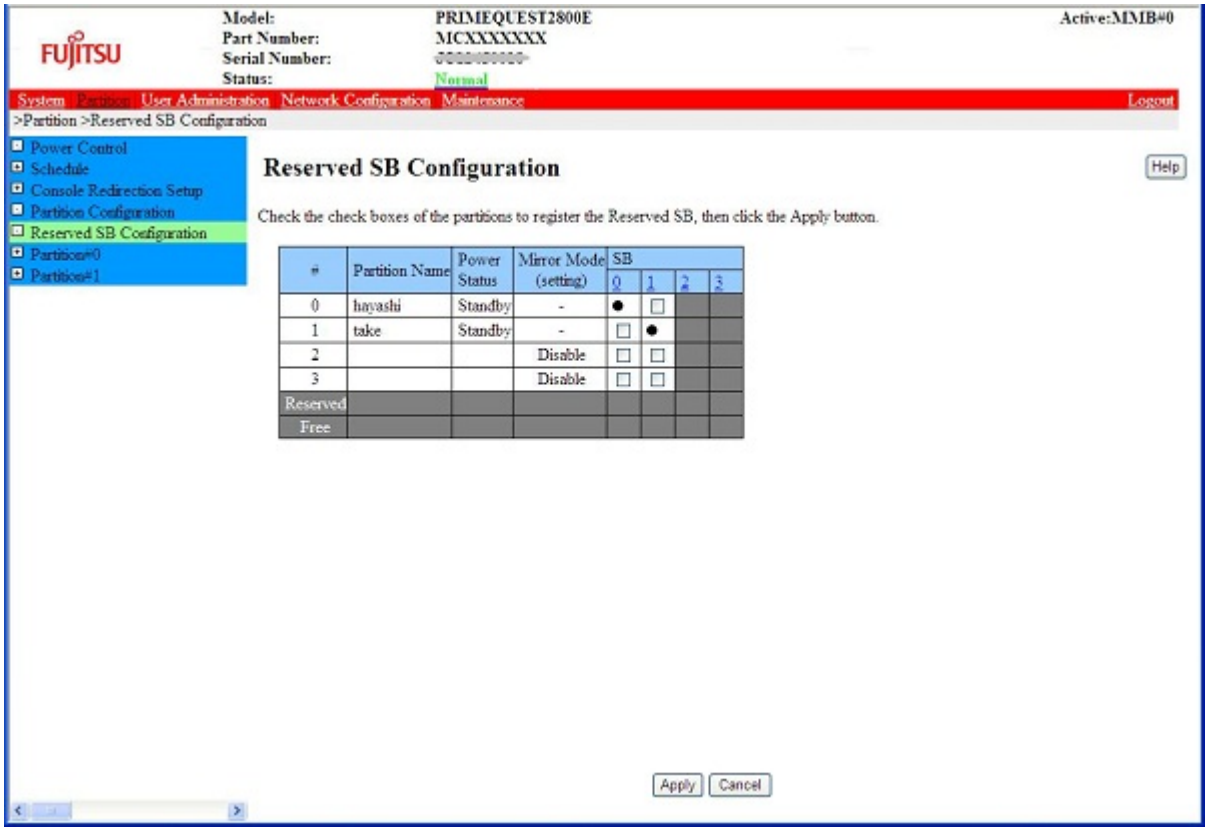
For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.7 [Reserved SB Configuration] window

In the [Reserved SB Configuration] window, you can set the Reserved SB to the partition.

Reserved SB is an SB (Memory Scale-up Board is excluded) which is incorporated newly in the Partition, in place of a disconnected SB when the SB which was incorporated in the Partition was disconnected due to hardware problems.

FIGURE 1.69 [Reserved SB Configuration] Window



Gray out is done for SB or Memory Scale-up Board not installed.

In case of an PRIMEQUEST 2800E3/2800E2/2800E model, check the number of CPUs of the SB which is incorporated in the specified Partition while setting it in the Reserved SB, and check with the following mounting conditions.

- Mounting of one CPU for an SB is possible only when the Partition is configured with one SB.
- Mounting of two 2CPUs for an SB is mandatory when the Partition is configured with several SB.

The Reserved SB cannot be set when TPM function is used.
The Reserved SB cannot be set though Fixed I/O Mode is specified in the Partition.

When mounting conditions are not fulfilled, a message is displayed and Reserved SB cannot be set.

If you attempt to set an SB with a DIMM configuration that does not satisfy the Memory Operation Mode requirements as a Reserved SB for a partition that is set to Memory Operation Mode, a confirmation dialog box appears. A warning message stating that Memory Operation Mode is cancelled while shifting to Reserved SB is displayed in the dialog box for confirmation and whether to continue with the Reserved SB settings is confirmed.

When several Reserved SBs are registered in one Partition, they operate as Reserved SBs in ascending order of SB number.

TABLE 1.78 Display Items and Set Items of [Reserved SB Configuration] Window

Items	Description
#	Displays number that identifies the Partition. ・ Reserved: Reserved SB ・ Free: Free SB
Partition Name	Displays name given to Partition.
Power Status	Displays the power status of the partition ・ On ・ Standby
Mode (setting)	Displays the setting value of Mode corresponding to the Partition. ・ Enable: Mode is set ・ Disable: Mode is not set
SB	Displays the Partition to which the SB belongs. The check box to register the SB as a Reserved SB in the Partition of the corresponding line is displayed in the cell which corresponds to Reserved SB or Free SB.

TABLE 1.79 [Reserved SB Configuration] Window Buttons

Buttons	Description
Apply	If “[Apply]” button is clicked, it is defined as Reserved SB.
Cancel	If “[Cancel]” button is clicked, it returns to the original state without being defined as a Reserved SB.

(1) Menu Operation

[Partition] - [Reserved SB Configuration]

(2) Window Operations

1. The check box of Partition intended for Reserved SB is set to ON.
2. Click the [Apply] button.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00098	Failed to get the Replacement Condition
E_00100	Failed to set the Replacement Condition
E_00113	Unable to register the specified SB#%aa as a Reserved SB due to CPU mismatch between SBs.
E_00114	The specified SB#%aa cannot be registered as a Reserved SB.
I_00223	Unable to change the specified SB(s) because the partition including the specified SB(s) is under maintenance.
E_00419	Unable to register the specified SB#%s as a Reserved SB due to unsupported CPU configuration.
E_00420	Unable to register the specified SB#%s as a Reserved SB because the DIMM does not satisfy requirements of Mode.
E_00421	No change.
E_00460	Unable to set the specified SB to the partition due to CPU composition abnormal.
W_00481	Unable to register the specified SB#%s as a Reserved SB due to the home SB is TPM enabled.
W_00492	Unable to register the specified SB#%d as a Reserved SB due to Partition is Fixed I/O Mode.
W_00493	Unable to register the specified SB#%d as a Reserved SB due to abnormal DIMM composition.
I_00494	The DIMM does not satisfy requirements of Mode. If you register the specified SB%s as a Reserved SB, Mode will be disabled when switching to specified SB. Are you sure to continue?
W_00520	Unable to register the specified SB#%d as a Reserved SB due to abnormal SB composition.
W_00626	Unable to register Reserved SB because Extended Partitioning doesn't support Reserved SB in multiple SB configuration.
W_00628	Since the setting of ASR counter for Partition#%d [Partition >Partition#%d >ASR Control >Number of Restart Tries] is zero, Reserved SB doesn’t work when error event occurs on the SB. Please change the ASR counter for Partition#%d to more than 1 if you want to avoid the situation.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

When multiple errors are detected, multiple errors are displayed in the dialogue box.

1.3.8 [Power Management Setup] Window

In the [Power Management Setup] window, Power Saving can be set in the partition unit.

Power Saving can be set only when the Power save Control of the system is Enable.

When the System Power Save setting is Disable, then the display of this screen is shown as gray and cannot be set.

FIGURE 1.70 [Power Management Setup] window

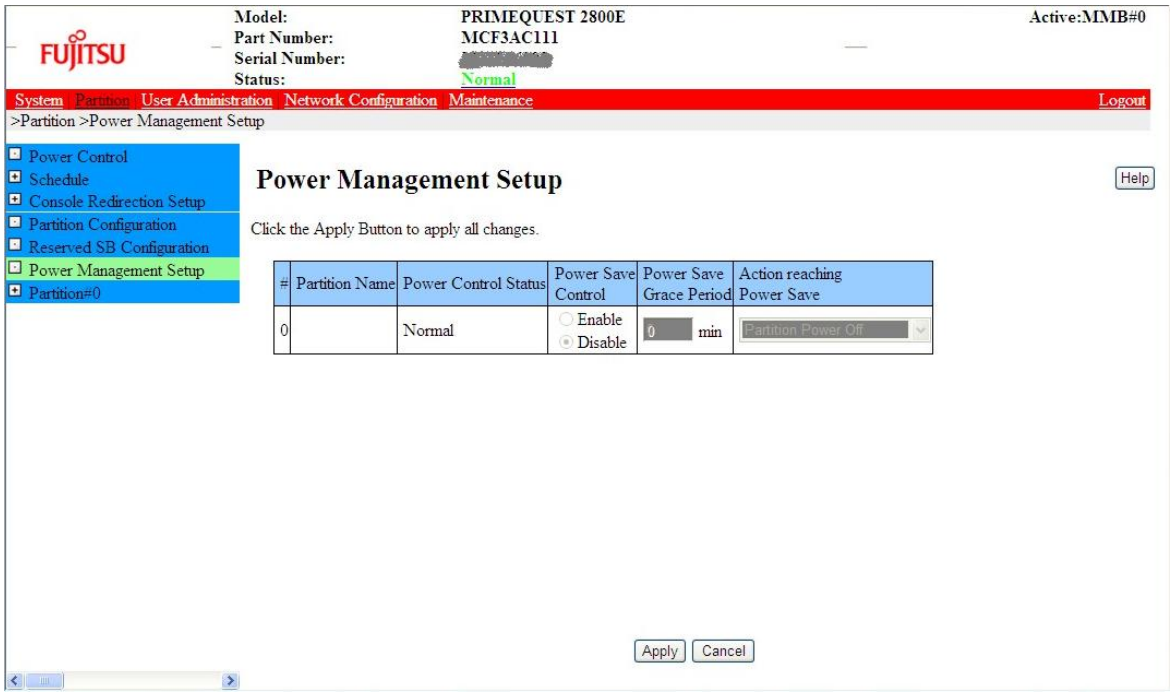


TABLE 1.80 Display Items and Set Items of [Power Management Setup] Window

Items	Description
#	Displays number (0~3) to identify the partition. However displays only the partitions registered by SB/IOU.
Partition Name	Displays the name given to the Partition.
Power Control Status	Displays the operating state of power control status of each partition. ・ Normal: Normal operating state. Shows that the operating rate suppression function for limitation of the electric power consumption is not working. ・ Power Saving: Shows that the operating rate is being suppressed
Power Save Control	Valid/ invalid Power Saving function setting is executed in the partition unit. ・ Enable ・ Disable The setting can be done only when System Power Save Control is Enable and gray color is shown when System Power Saving Control is Disable. Default is Enable When the Extended Partitioning function is effective, the operation is controlled.
Power save Grace Period	Sets shutdown waiting time in partition unit when the Limit threshold is exceeded. Specified in the range of 0 ~ 99 minutes. Shows a valid item when Power Save Control of partition is Enable and shows gray color when Disable. Default is 5 minutes.
Action reaching Power Save	Executes the operation setting in the partition unit after the Limit threshold excess stand-by time. ・ Continue: Continues operation for the partition under operation. ・ Partition Power Off: Power Off is done for the partition under operation. ・ Partition Force Power Off: Force Power Off is done for the partition under operation. Displays a valid item when Power Save Control of partition is Enable and displays gray color in case of Disable. Default is Partition Power Off

TABLE 1.81 [Power Management Setup] Window Buttons

Buttons	Description
Apply	The setting of the Power Management Setup is changed.
Cancel	Returns to the original state without changing the setting of the Power Management Setup.

(1) Menu Operation

[Partition] - [Power Management Setup]

(2) Window Operations

1. Set the items for changing the settings of the Power Management Setup and click the [Apply] button. Set the connection.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
W_00426	Invalid values specified.
E_00098	Failed to get Partition Power Management.
E_00098	Failed to get the system configuration.
W_00559	Unable to set Power Save Control because PSU type is not PSU_P.
W_00560	Unable to set Partition Power Save Control because System Power Save Control is disabled.
E_00100	Failed to set Partition Power Management.
W_00603	Unable to set Partition Power Save Control because Extended Partitioning Mode is enabled.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.9 [Partition#x] Menu

The following settings and the displays for the partition can be done in the Partition#x menu.

- Status display
- ASR condition setting
- Video redirection display
- Various modes

1.3.9.1 [Information] Window

Displays the status of the partition and various information on the partition, on the information screen.

FIGURE 1.71 [Information] Window (In case of a Physical Partition)

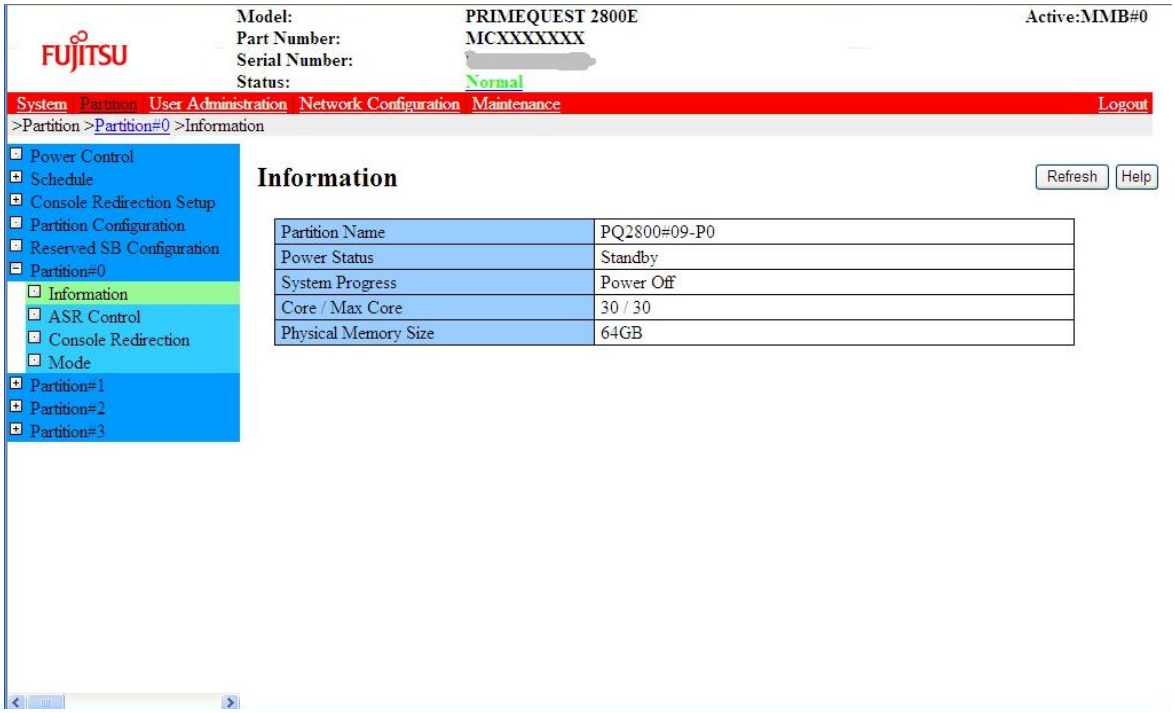


FIGURE 1.72 [Information] Window (In case of a Extended Partition)

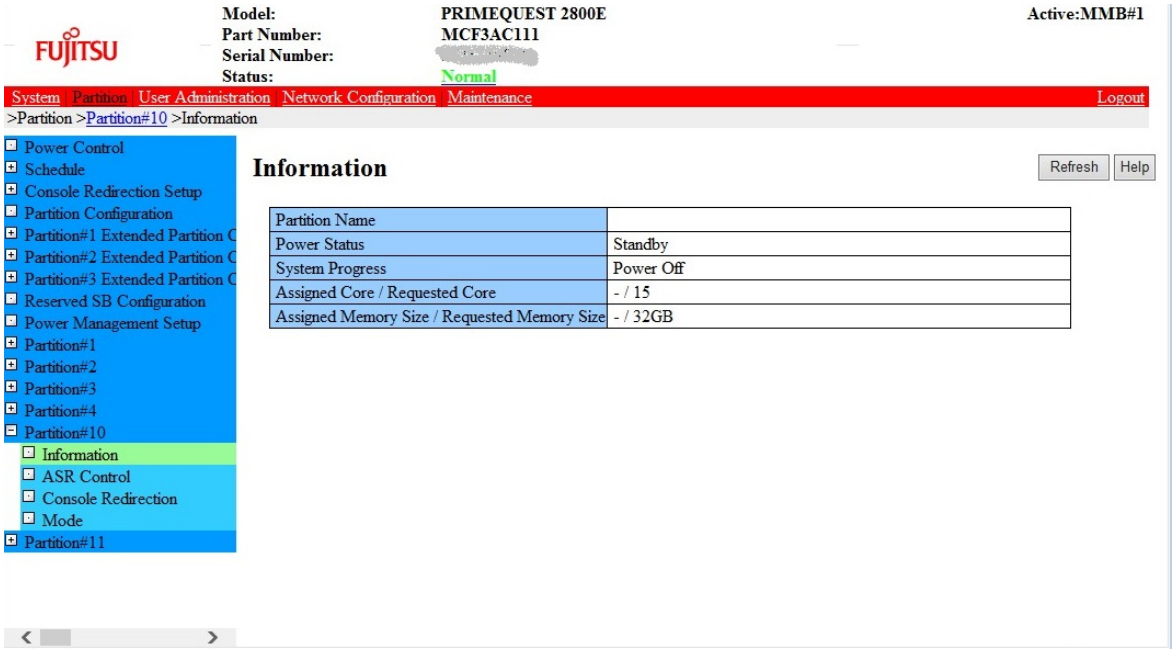


TABLE 1.82 Display Items of [Information] Window

Items	Description
Partition Name	Displays the name given to the partition
Power Status	Displays the power status of the partition. ・ On ・ Standby
System Progress	Displays the progress status of partition. ・ Power Off: The power supply for partition has been cut. ・ Power On In Progress: The partition power on is in progress. ・ Reset: The partition is being reset. ・ EFI: The UEFI menu screen is displayed. ・ Boot: Operating system is being booted ・ OS Running: operating system is operating. ・ OS Shutdown: operating system is shutting down. ・ Panic: Panic (Only RHEL). ・ Power Off In Progress: The partition power off is in progress. ・ Fatal: Is stopping. ・ Dumping: It is a dumping output. ・ Halt: It is halting ・ Extended Partitioning Running: Firmware of Extended Partitioning is operating. **Remarks** If the SVAS is not installed, the display does not change to “Operating System Running ”even if the operating system is actually operating. Also, “operating system Shutdown”, “Panic”, “Stop Error” which are specified by SVAS are not displayed if SVAS is not installed.
Core / Max Core (Assigned Core / Requested Core)	The CPU core number included in the partition, Max Core number is displayed in the Physical Partition. The CPU core number that is actually allotted and the CPU core number that is specified on the Extended Partition Configuration screen are displayed on the Extended Partition. ”-“, is displayed for the actually allotted CPU core number till the value is confirmed, after the Extended Partition is Pon. **Remarks** Degenerated CPU is not included in the number.
Physical Memory Size (Assigned Memory Size / Requested Memory Size)	Physical Partition displays the physical memory volume that is included in the partition. Extended Partition displays the actually allocated memory volume and the memory volume specified on the, Extended Partition Configuration. The capacity of each DIMM group rounded up is displayed in Assigned Memory Size when Memory EXCL is effective. However, when Requested Memory Size is smaller than this value, only Requested Memory Size is shown to OS. ”-“, is displayed for the actually allotted memory volume, till the value is confirmed, after the Extended Partition is Pon. **Remarks** The physical memory volume that has been displayed differs from the memory volume that can be actually used by the operating system. Degraded DIMM is not included in the memory.

(1) Menu Operation

[Partition] - [Partition#x] – [Information]

(2) Window Operations

None

1.3.9.2 [ASR Control] Window

The conditions for executing automatic restart of the partition on the [ASR (Automatic Server Restart) Control] can be set.

FIGURE 1.73 [ASR (Automatic Server Restart) Control] Window

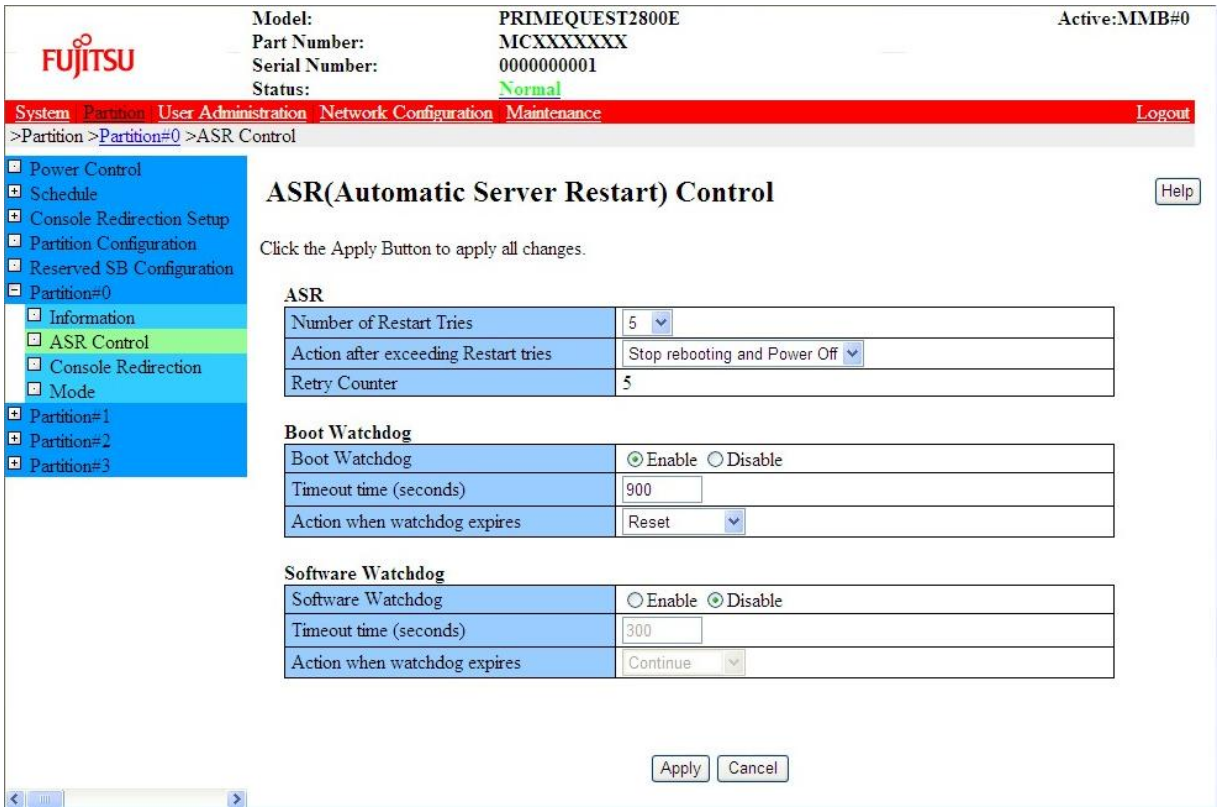


TABLE 1.83 Display Items and Set Items of [ASR (Automatic Server Restart) Control] Window

Items	Description
ASR	
Number of Restart Tries	Set the number of retries for restarting the partition automatically when there is time out by Boot Watchdog, or Software Watchdog of SVAS, or the hardware error occurs and OS shuts down. The number of times can be set up to 0-10 times. When 0 is specified, the partition does not restart automatically, and the action which is set in 'Action After exceeding Restart tres' is executed. Default is five times. **Notes** - When you use Reserved SB function, set a value which is greater than or equal to 1. - When you set a value which is greater than or equal to 1 in [Number of Restart Tries] of the [ASR Control] window, a failed SB is replaced to a Reserved SB at first automatic restart of the partition.
Action after exceeding Restart tries	Repeat the restart by Watchdog Timeout and sets the action when the above-mentioned retry number is exceeded. The actions are as below. ・ Stop rebooting and Power Off: Reboot process is stopped, power supply of partition is cut off. ・ Stop rebooting: Reboot process is stopped, and the partition is stopped. ・ Diagnostic Interrupt assert: Reboot process is stopped, instructs the NMI interruption for partition. Tries to collect the data for investigation (damp) for the investigating the cause of stoppage, of the partition which has stopped. Default setting is 'Stop rebooting and Power Off'
Retry Counter	Displays the number of actual possible retries.
Boot Watchdog	
Boot Watchdog	Enable/disable of the Boot Watchdog function of ServerView is set. The start of OS is observed when setting it to Enable. After OS starts, Boot Watchdog is stopped by ServerView. Default is Disable.
Timeout time (seconds)	Time until Boot Watchdog does timeout is set. The range of 1-6000 can be set. Default is 6000 seconds (=100 minutes).
Action when watchdog expires	Action when Boot Watchdog does timeout is set. In Action, there is the following. ・ Continue ・ Reset ・ Power Cycle
Software Watchdog	
Software Watchdog	Enable/disable of the Software Watchdog function of ServerView is set. After OS starts, the operation of OS is observed by ServerView when setting it to Enable. Default is Disable.
Timeout time (seconds)	Time until Software Watchdog does timeout is set. The range of 1-6000 can be set. Default is 300 seconds (=5 minutes).
Action when watchdog expires	Action when Software Watchdog does timeout is set.

Items	Description
	In Action, there is the following. ・ Continue ・ Reset ・ Power Cycle ・ NMI

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00629	Since the setting of ASR counter [Number of Restart Tries] is zero, Reserved SB doesn't work when error event occurs on the SB. Please change the ASR counter to more than 1 if you want to avoid the situation.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

When multiple errors are detected, multiple errors are displayed in the dialogue box.

TABLE 1.84 [ASR (Automatic Server Restart) Control] Window Buttons

Buttons	Description
Apply	Sets the information if [Number of Restart Tries] [Action after exceeding Restart tries] are specified.
Cancel	Does not set the information and returns to the original state.

(1) Menu Operation

[Partition] - [Partition#x] - [ASR Control]

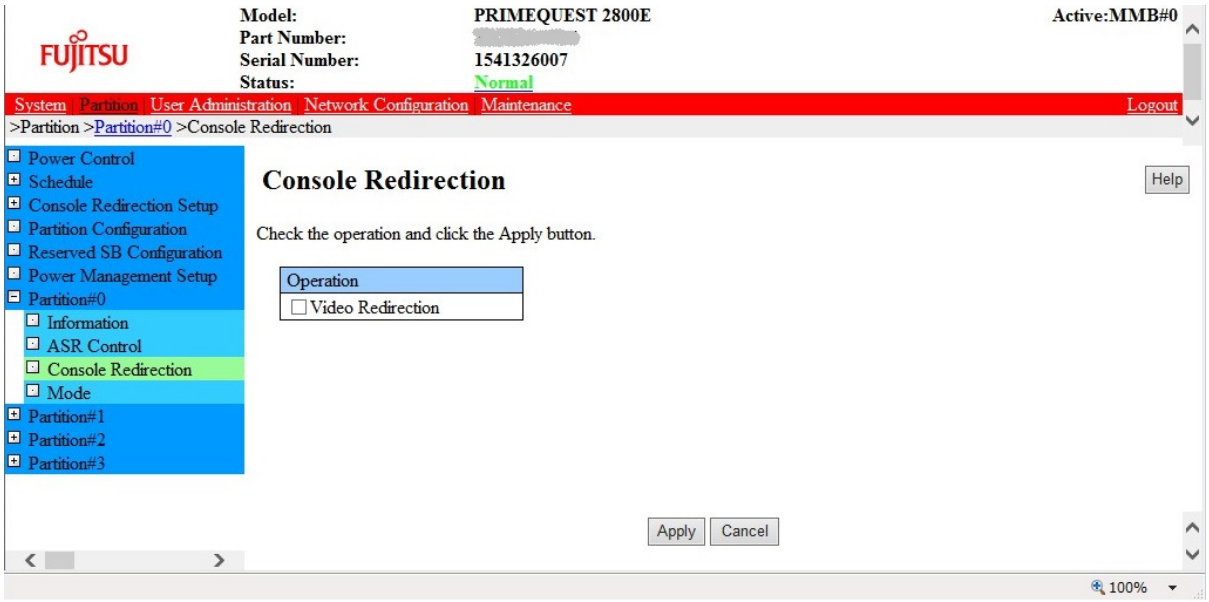
(2) Window Operations

1. Every item is set.
2. [Apply] button is clicked.
   Specified information is set.

1.3.9.3 [Console Redirection] Window

If the Console Redirection screen is selected when it enabled, the Video Redirection screen on the BMC is displayed in another window.
If the settings in [Console Redirection setup] Window are Disabled, check box cannot be Checked.
The check box can be selected by making the setting of Video Redirection Enable on either [Console Redirection Setup] screen of IPv4 or IPv6 when Console Redirection is used from CE Port.

FIGURE 1.74 [Console Redirection] Window



Attention

Click the mouse while pushing the Control key when you start the video redirection with Internet Explorer. Moreover, click the mouse while pushing the Control key when the following messages are displayed.

Message displayed in statusbar of Internet Explorer:
Pop up on this page was blocked. Click while pushing the Ctrl key to permit the display of pop up.

Console Redirection can be connected only by the click of a mouse for Firefox.

TABLE 1.85 Display Items of [Console Redirection] Window

Items	Description
Video Redirection	Displays the Video Redirection on the BMC side. On the Console Redirection Setup window, selection is possible only when Enabled; when Disabled, the check box cannot be checked. In the Physical Partition with Extended Partitioning mode set as Enable, Video Redirection cannot be used. Also, Extended Partition for which VGA/USB2/rKVMS is not allocated, Video Redirection cannot be used.

TABLE 1.86 [Console Redirection] Window Buttons

Buttons	Description
Apply	The window of Video Redirection is displayed.
Cancel	The window of Video Redirection is not displayed and returns to former state.

(1) Menu Operation

[Partition] - [Partition#x] – [Console Redirection]

(2) Window Operations

1. Check Video Redirection and click the [Apply] button.
   Confirmation dialog box is displayed.
2. Click the [Ok] button.
   The window of Video Redirection is displayed.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00413	Nothing is selected.
W_00472	Unable to get the reserved WEB Session information due to WEB Session Max over.
W_00473	Unable to check the Video Redirection check box due to the Video Redirection option is disabled.
I_00222	Unable to %aa the Partition#%aa because this Partition is under maintenance.
I_00417	Are you sure?
W_00541	Nothing is checked.
W_00550	Unable to select the option due to this Partition is not connected to VGA/USB2/rKVMS.
W_00551	Unable to select the option due to Extended Partitioning mode of this Partition is enabled.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.9.4 [Mode] Window

Various modes can be set for partition in [Mode] window. In order to reflect the set value, turn Off the power of partition and then it is necessary to turn On the Power of partition once again.

Attention of operation

- Do not start two or more Web screen when you change Extended Partitioning and change on a single Web screen.

FIGURE 1.75 [Mode] Window (PRIMEQUEST 2400E2/2800E2/2400E/2800E) (1)

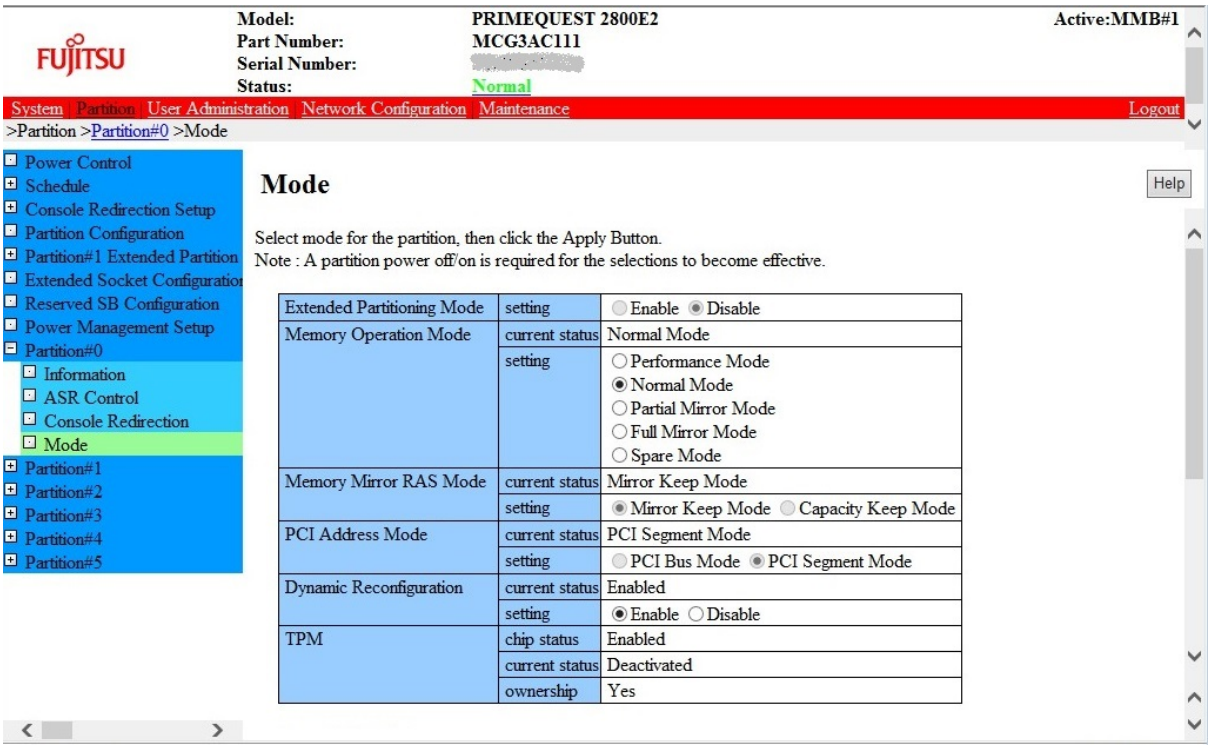


FIGURE 1.76 [Mode] Window (PRIMEQUEST 2400E2/2800E2/2400E/2800E) (2)

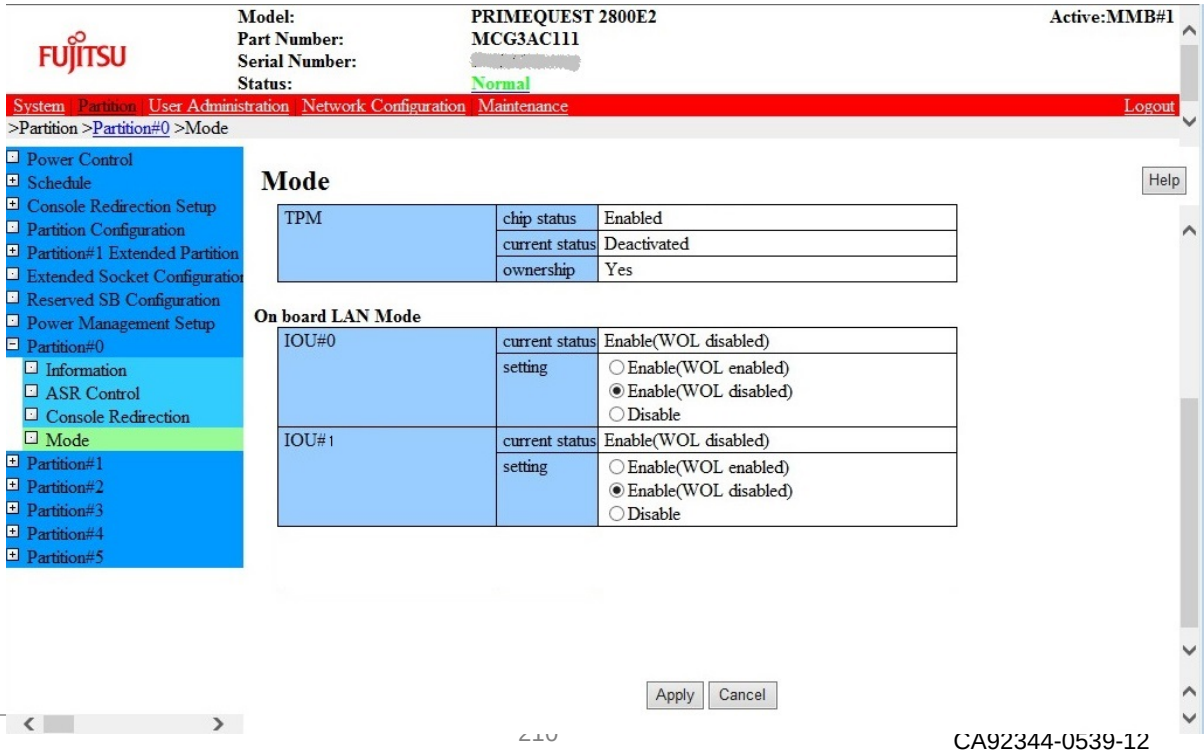


FIGURE 1.77 [Mode] Window (PRIMEQUEST 2400E3/2800E3)

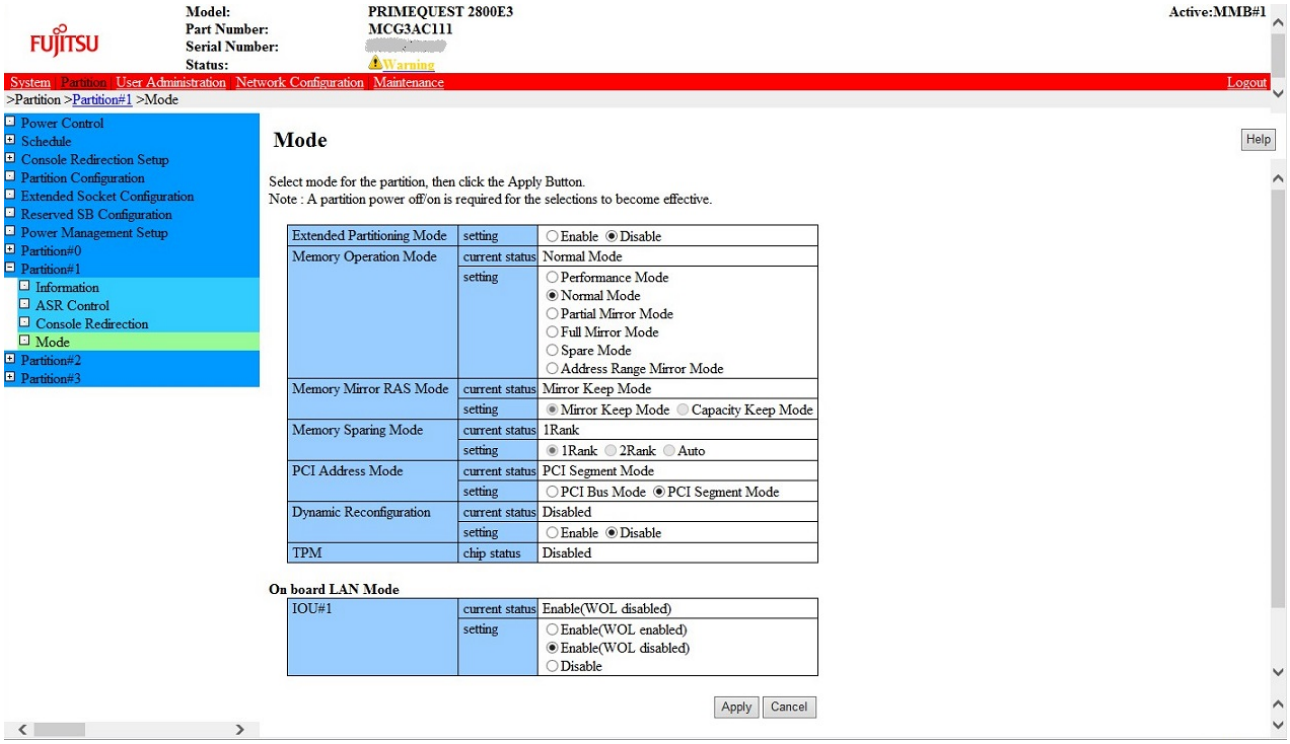
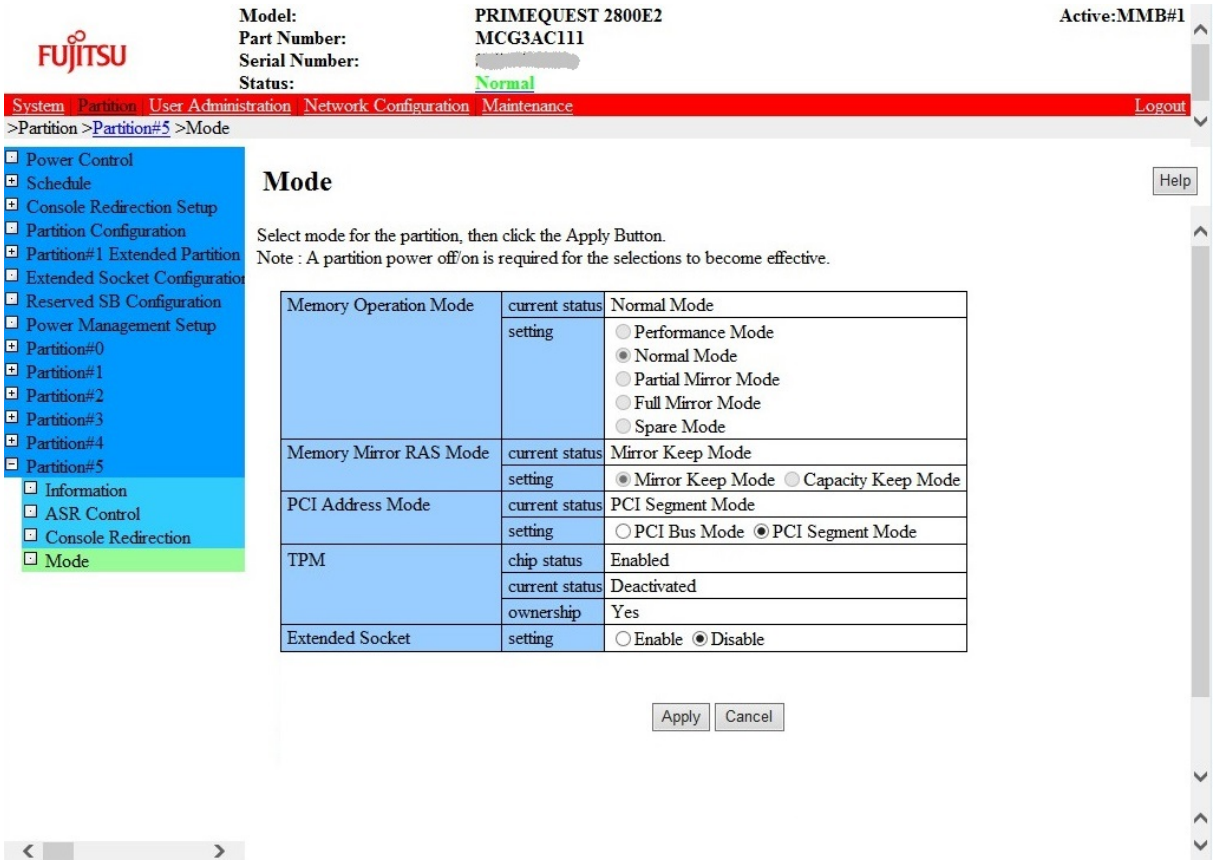


FIGURE 1.78 [Mode] Window (Extended Partition)



When the [Apply] button is clicked while the partition is powered on, a warning dialog box “W_00487 Unable to change the mode, because this partition is powered on” is displayed.

When the partition is already powered off, the settings are reflected without displaying the dialog box.

Extended Partitioning Mode can be changed only when the Power status of Physical Partition is Off. If Physical Partition is to be changed while it is powered on, a warning dialog box such as “W_00552 the Extended Partitioning mode cannot be changed while the Physical Partition is powered on. Please try to change the Extended Partitioning mode after the Physical Partition is powered off.” is displayed and settings are prohibited.

When SB with DIMM configuration that does not satisfy requirements of Mode configures the Mode for the partition configured in a Reserved SB, a confirmation dialogue box is displayed. At the time of switching to the Reserved SB, a warning message of Mode cancellation is displayed and to confirm whether to proceed with the setting or not.

The LAN Device Mode is displayed in IOU Unit comprised in the partition specified by the LAN Device Mode. For settings, select LAN Device Mode in the IOU Unit, with the radio button and click the [Apply] button.

The setting items of Extended Partitioning Mode and LAN Device Mode are not displayed in Extended Partition. Moreover, Entire Mode setting is prohibited and the settings cannot be changed.

When Partition contains Memory Scale-up Board, the setting of Dynamic Reconfiguration Mode cannot be set by warning Dialog box being displayed.

TABLE 1.87 Display Items and Setting Items in [Mode] Window

Items	Description
Extended Partitioning Mode (setting)	Sets whether the Extended Partitioning Function is enabled or not. ・ Enable: Enables Extended Partitioning Function. ・ Disable: Disables Extended Partitioning Function. Extended Partitioning Mode is displayed only in the Physical Partition. Settings can be changed only when the Partition is POff. Operations are prohibited when the Dynamic Reconfiguration is enabled. Default setting is Disable. When the Power Saving function is effective, the operation is controlled.
Memory Operation Mode (current status)	Displays the currently enabled Memory Operation Mode. ・ Performance Mode: Displays the settings to the Performance Mode. ・ Normal Mode: Displays the settings to the Normal Mode. ・ Partial Mirror Mode: Displays the settings to the Partial Mirror Mode. ・ Full Mirror Mode: Displays the settings to the Full Mirror Mode. ・ Spare Mode: Displays the settings to the Spare Mode. ・ Address Range Mirror Mode : Displays the settings to the Address Range Mirror Mode(This item is displayed in PRIMEQUEST 2400E3/2800E3.)
Memory Operation Mode (setting)	Sets the Memory Operation Mode for partition. ・ Performance Mode ・ Normal Mode ・ Partial Mirror Mode ・ Full Mirror Mode ・ Spare Mode ・ Address Range Mirror Mode(This item is displayed in PRIMEQUEST 2400E3/2800E3.) Enables the settings after rebooting the partition. Default setting is Normal Mode.
Memory Mirror RAS Mode (current status)	Displays the Memory Mirror currently enabled Mode. ・ Mirror Keep Mode: Shows the maintenance of Mode. ・ Capacity Keep Mode: Shows maintenance of memory capacity.
Memory Mirror RAS Mode (setting)	Sets the Memory Mirror Mode for partition. ・ Mirror Keep Mode ・ Capacity Keep Mode Enables the settings after rebooting the partition. As these items are enabled only when the Full Mirror Mode or Partial Mirror Mode is set, when the rest is set, they are disabled. Default setting is Mirror Keep Mode.
Memory Sparing Mode (current status) (This item can be available in the PRIMQUEST 2400E3/2800E3/ 2400E2/2800E2)	Displays the Memory Sparing currently enabled Mode. ・ 1 Rank: 1Rank or less is allocated in Spare Memory. ・ 2 Rank: 2Rank or less is allocated in Spare Memory. ・ Auto: Spare Memory is allocated by the automatic operation.

Items	Description
Memory Sparing Mode (setting) (This item can be available in the PRIMQUEST 2400E3/2800E3/ 2400E2/2800E2)	Sets the Memory Sparing Mode for partition. ・ 1 Rank ・ 2 Rank ・ Auto Enables the settings after rebooting the partition. As these items are enabled only when the Spare Mode is set, when Spare Mode is not set, they are disabled. Default setting is1 Rank.
PCI Address Mode (current status)	Shows the currently set PCI Bus number allocation Mode. ・ PCI Bus Mode ・ PCI Segment Mode The setting of PCI Address Mode is decided depending on the following conditions. ・ When the Dynamic Reconfiguration function is made effective, it is necessary to set it to Segment Mode. ・ When OS does not correspond to Segment Mode, it is necessary to set PCI Address Mode to Bus Mode. ・ When the TXT function is used, it is necessary to set PCI Address Mode it to Bus Mode. It is recommended to set PCI Address Mode to Segment Mode though it is possible to set in both Bus Mode and Segment Mode when OS corresponds to Segment Mode. Please refer to "Appendix of General Description (CA92344-0534)" for whether OS corresponds to Segment Mode.
PCI Address Mode (setting)	Sets the PCI Bus number allocation Mode for partition. ・ PCI Bus Mode ・ PCI Segment Mode Enables the settings after rebooting the partition. Default setting is PCI Segment Mode.
Dynamic Reconfiguration (current status)	Displays whether Dynamic Reconfiguration Function is enabled or disabled. ・ Enable ・ Disable
Dynamic Reconfiguration (setting)	Sets whether the Dynamic Reconfiguration Function is enabled or not. ・ Enable: Enables the Dynamic Reconfiguration Function. ・ Disable: Disables the Dynamic Reconfiguration Function. Enables the settings after rebooting the partition. Settings can be done in the following conditions. ・ When it is on at Flexible I/O mode. ・ When it is not at the Extended Partition. ・ When the TXT/TPM function is disabled. Default setting is Disable.
TPM (chip status)	Displays whether TPM function is Enabled or Disabled. ・ Enabled (TPM is enabled) ・ Disabled (TPM is disabled) **Remarks** When Home SB of partition is ‘without TPM mode’, this field is not displayed. (TPM1.2/2.0 is supported for PRIMEQUEST 2400E3/2800E3.) (Only TPM1.2 is supported for PRIMEQUEST 2400E2/2800E2/2400E/2800E.)

Items	Description
TPM (current status)	Displays the TPM status. ・ Activated ・ Deactivated **Remarks** When Home SB of partition is 'without TPM mode', this field is not displayed. This item is displayed only at time equipped with TPM1.2.
TPM (ownership)	Displays ownership of TPM. ・ Yes (having Ownership) ・ No (not having Ownership) **Remarks** When Home SB of partition is without TPM mode, this field is not displayed. This item is displayed only at time equipped with TPM1.2.
Extended Socket (setting)	Displays whether Extended Socket function is Enabled or Disabled. □ Enabled (Extended Socket is enabled) □ Disabled (Extended Socket is disabled) Enables the settings after rebooting the partition. Settings can be done in the following conditions. ・ Extended Partitioning must be Enable. Default setting is Disable.
On board LAN Mode	
IOU	Displays the IOU that belongs to the partition.
On board LAN Mode (current status)	Displays the On board LAN Mode in IOU Unit. ・ Enabled (WOL enabled): Onboard LAN can be used at AC On status. ・ Enabled (WOL disabled): Onboard LAN comprised in the partition can be used at Power On status. ・ Disabled: Onboard LAN cannot be used every time.
On board LAN Mode (setting)	Sets On board LAN Device Mode in IOU Unit. Select the Mode to be set by using the radio button. ・ Enabled(WOL enabled) ・ Enabled(WOL disabled) ・ Disabled Default setting is Enabled (WOL disabled). On board LAN Mode is displayed only at the Physical Partition (Partition #0~3). Please start Partition once, and reflect the setting of WOL when you assume the Enabled(WOL enabled) On board LAN Mode again after the setting is changed to Disable or Enabled(WOL disabled).

TABLE 1.88 Display/non-display of TPM item by status of the partition

		Status of the Partition		
		Before first Partition Pon after AC on	Partition Running	Partition off
PRIMEQUEST 2400E3/2800E3	SB without TPM	No	No	No
	SB with TPM	No	Yes	Yes
PRIMEQUEST 2400E2/2800E2/ PRIMEQUEST 2400E/2800E	SB without TPM	No	No	No
	SB with TPM	Yes	Yes	Yes

Yes : Display
No : N0n-display

(1) Menu Operation

[Partition] - [Partition#x] - [Mode]

(2) Window Operations

1. Specify respective Mode and click the [Apply] button.
   Confirmation dialog box is displayed.
2. Click the [Ok] button.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00089	Mode setting failed.
E_00090	Power Control [Reset] setting failed.
E_00461	Unable to register the specified Partition#%s as Mode enable because the DIMM does not satisfy requirements of Mode.
W_00487	Unable to change the mode, because this partition is powered on.
E_00497	Unable to register the specified Partition#%s as Mode enable because the CPU mismatch between SBs.
E_00498	Unable to register the specified Partition#%s as Mode enable because the unsupported CPU configuration.
E_00499	Unable to register the specified Partition#%s as Mode enable because of abnormal CPU composition.
E_00500	Unable to register the specified Partition#%s as Mode enable because of abnormal DIMM composition.
I_00501	The SB with DIMM that does not satisfy requirements of Mode is registered as a Reserved SB. If you register this partition as a Mode, Mode will be disabled when switching to Reserved SB. Are you sure to continue?
E_00521	Unable to register the specified Partition#%s as Mode enable because of abnormal SB composition.
W_00584	The Dynamic Reconfiguration Mode cannot be changed while the Partition is Extended Partitioning Mode.
W_00585	Dynamic Reconfiguration Mode cannot be set to this Partition because of PCI Bus. Mode
W_00586	Dynamic Reconfiguration Mode cannot be set to this Partition because of Fixed I/O Mode.
E_00594	Dynamic Reconfiguration Mode cannot be changed due to the partition has Memory Scale-up Board.
W_00602	Unable to set Extended Partitioning Mode because Partition Power Save Control is enabled.
W_00624	Unable to set Extended Partitioning Mode because Extended Partitioning doesn't support multiple SB configuration except SB#0-1 or SB#2-3.
W_00625	Unable to set Extended Partitioning Mode because Extended Partitioning doesn't support Reserved SB in multiple SB configuration.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.3.9.5 [SSD Life Cycle Management] Window

This function can be available in BA15082, BB15082 or later version of firmware.

Information on writing volume of data (write endurance) of PCIe-SSD installed in the PCI extended slot and SAS SSD installed in SB, DU, and Disk Enclosure are displayed on [SSD Life Cycle Management] Window. At least one or more PCIe-SSD or SAS SSD is installed in the partition, and the partition including PCIe SSD or SAS SSD is in the state of OS Running, and when ServerView Agentless Service(SVAS) or classic Agent(SVAgent + SVRaid) is operating, the writing volume of data of SSD is displayed. (*1)
(*1) After System Progress is changed into the state of OS Running, it takes five minutes or less until information is correctly displayed.

Remarks
This Window supports only a physical partition, and this Window is not displayed in the Extended Partition.
Please install ServerView agent (SVagent) and ServerView RAID Manager (SV RAID), and use the function of SV RAID when you observe the longevity of SSD in the Extended Partition.

FIGURE 1.79 [SSD Life Cycle Management] Window

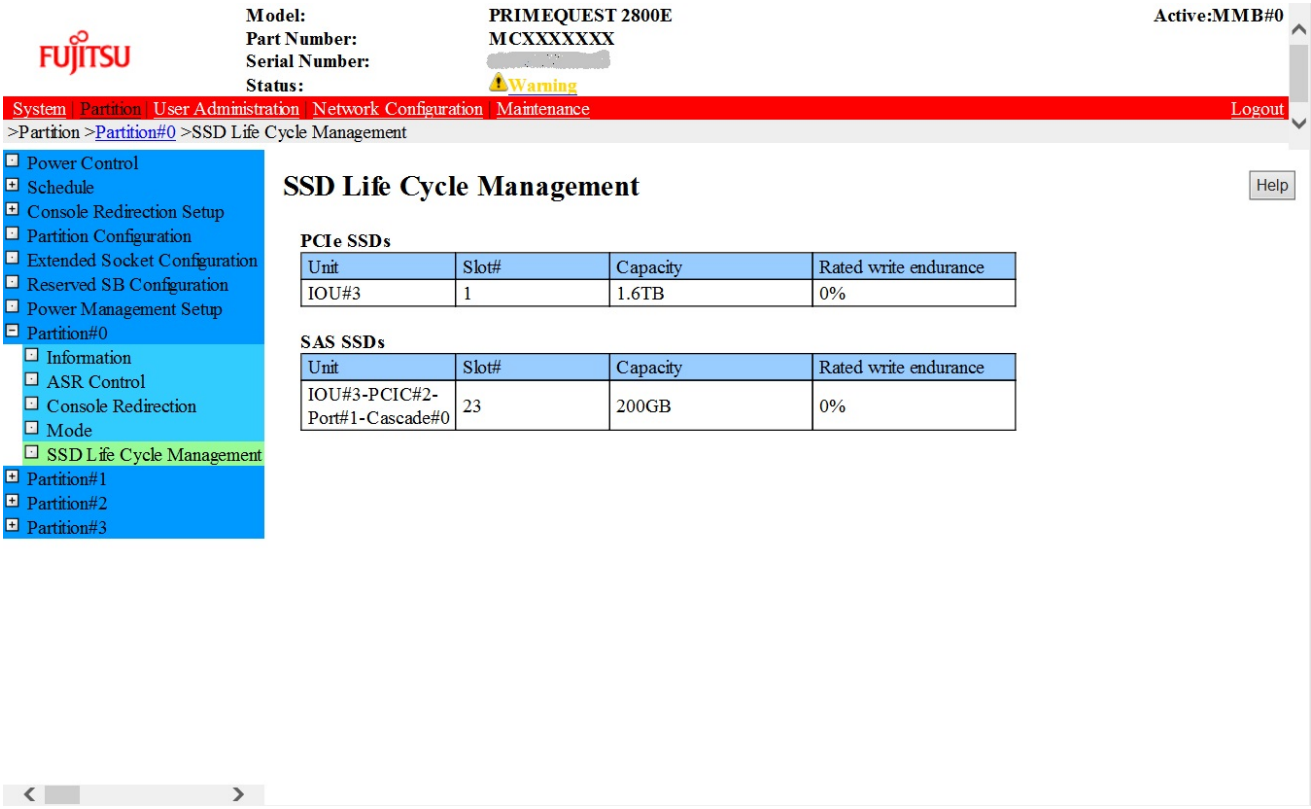


TABLE 1.89 Display Items and Set Items of [SSD Life Cycle Management] Window

Items	Description
PCIe SSDs	
Unit	Displays the unit that the PCIe SSD card belongs.
Slot#	Displays the slot position of IOU or PCI_Box that the PCIe SSD card belongs.
Capacity	Displays the capacity of the PCIe SSD card.
Rated write endurance	Displays the volume of data written on the PCIe SSD card. When buying it, this value is displayed by 0%. The value increases because the write data accumulates.100% becomes writing longevity.
SAS SSDs	
Unit	Displays the unit that the SAS SSD belongs.
Slot#	Displays the installing slot position of SAS SSD.
Capacity	Displays the capacity of the SAS SSD.
Rated write endurance	Displays the volume of data written on the SAS SSD. When buying it, this value is displayed by 0%. The value increases because the write data accumulates.100% becomes writing longevity.

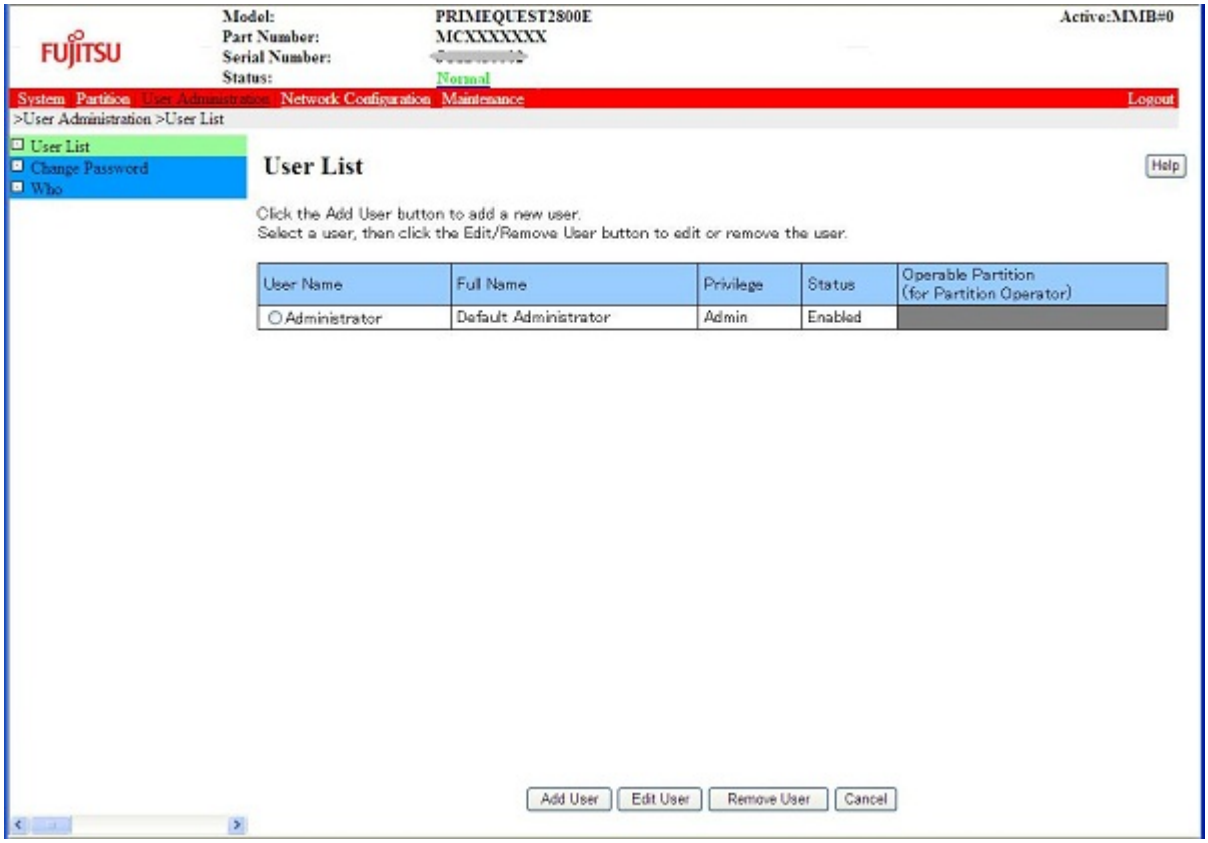
1.4 [User Administration] Menu

You can manage user accounts from the [User Administration] menu.

1.4.1 [User List] window

The [User List] window displays information on the registered user accounts. Only users with Administrator privileges can view this window.

FIGURE 1.80 [User List] Window



The users set to Disabled are grayed out.

TABLE 1.90 Display items in the [User List] window

Items	Description
User Name	Displays the user name. The user name must consist of a total of 3 to 32 characters.
Full Name	Used to enter the user's real name or other related information. You can enter up to 32 characters.
Privilege	Displays the privileges of the user account.
Status	Displays the current status of this account. ・ Enabled ・ Disabled
Operable Partition	This item is not displayed in PRIMEQUEST 2800B3/2800B2/2800B. Displays the partitions that the user is permitted to operate. The window displays them only if the user account has Partition Operator privileges.

TABLE 1.91 Buttons in the [User List] window

Buttons	Description
Add User	Displays the [Add User] window.
Edit User	Displays the [Edit User] window.
Remove User	Deletes the user.
Cancel	Restores the original information and does not set the specified information.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
E_00031	Same name already exists. User addition failed.
E_00032	No more User addition.
E_00034	Unable to change the status to Disable because the specified user is last Administrator.
E_00035	The user is logining. User deletion failed.
I_00041	User addition was completed
I_00042	User information editing was completed.
I_00043	User deletion was completed.
W_00463	Select a User Name.
I_00464	%aa will be removed. Are you sure?
W_00404	Password differs from the re-password.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

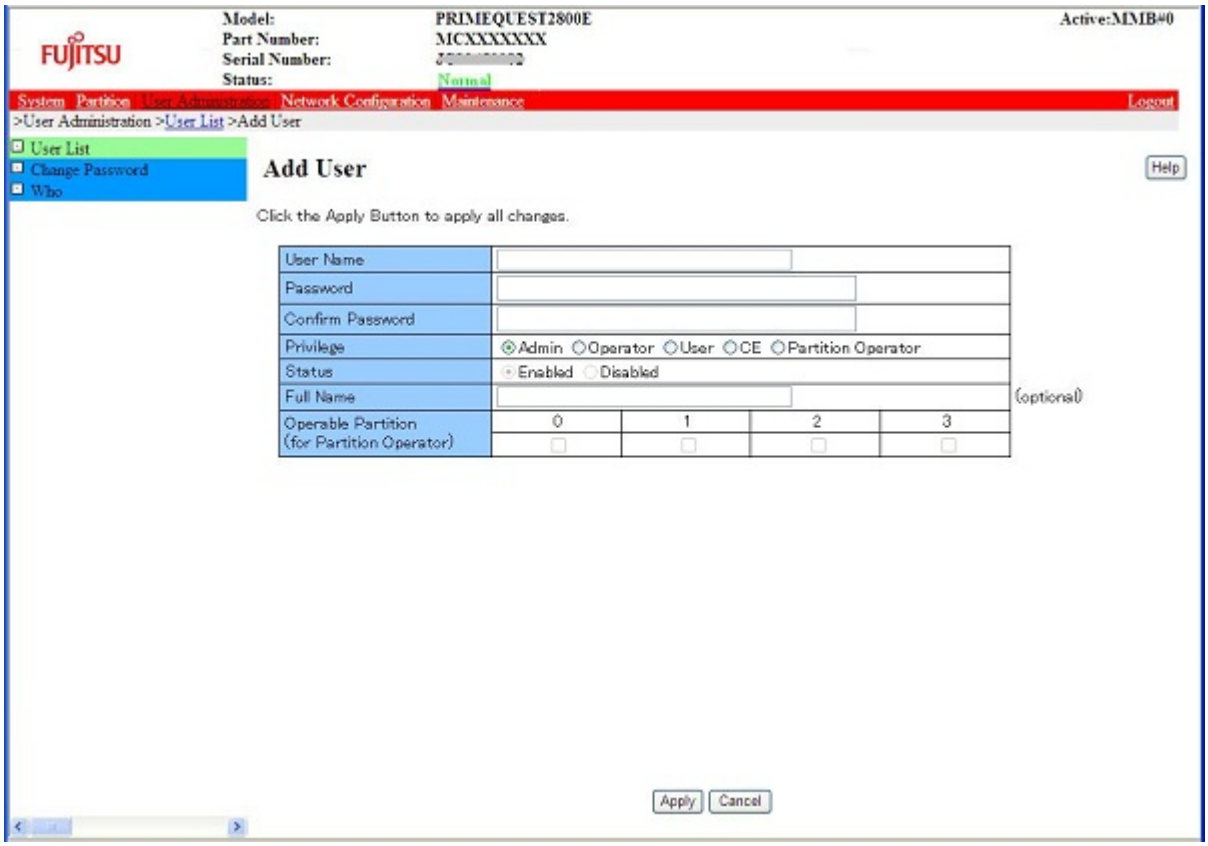
1.4.1.1 [Add User] window

Clicking the [Add User] button in the [User List] window displays the [Add User] window.

You can register new users in the [Add User] window.

It is possible to register up to 16 users or less.

FIGURE 1.81 [Add List] Window



For details on the setting and display items in the [Add User] window, see TABLE 1.92 Setting and display items in the [Add User] and [Edit User] windows.

1.4.1.2 **[Edit User] window**

Selecting a user and clicking the [Edit User] button in the [User List] window displays the [Edit User] window.

You can change management information on user accounts in the [Edit User] window.

Changes in the administrative information of User other than User Name can be done.

FIGURE 1.82 [Edit List] Window

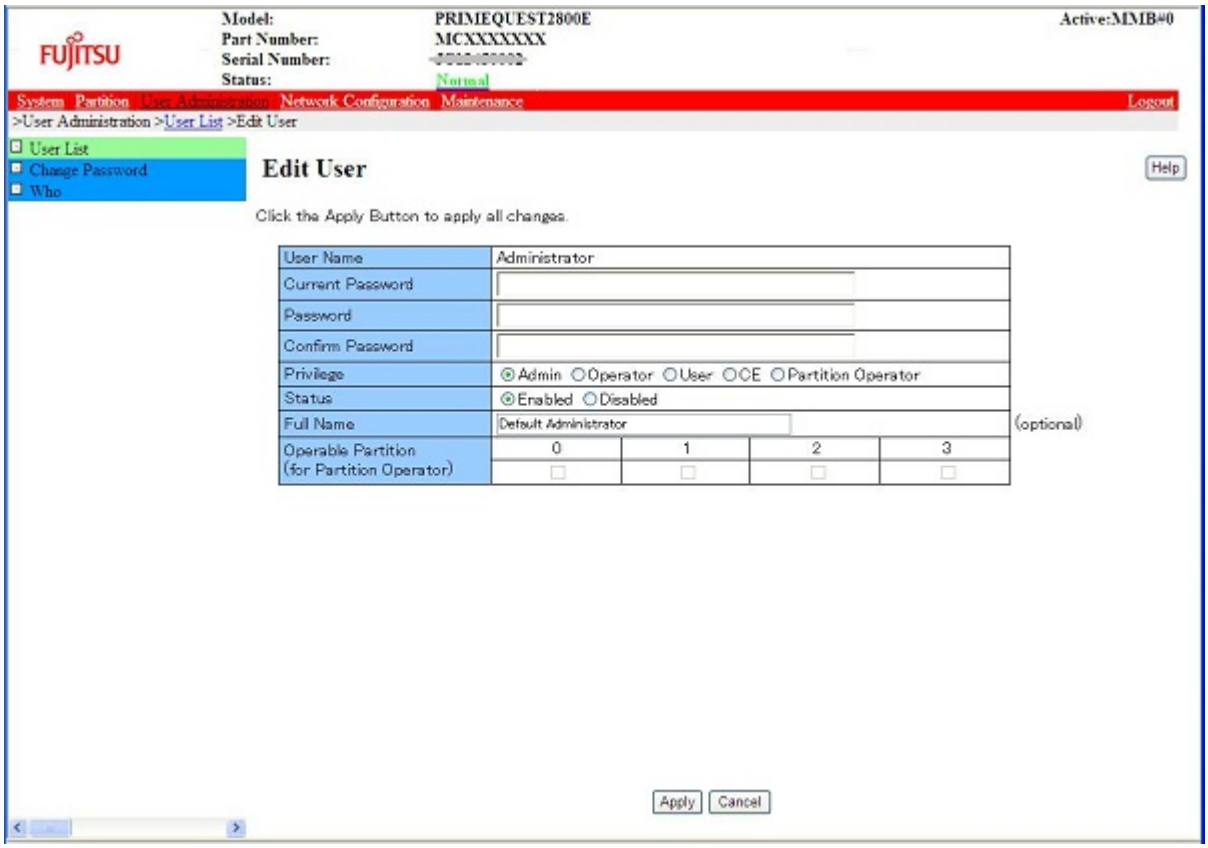


TABLE 1.92 Setting and display items in the [Add User] and [Edit User] windows

Items	Description
User Name	Sets the user name. You can enter a total of 3 to 32 characters. You can enter the following characters in a user name: [0-9], [a-z], [A-Z], - (hyphen), _ (underscore). However, the first character of the user name must be a letter from a to z or A to Z.
Current Password	Used to enter the current password. **Remark** This item is not displayed in case of Add User windows.
Password	Sets the password. You can specify the following characters in a password: numeric characters: [0-9] characters: [a-z], [A-Z] special characters: ! " # $ % & ' ( ) = - ^ ~ ¥ @ `[/] { } : * ; + ? < . > , _ | The password is specified by the following rules. ・ The number of characters that can be specified is from 8 to 32 characters. ・ There are six kinds of characters of the password more. (The same character of capital letters and small letters becomes two kinds.) (example: If it is aabBcCee, become six kinds.) ・ Do not become time sentence. (example: Madam etc.) ・ The password that can be analogized cannot be specified . (example: Abcdefgh and 12345678, etc.)
Confirm Password	Used to reenter a password for confirmation.
Privilege	Sets the privileges of the user account. 'Partition Operator' is not displayed in PRIMEQUEST 2800B3/2800B2/2800B.
Status	Sets the current status of this account. ・ Enabled ・ Disabled
Full Name	Used to enter the user's real name or other related information. You can enter a total of up to 32 characters.
Operable Partition (for Partition Operator)	This item is not displayed in PRIMEQUEST 2800B3/2800B2/2800B. Sets the partitions that the user is permitted to operate. You can specify this only if [Partition Operator] is selected for [Privilege]. If the user privilege selected in [Privilege] is other than [Partition Operator], the window grays out the check boxes. **Remark** This item is not displayed in case of PRIMEQUEST 2800B3/2800B2/2800B model.

TABLE 1.93 Buttons in the [Add User] and [Edit User] windows

Buttons	Description
Apply	Adds or updates the user account, and returns to the [User List] window.
Cancel	Returns to the [User List] window without adding or updating the user account.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00410	%aa will be added. Are you sure?
E_00032	No more User addition.
E_00409	Unable to change the privilege because the specified user is last Administrator.
I_00410	%aa will be changed. Are you sure?
W_00401	Username is too short.
W_00402	Password is too short.
W_00406	Invalid character is included in User Name.
W_00403	Invalid character is included in Password.
W_00462	The specified password is invalid.
W_00405	Invalid character is included in Full Name.
W_00407	Input characters are too long.
W_00408	Partitions are not selected. Please select at least one partition.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

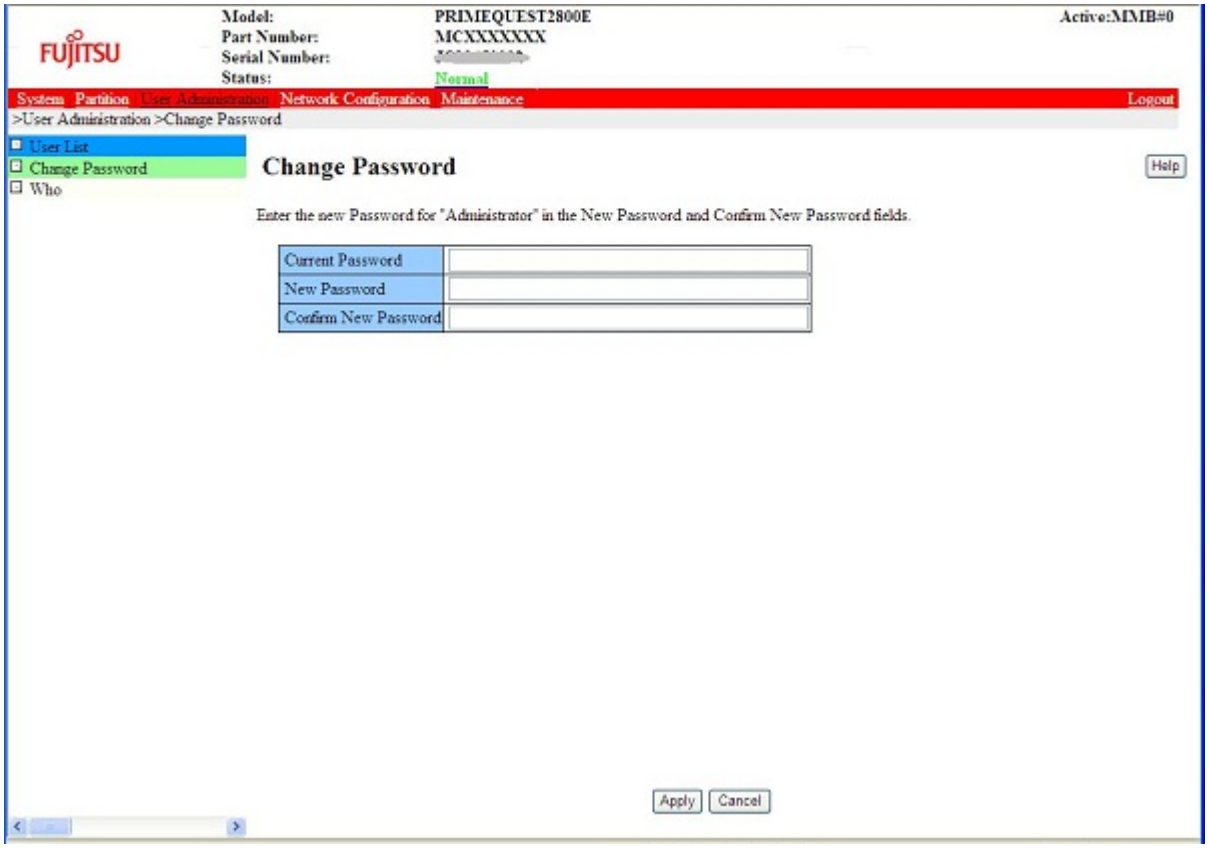
1.4.1.3 [Remove User] button

To delete a user account, select a user in the [User List] window, and then click the [Remove User] button. A deletion confirmation dialog box appears. Click the [OK] button to delete it. Click the [Cancel] button to cancel processing.

1.4.2 [Change Password] window

You can change the password of a logged-in user in the [Change Password] window.

FIGURE 1.83 [Change Password] window



Remarks

The entered password must consist of at least eight characters. The message to the effect that should be input by eight characters or more is displayed for eight characters or less. The password that can be analogized cannot be set again.

TABLE 1.94 Buttons in the [Change Password] window

Buttons	Description
Apply	Registers the changed password.
Cancel	Restores the original information and does not change the password.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
E_00012	One or more errors occurred while setting.
E_00018	Information acquisition failed.
E_00036	Changing Password failed.
I_00037	Changing Password completed.
W_00404	Password differs from the re-password.
W_00402	Password is too short.
W_00403	Invalid character is included in Password.
I_00417	Are you sure?
W_00462	The specified password is invalid.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.4.3 [Who] window

The [Who] window lists the users who connect to the MMB through the serial port, Telnet/SSH or the Web-UI.

FIGURE 1.84 [Change Password] window

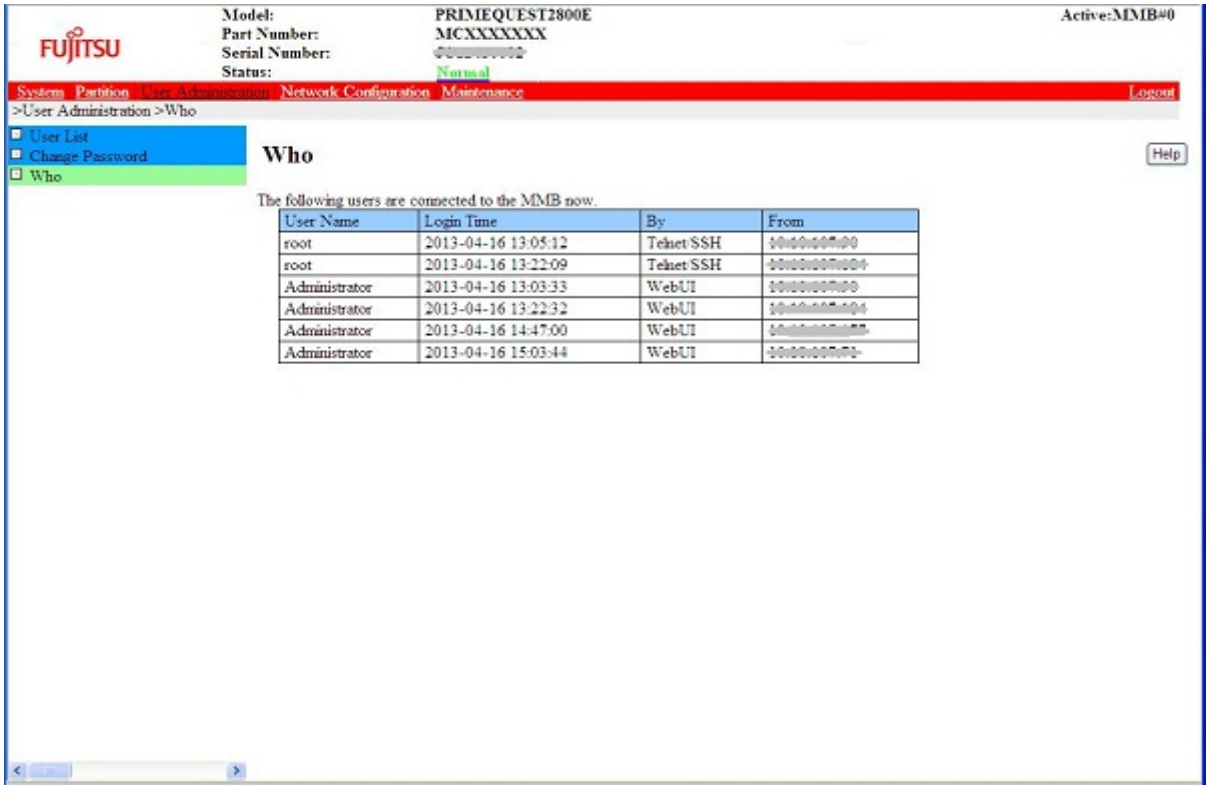


TABLE 1.95 Display items in the [Who] window

Items	Description
User Name	Displays the name of the user logged in to the MMB through the serial port, Telnet/SSH, or the Web-UI.
Login Time	Displays the user's login time.
By	Displays whether the Web-UI or Telnet/SSH was used for the login. If the serial port was used for the login, this field displays "-" (hyphen).
From	Displays the host name or the IP address (IPv4 or IPv6 address) of a remote host if the user logged in remotely. If the host name can be identified from the DNS set on the MMB at the login time, this field displays the host name. Otherwise, it displays the IP address. If the serial port of the MMB was used for the login, the field displays "-" (hyphen). If the user logged in from the Web-UI, the field displays only the IP address using the DNS.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
E_00098	Failed to get login user information

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

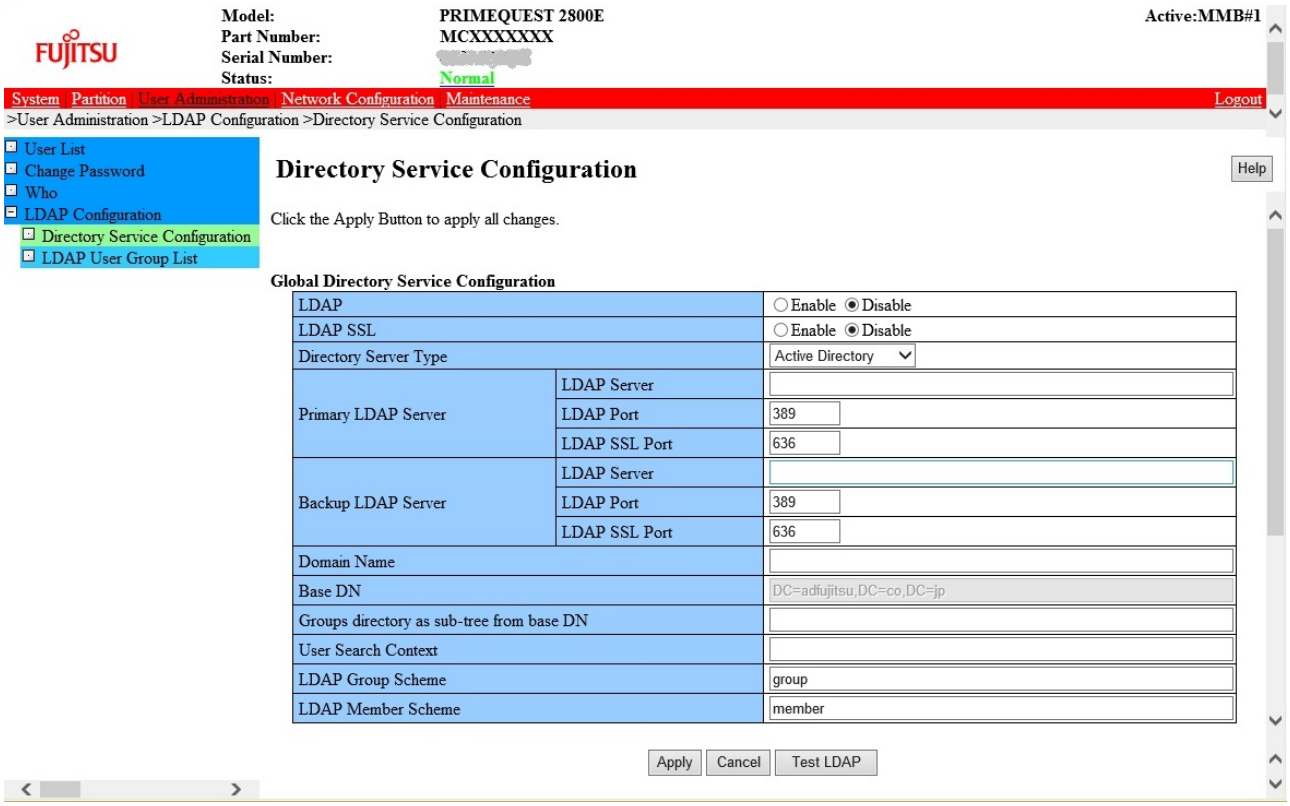
1.4.4 [LDAP Configuration] window

LDAP function(Active Directory) can be available in BA15082, BB15082 or later version of firmware.
LDAP function(Novell eDirectory/OpenLDAP/OpenDS/Open DJ) can be available in BA15104, BB15104 or later version of firmware.
The setting content of LDAP function (Active Directory) changes in BA16036, BB16036 or later version of firmware.
Please refer to the explanation of "TABLE 1.96 Display Items and Set Items of [Direcotory Service Configuration] Window" for details.

1.4.4.1 [Direcotory Service Configuration] Window

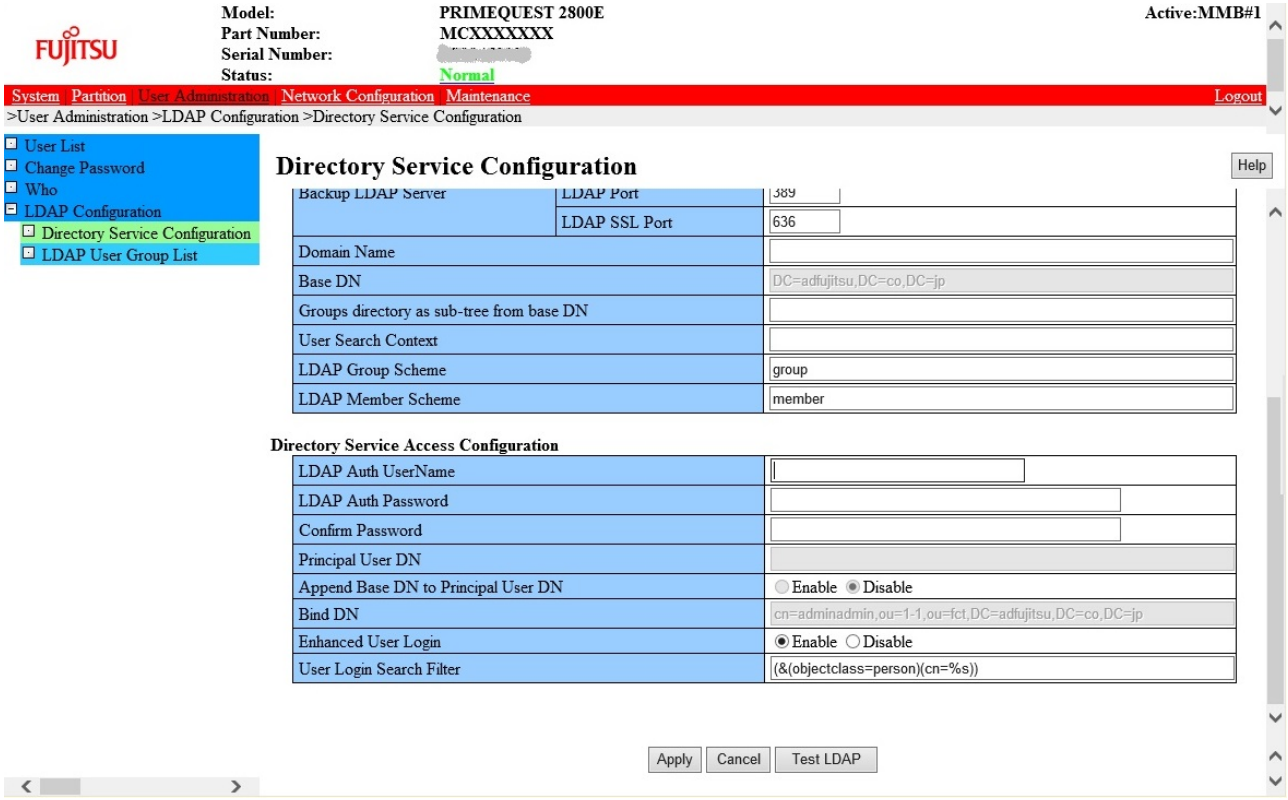
You can set the directory service configuration setting and the directory service access setting of the directory service in the [Direcotory Service Configuration] window, As for the display of this window, only the user of Administrator is possible.

FIGURE 1.85 [Direcotory Service Configuration] Window(1/2)



The item that cannot be input according to the type of selected Directory Server Type is displayed in the grayout state.

FIGURE 1.86 [Direcotory Service Configuration] Window(2/2)



The item that cannot be input according to the type of selected Directory Server Type is displayed in the grayout state.

TABLE 1.96 Display Items and Set Items of [Direcotory Service Configuration] Window

Items		Description
Global Directory Service Configuration		
LDAP		Sets whether to enable or disable the LDAP function. ・ □ Enable ・ □ Disable The default is Disable. **Attention** When the setting of LDAP is Enabled, only global user ID becomes possible the log in of MMB.
LDAP SSL		Sets whether to enable or disable the SSL connection with the LDAP server. ・ □ Enable ・ □ Disable The default is Disable.
Directory Server Type		Sets the directory service that the LDAP server uses. ・ □ Active Directory ・ □ Novell eDirectory ・ □ OpenLdap ・ □ Open DS / Open DJ The default is Active Directory.
Primary LDAP Server		Sets the Primary LDAP server.
	LDAP Server	Sets the IP address or the DNS name of Primary LDAP server. The DNS name is assumed to be 64 characters or less.
	LDAP Server	Sets the LDAP port of Primary LDAP server. You can specify 389 or a value in a range of 1024 to 65535. The default is 389.
	LDAP SSL Port	Sets the secure LDAP port of Primary LDAP server. You can specify 636 or a value in a range of 1024 to 65535. The default is 636.
Backup LDAP Server		Sets the Backup LDAP server.
	LDAP Server	Sets the IP address or the DNS name of Backup LDAP server. When the setting of backup LDAP server is unnecessary, the value of LDAP Server is not input. The DNS name is assumed to be 64 characters or less.
	LDAP Server	Sets the LDAP port of Backup LDAP server. You can specify 389 or a value in a range of 1024 to 65535. The default is 389.
	LDAP SSL Port	Sets the secure LDAP port of Backup LDAP server. You can specify 636 or a value in a range of 1024 to 65535. The default is 636.
Domain Name		Sets the complete DNS path name of the directory server. The DNS name is assumed to be 64 characters or less.

Items	Description
	When Directory Server Type is Active Directory, this item can be input.
Base DN	Sets the Base DN of the LDAP directory tree. The DN is assumed to be 127 characters or less. When Directory Server Type is Active Directory, this item cannot be input.
Groups Directory as sub-tree from base DN	Sets the Group Directory under the control of Base DN. The setting is 64 characters or less. The setting is changed as follows in BA16036, BB16036 or later version of firmware. ・ This item cannot be omitted, except when Directory Server Type is set to Active Directory. ・ When Directory Server Type is set to Active Directory and this item is a unsetting, a set value of Base DN becomes a retrieval beginning position.
User Search Context	Sets the User Search Context. The setting is 64 characters or less. When Directory Server Type is Active Directory, this item cannot be input. The setting is changed as follows in BA16036, BB16036 or later version of firmware. ・ This item cannot be omitted, except when Directory Server Type is set to Active Directory. ・ After Apply, a set value of Base DN is set to this item when Directory Server Type is set to Active Directory and this item is a unsetting.
LDAP Group Scheme	Sets the LDAP Group Scheme. The setting is 64 characters or less. The default is groupOfNames. When Directory Server Type is Active Directory, this item cannot be input. The setting is changed as follows in BA16036, BB16036 or later version of firmware. Default is as follows by the setting of Directory Server Type. ・ Active Directory : Group ・ except Active Directory : GroupOfNames When Directory Server Type is Active Directory, this item can be input.
LDAP Member Scheme	Sets the LDAP Member Scheme. The setting is 64 characters or less. The default is member. When Directory Server Type is Active Directory, this item cannot be input. The setting is changed as follows in BA16036, BB16036 or later version of firmware. When Directory Server Type is Active Directory, this item can be input.
Directory Service Access Configuration	
LDAP Auth User Name	Sets the LDAP Auth User Name. You can enter a total of 3 to 32 characters. You can enter the following characters in a user name: [0-9], [a-z], [A-Z], - (hyphen), _ (underscore), . (dot) However, the first character of the user name must be a letter from a to z or A to

Items	Description
	Z. When Directory Server Type is Active Directory, this item can be input.
LDAP Auth Password	Sets the LDAP Auth Password. You can specify the following characters in a password: numeric characters: [0-9] characters: [a-z], [A-Z] special characters: ! " # $ % & ' ( ) = - ^ ~ ¥ @ `[/] { } : * ; + ? < . > , _ | The password is specified by the following rules. □ The number of characters that can be specified is from 8 to 32 characters. □ There are six kinds of characters of the password more. (The same character of capital letters and small letters becomes two kinds.) (example: If it is aabBcCee, become six kinds.) □ Do not become time sentence. (example: Madam etc.) □ The password that can be analogized cannot be specified . (example: Abcdefgh and 12345678, etc.)
Confirm Password	Used to reenter a password for confirmation.
Principal User DN	Sets the Principal User DN. The setting is 64 characters or less. When Directory Server Type is Active Directory, this item cannot be input.
Append Base DN to Principal User DN	Sets whether Base DN is added to Principal User DN. When this option is Enable, Base DN is added to Principal User DN. The default is Disable. When Directory Server Type is Active Directory, this item cannot be input.
Bind DN	After the setting is stored, Principal User DN used by the LDAP authentication is displayed.
Enhanced User Login	Sets whether to enable or disable the Enhanced User Login. Because the flexibility at the user log in is enhanced when this option is Enable, the User Login Search Filter can be specified. The default is Disable. When Directory Server Type is Active Directory, this item cannot be input. The setting is changed as follows in BA16036, BB16036 or later version of firmware. When Directory Server Type is Active Directory, this item can be input.
User Login Search Filter	Sets the User Login Search Filter. The standard Search Filter "(&(objectclass=person)(cn=%s))" is displayed. Placeholder“%s" is replaced by corresponding global log in. A standard filter can be changed by specifying another attribute instead of “cn=". The setting is 64 characters or less. When Directory Server Type is Active Directory, this item cannot be input. The setting is changed as follows in BA16036, BB16036 or later version of firmware. When Directory Server Type is Active Directory, this item can be input.

When the LDAP function is made effective, it is necessary to make a special account for Admin and for CE from CLI beforehand. Moreover, it is necessary to make one group with the Admin authority in LDAP User Group.

Because it becomes only an outside LDAP server when the LDAP function is made effective referring to the user attestation ahead, log in by local user ID becomes impossible. And, only global user ID becomes possible log in.

Global user ID indicates the user who belongs to the global group.
When the global group is included in the universal group, it becomes an object.

The setting of backup LDAP server can be omitted though the setting of primary LDAP server is indispensable.

TABLE 1.97 [Direcotory Service Configuration] Window Buttons

Buttons	Description
Apply	Sets the specified information.
Cancel	Does not set the information and returns to the original state.
Test LDAP	The access data is transmitted to the LDAP directory server.

[Message]

The following table lists the messages displayed in this window.

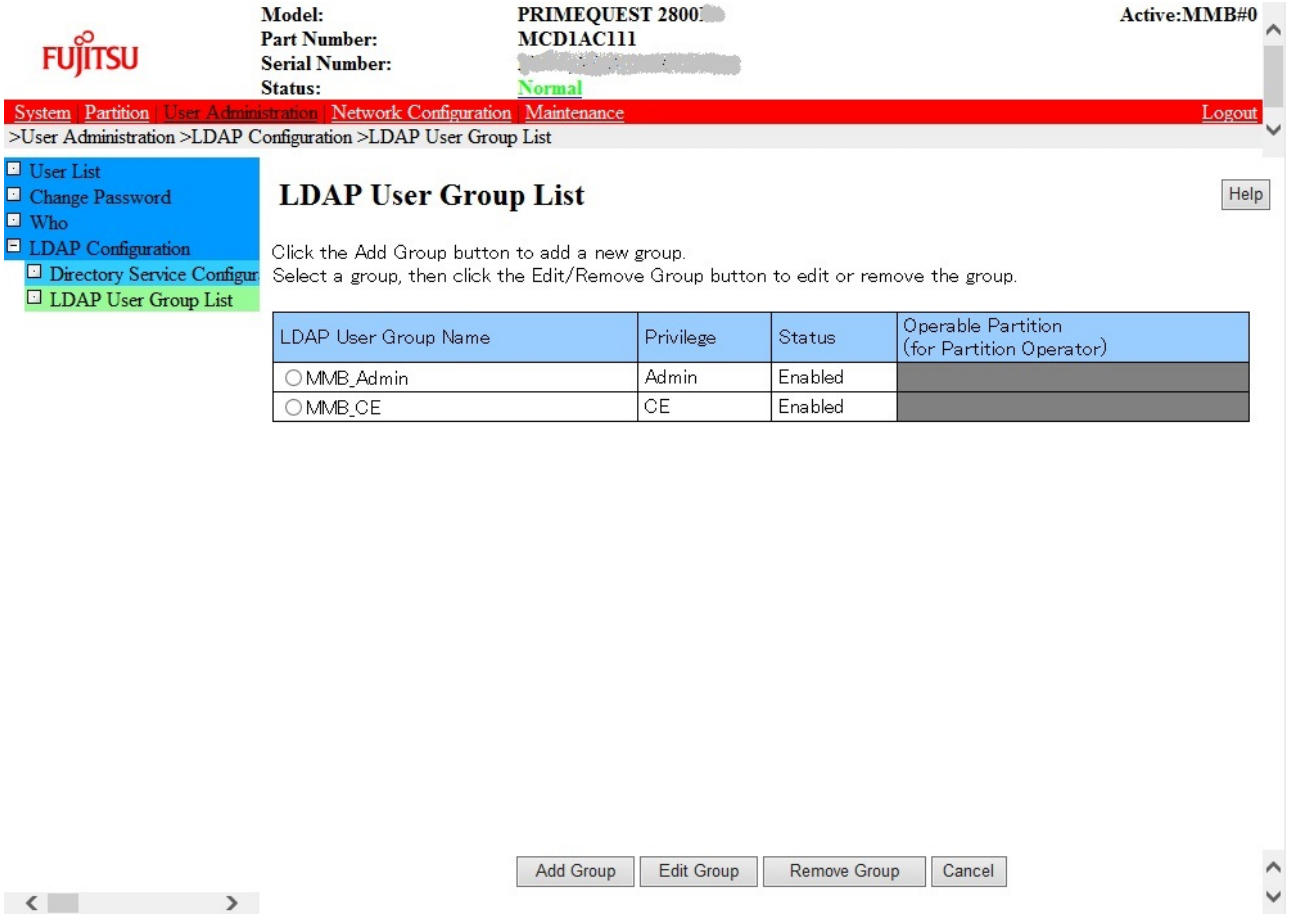
Message Number	Message
W_00426	Invalid values specified.
W_00435	Invalid Port number.
W_00437	The duplicate Port number was found.
I_00013	Setting completed.
W_00401	Username is too short.
W_00402	Password is too short.
W_00403	Invalid character is included in Password.
W_00404	Password differs from the re-password.
W_00406	Invalid character is included in UserName.
W_00407	Input characters are too long.
W_00616	The duplicate LDAP Server was found.
W_00617	LDAP cannot be set, because special account is not made.
W_00618	LDAP cannot be enabled, because LDAP User Group of the Admin privilege is not set.
I_00417	Are you sure?
I_00619	The Test LDAP sunceeded.
W_00620	The Test LDAP failed.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.4.4.2 [LDAP User Group List] Window

Information on each LDAP User Group registered now is displayed on [LDAP User Group List] Window,
As for the display of this window, only the user of Administrator is possible.

FIGURE 1.87 [LDAP User Group List] Window



User Group can be edited by selecting LDAP User Group by the radiobutton.
The grayout state is displayed to Group that Status is set to Disabled.

TABLE 1.98 Display Items and Set Items of [LDAP User Group List] Window

Items	Description
LDAP user group name	Displays the LDAP user group name. You can enter a total of 3 to 64 characters. You can enter the following characters in a group name: [0-9], [a-z], [A-Z], - (hyphen), _ (underscore), . (dot) However, the first character of the user name must be a letter from a to z or A to Z.
Privilege	Displays the Privilege of LDAP user group.
Status	Displays the status of present LDAP user group. · □ Enable · □ Disable The default is Disable. **Attention** When the setting of LDAP is Enabled, only global user ID becomes possible the log in of MMB.
Operable Partition (for Partition Operator)	This item is not displayed in PRIMEQUEST 2800B3/2800B2/2800B. Displays the partition that the user who belongs to LDAP user groups can operate.

TABLE 1.99 [LDAP User Group List] Window Buttons

Buttons	Description
Add Group	Displays the [Add Group] window.
Edit Group	Displays the [Edit Group] window.
Remove Group	Deletes the Group.
Cancel	Restores the original information and does not set the specified information.

[Message]

The following table lists the messages displayed in this window.

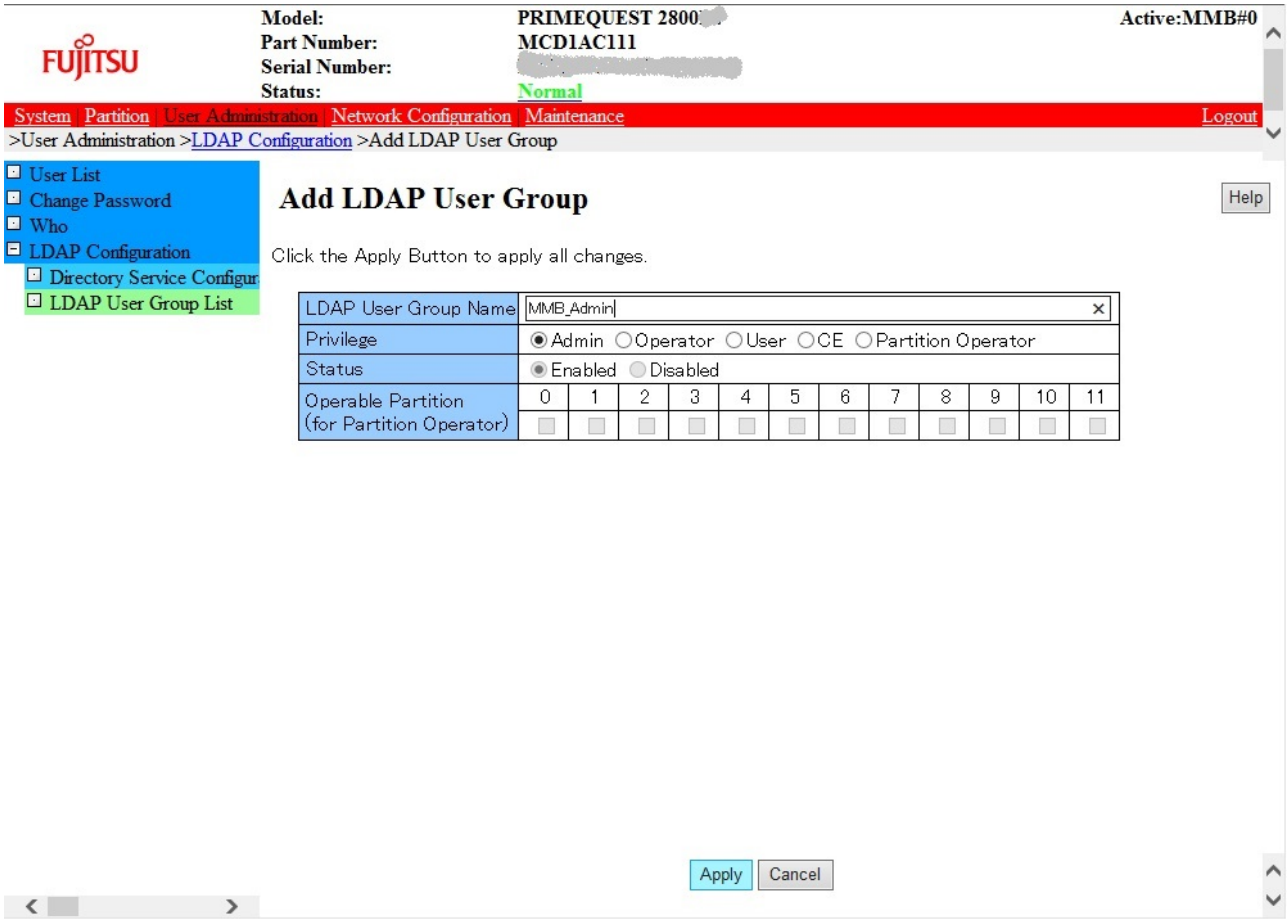
Message Number	Message
E_00031	Same name already exists. User addition failed.
E_00032	No more User addition.
E_00034	Unable to change the status to Disable because the specified user is last Administrator.
E_00035	The user is logining. User deletion failed.
I_00041	User addition was completed
I_00042	User information editing was completed.
I_00043	User deletion was completed.
W_00463	Select a User Name.
I_00464	%aa will be removed. Are you sure?
W_00404	Password differs from the re-password.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.4.4.3 [Add LDAP User Group] Window

[Add Group] clicks on a button on the [LDAP User Group List] Window, and the [Add LDAP User Group] Window is displayed.
User Group can be newly registered on the [Add LDAP User Group] Window.
It is possible to register up to 16 groups or less.

FIGURE 1.88 [Add LDAP User Group] Window



The group is made when a necessary matter is input and the button of [Apply] is clicked and it returns to the [LDAP User Group List] Window.
On the [LDAP User Group List] Window, the group that registers can confirm it.
It returns to the [LDAP User Group List] Window without doing anything when the button of [Cancel] is clicked.

TABLE 1.100 Display Items and Set Items of [Add LDAP User Group]／[Edit LDAP User Group] Window

Items	Description
LDAP user group name	Sets the LDAP user group name. You can enter a total of 3 to 64 characters. You can enter the following characters in a group name: [0-9], [a-z], [A-Z], - (hyphen), _ (underscore), . (dot) However, the first character of the user name must be a letter from a to z or A to Z.
Privilege	Sets the Privilege of LDAP user group.
Status	Sets the status of present LDAP user group. ・ □ Enable ・ □ Disable
Operable Partition (for Partition Operator)	his item is not displayed in PRIMEQUEST 2800B3/2800B2/2800B. Sets the partition that the user who belongs to LDAP user groups can operate. Only when [Partition Operator] is selected with [Privilege], this item can be set. The gray out is displayed to this check box when selecting it with [Privilege] excluding [Partition Operator].

TABLE 1.101 [Add LDAP User Group]／[Edit LDAP User Group] Window Buttons

Buttons	Description
Apply	Adds or updates the Group, and it returns to the [LDAP User Group List] Window.
Cancel	Restores the original information, and it returns to the [LDAP User Group List] Window.

[Message]

The following table lists the messages displayed in this window.

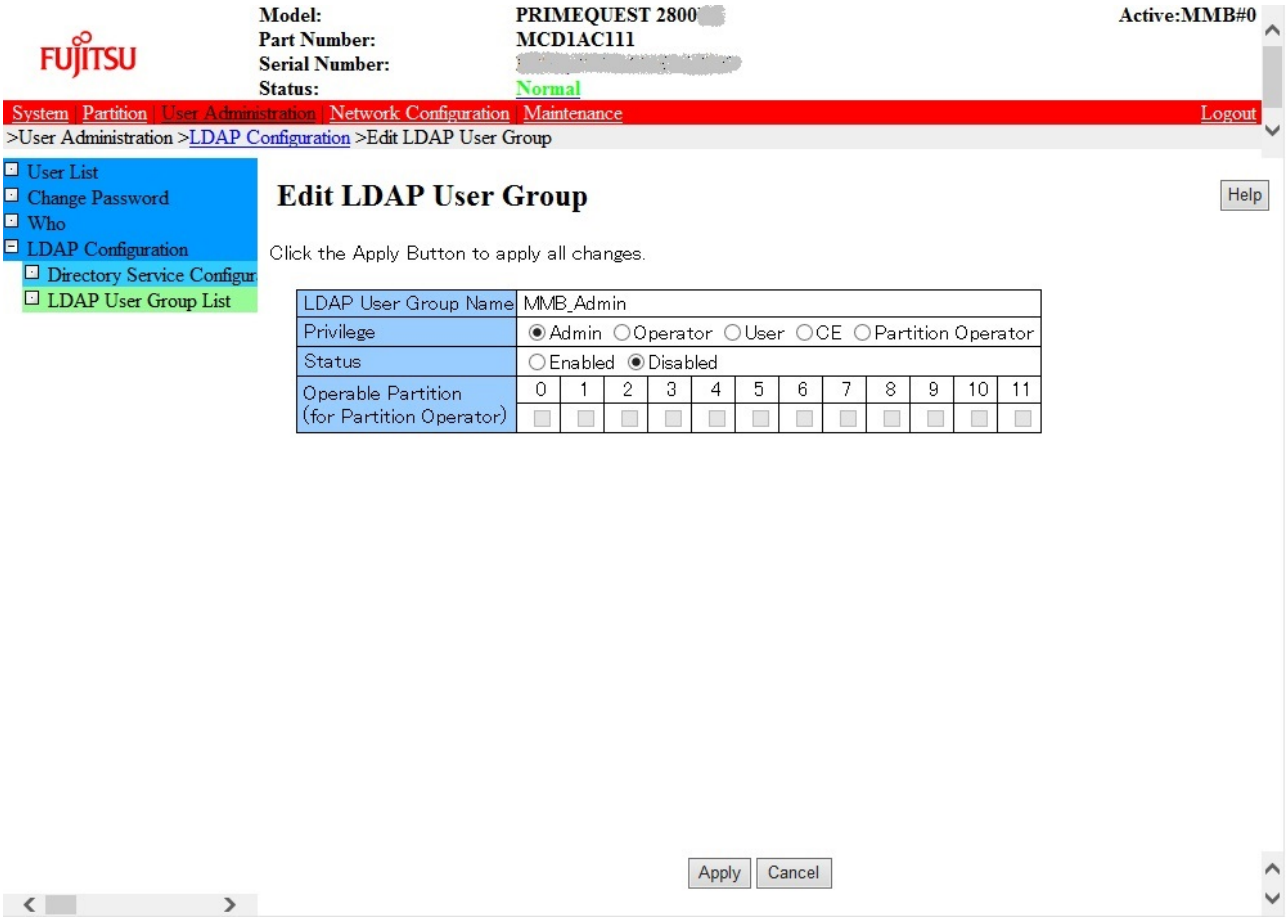
Message Number	Message
W_00426	Invalid values specified.
W_00407	Input characters are too long.
W_00408	Partitions are not selected. Please select at least one partition.
I_00410	%aa will be added. Are you sure?
I_00411	%aa will be changed. Are you sure?
W_00614	Invalid character is included in GroupName.
W_00615	Groupname is too short.
E_00607	Same name already exists. Group addition failed.
E_00609	Unable to change the status to Disable because the specified group is the last Administrator.
E_00610	Unable to change the privilege because the specified group is the last Administrator.
I_00611	Group addition was completed.
I_00612	Group information editing was completed.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.4.4.4 [Edit LDAP User Group] Window

The group that wants to change the group administrative information is selected on the [LDAP User Group List] Window.
The button of Edit Group is clicked, and the [Edit LDAP User Group] Window is displayed.
The group administrative information other than LDAP User Group Name can be changed on the [Edit LDAP User Group] Window.

FIGURE 1.89 [Edit LDAP User Group] Window



The group administrative information is changed when a necessary matter is input, and the button of [Apply] is clicked, and it returns to the [LDAP User Group List] Window.
The changed account can be confirmed on the [LDAP User Group Lis]t Window.
It returns to the [LDAP User Group List] Window without doing anything when the button of [Cancel] is clicked.

Please refer to 1.4.4.3 [Add LDAP User Group] Window for "Display and set item of this Window", "Button of this Window", and "Message displayed on this Window".

1.4.4.5 [Remove Group] Window

When the group is deleted, the group is selected on the [LDAP User Group List] Window, and the button of Remove Group is clicked.
The dialog box to confirm the deletion is displayed.
The button of OK is clicked when deleting it.
The button of Cancel is clicked when canceling.

1.5 [Network Configuration] Menu

The [Network Configuration] menu is available only to users who have Administrator privileges.

1.5.1 [Date/Time] window

You can set the date and time of the MMB in the [Date/Time] window.

FIGURE 1.90[Date/Time] window

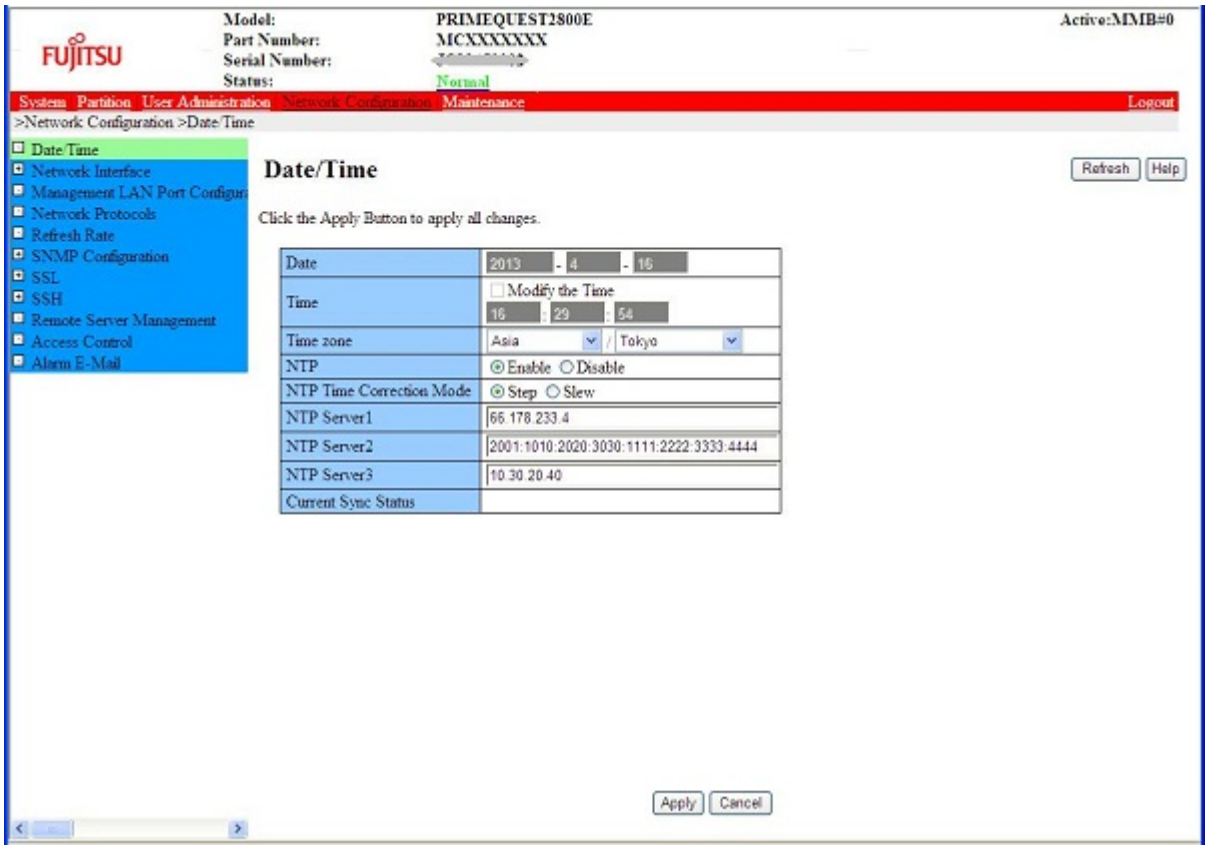


TABLE 1.102 Setting and display items in the [Date/Time] window

Items	Description
Date	Displays and sets the date. If only a date is specified and [Modify the Time] is unchecked, the specified date is set. The time is defined as the instant when the [Apply] button is clicked. For example, if you change the date to August 1 (during daylight savings time) at 13:00 on January 1 (outside daylight savings time), processing assumes that the specified time and date are 13:00 on August 1.
Time	Displays the [Date/Time] window display time (hh:mm:ss). This time is shown in 24-hour format. To update the displayed time, the window must be refreshed. If automatic refresh is set, the displayed time is the window refresh time. To set a time, check the [Modify the Time] check box. With this check box checked, the [hh:mm:ss] field can be set. With the check box unchecked, the [hh:mm:ss] field in the window is grayed out.
Time zone	Used to select a time zone from the pull-down menu.
NTP	Sets whether to enable or disable the NTP function. ・ Enable ・ Disable With [Enable] selected, the MMB synchronizes with the time of the NTP server specified below in [NTP1] to [NTP3]. It is synchronized with immediately after the Enable setting at the time of the server side regardless of the setting of NTP Time Correction Mode. The default is Disable.
NTP Time Correction Mode	Sets an NTP time correction mode. (This item is valid only if [NTP] is [Enable]. If it is set to [Disable], the item is grayed out.) - [Step]: If the time difference with the NTP server is less than 128 milliseconds, the MMB uses Slew mode (0.0005 seconds per second) to correct the time. The MMB corrects the time as soon as the difference reaches 128 milliseconds. If the time difference is outside a range of -1000 to +1000 seconds (16 minutes and 40 seconds), the NTP function stops. - [Slew]: The following action is taken depending on the time difference with the NTP server: ・ If the difference is within a range of -600 to +600 seconds (10 minutes), the NTP executes Slew adjustment, which corrects the time at a rate of up to 0.0005 seconds per second without reversal. ・ If the difference is outside a range of -600 to +600 seconds (10 minutes) and within a range of -1000 to +1000 seconds (16 minutes and 40 seconds), the NTP executes Step adjustment. (In this case, the clock may be reversed.) ・ If the difference is outside a range of -1000 to +1000 seconds (16 minutes and 40 seconds), the NTP function stops. The default is Step.
NTP 1	Sets the IPv4 or IPv6 IP address of the NTP server. (This item is valid only if [NTP] is [Enable]. If it is set to [Disable], the item is grayed out.)

Items	Description
NTP 2	Sets the IPv4 or IPv6 IP address of the NTP server. (This item is valid only if [NTP] is [Enable]. If it is set to [Disable], the item is grayed out.)
NTP 3	Sets the IPv4 or IPv6 IP address of the NTP server. (This item is valid only if [NTP] is [Enable]. If it is set to [Disable], the item is grayed out.)
Current Sync Status	Displays the synchronous status with the current NTP server. ・ When synchronized: Displays the latest synchronous time together with the IP address as follows: xxx.xxx.xxx.xxx yyyy-mm-dd -dd:mm:ss ・ When not synchronized: Displays "No Sync." ・ When ntpd stopped: Displays "Unknown" **Remarks** To resume NTP function, set NTP to [Disable] and set it to [Enable] again.

TABLE 1.103 Buttons in the [Date/Time] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information, such as the date and time zone.

(1) Menu Operation
[Network Configuration] - [Date/Time]

(2) Window Operations
1. Specify information such as the date and time zone. Then, click the [Apply] button.
This sets the information such as the date and time zone.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
E_00020	The IP address overlaps.
E_00100	Failed to set Date/Time information
W_00414	Invalid Date Format
W_00434	Invalid Time Format
W_00433	The duplicate IP address was found.
W_00432	Invalid IP Address specified.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

Time synchronization with NTP
This section describes the operational specifications for the NTP client.

- When starting time synchronization:
  The NTP client on the MMB synchronizes the time at the start of operation, irrespective of the time difference with the NTP server.
  The NTP client on the MMB starts operation:
  - when the NTP services on the MMB are enabled (i.e., when [Enable] in the [NTP] field is checked and the [Apply] button is clicked in the [Network Configuration] - [Date/Time] window), or
  - when the MMB is reset, the MMB redundancy is switched, and the AC power is turned from OFF to ON while the NTP services on the MMB are enabled.

- When starting time synchronization:
  The time-adjusting method on the NTP varies depending on the NTP operation mode (Step mode or Slew mode).
  In Step mode, if the time difference between the synchronized NTP servers and the MMB is:
  (1) within a range of -0.128 to +0.128 seconds, the NTP executes Slew adjustment, which corrects the time at a rate of up to 0.0005 per second without reversal.
  (2) outside a range of -0.128 to +0.128 seconds and within a range of -1000 to +1000 seconds, the NTP executes Step adjustment. (In this case, the clock may be reversed.)
  (3) outside a range of -1000 to +1000 seconds, the NTP function stops.

  In Slew mode, if the time difference between the synchronized NTP servers and the MMB is:
  (1) within a range of -600 to +600 seconds (10 minutes) , the NTP executes Slew adjustment, which corrects the time at a rate of up to 0.0005 per second without reversal.
  (2) outside a range of -600 to +600 seconds (10 minutes) and within a range of -1000 to +1000 seconds (16 minutes and 40 seconds) , the NTP executes Step adjustment. (In this case, the clock may be reversed.)
  (3) outside a range of -1000 to +1000 seconds (16 minutes and 40 seconds) , the NTP function stops.

- Time synchronization interval
  The NTP client synchronizes at an interval of 64 to 1024 seconds. The initial synchronization interval is 64 seconds. As the synchronization accuracy becomes stable, this interval gradually doubles from 64 seconds to 128 seconds, then to 256 seconds, then to 512 seconds, and finally to 1024 seconds.
  This increment algorithm for the synchronization interval conforms to RFC 1305. For details, see Sections 3.4.2 to 3.4.9 in RFC 1305.

- Stratum of the NTP servers on the MMB
  The stratum of the NTP servers on the MMB is the value of stratum + 1 of the synchronized external NTP servers. Unless the NTP servers synchronize with external NTP servers, the stratum is 5.

- Support for leap seconds
  The NTP on the MMB has no function for inserting leap seconds. Therefore, if you want to associate the MMB time with leap seconds, you need to synchronize it with an external NTP server that supports leap seconds.
  If the NTP client on the MMB is set to Step mode, and the external NTP server slowly changes the time for the leap second adjustment, the MMB time may be adjusted with the Step adjustment when a time difference outside a range of -0.128 to +0.128 second occurs. To prevent the leap second adjustment from using Step adjustment, use Slew mode.

1.5.2 [Network Interface] window

The [Network Interface] menu has the following windows:

[IPv4 Interface] window
[IPv6 Interface] window

1.5.2.1 [IPv4 Interface] window

You can set the IPv4 IP address for MMB access and other related items in the [IPv4 Interface] window.

FIGURE 1.91 [IPv4 Interface] window (PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E) (1)

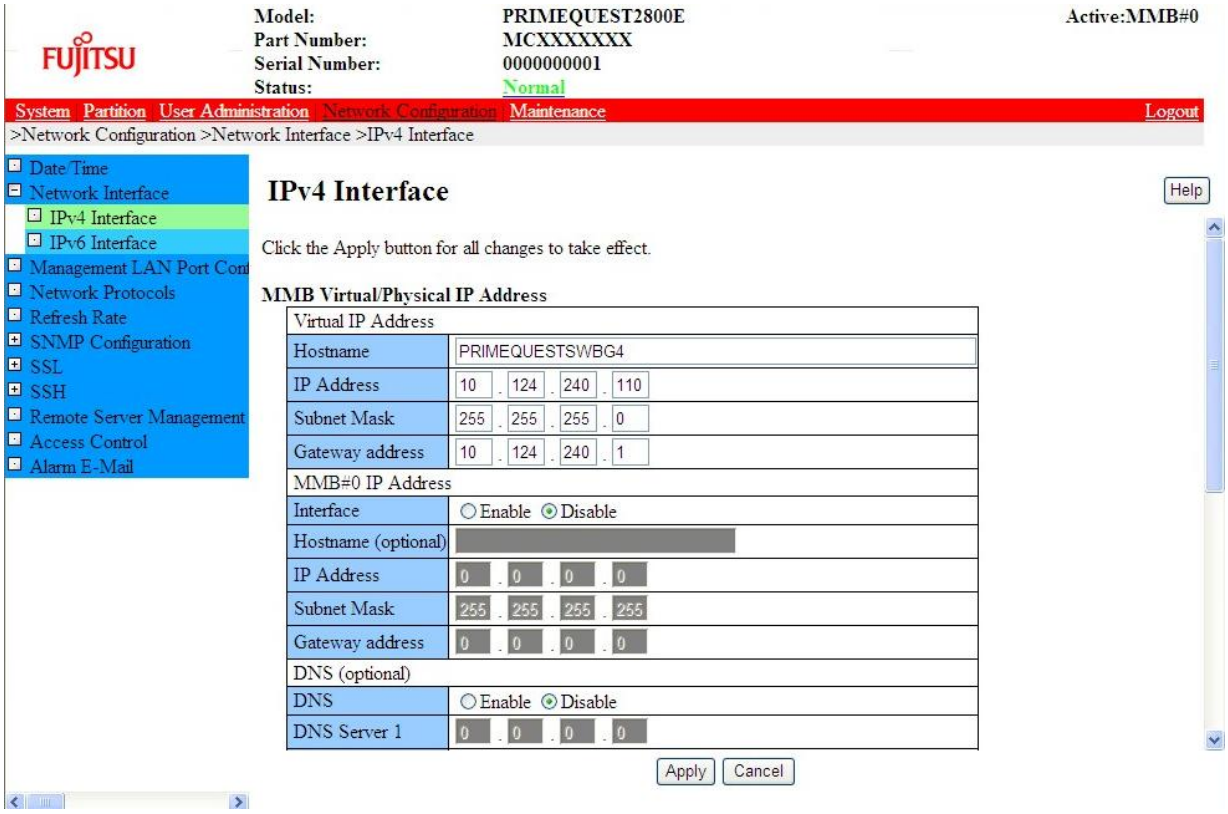


FIGURE 1.92 [IPv4 Interface] window (PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E) (2)

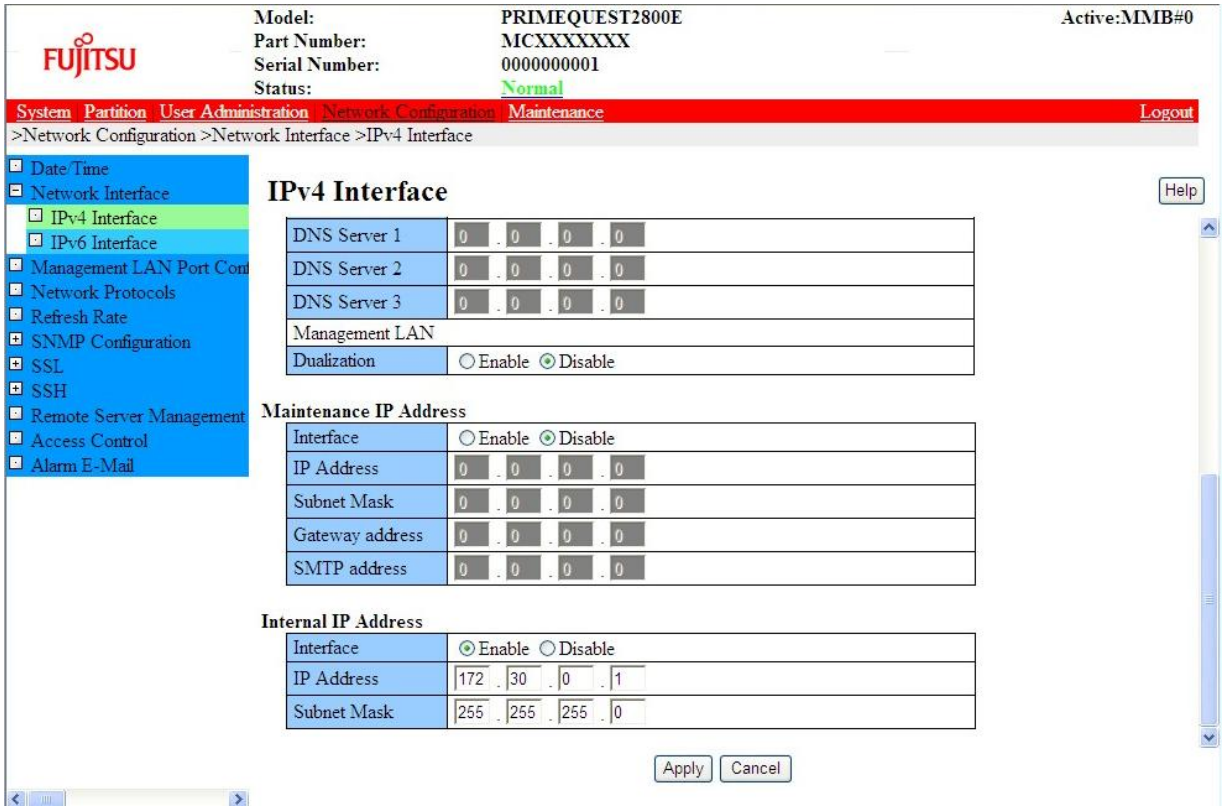


TABLE 1.104 Setting and display items in the [IPv4 Interface] window (PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E)

Items	Description
MMB Virtual/Physical IP Address	
Virtual IP Address	Sets the virtual IPv4 IP address for Web-UI access. If the MMB has a redundant configuration, the switched MMB will take over this virtual IP address.
Hostname	Sets the host name in FQDN format. You can enter the following characters: [a-z], [A-Z], [0-9], - (hyphen), . (period). Only the above characters can be specified. Also, the following restrictions apply: ・ The character string must begin with an alphabetic character. ・ The character string cannot begin or end with the following character specified: - (hyphen) or . (period). The default is "PRIMEQUEST" + Product Serial Number. For example, if the serial number is 1020516004, the character string is "PRIMEQUEST1020516004". **Remarks** The setting in FQDN format is not required if you are not operating on the domain.
IP Address	Sets the IP address.
Subnet Mask	Sets the subnet mask.
Gateway address	Sets the gateway IP address.
MMB#0 IP Address	Sets the physical IP address assigned to the MMB#0 interface. This item is available only if the system has MMB#0. You cannot access the Web-UI from this interface. Unless MMB#0 is mounted, the window does not display the [MMB#0 IP Address] table.
Interface	・ Enable ・ Disable
Hostname (optional)	Sets the host name in FQDN format.
IP Address	Sets the IP address.
Subnet Mask	Sets the subnet mask.
Gateway address	Sets the gateway IP address.
MMB#1 IP Address	Sets the physical IP address assigned to the MMB#1 interface. This item is available only if the system has MMB#1. You cannot access the Web-UI from this interface. Unless MMB#0 is mounted, the window does not display the [MMB#1 IP Address] table.
Interface	・ Enable ・ Disable
Hostname (optional)	Sets the host name in FQDN format.
IP Address	Sets the IP address.
Subnet Mask	Sets the subnet mask.
Gateway address	Sets the gateway IP address.
DNS (optional)	Sets whether to use the DNS server
DNS	Sets whether to use the DNS server. To use the DNS, select Enable. The default is Disable.
DNS Server 1	Sets the IP address of the Primary DNS server.

Items	Description
DNS Server 2	Sets the IP address of the Secondary DNS server.
DNS Server 3	Sets the IP address of the Third DNS server.
Management LAN	Duplicates the management LAN.
Dualization	Duplicates the management LAN. The default is Disable.
Maintenance IP Address	
Interface	Sets whether to enable or disable the CE/REMCS LAN interface. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is Enable. In case of PRIMEQUEST 2400E/2800E/2800B The default is Disable.
IP Address	Sets the IP address. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is 192.168.1.1.
Subnet Mask	Sets the subnet mask. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is 255.255.255.0.
Gateway address	Sets the gateway IP address.
SMTP address	Sets the SMTP IP address.
Internal IP Address	
Interface	Sets whether to enable or disable the Internal LAN interface. The default is Disable.
IP Address	Sets the IP address.
Subnet Mask	Sets the subnet mask.

FIGURE 1.93 [IPv4 Interface] window (PRIMEQUEST 2800B3/2800B2/2800B) (1)

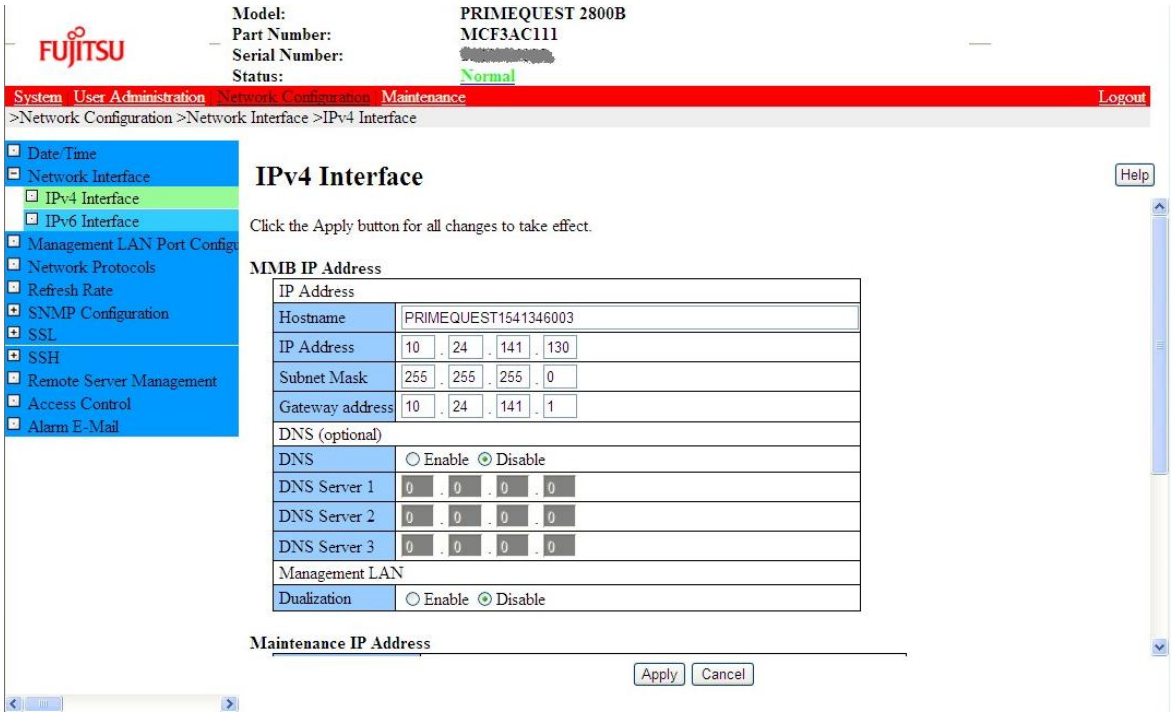


FIGURE 1.94 [IPv4 Interface] window (PRIMEQUEST 2800B3/2800B2/2800B) (2)

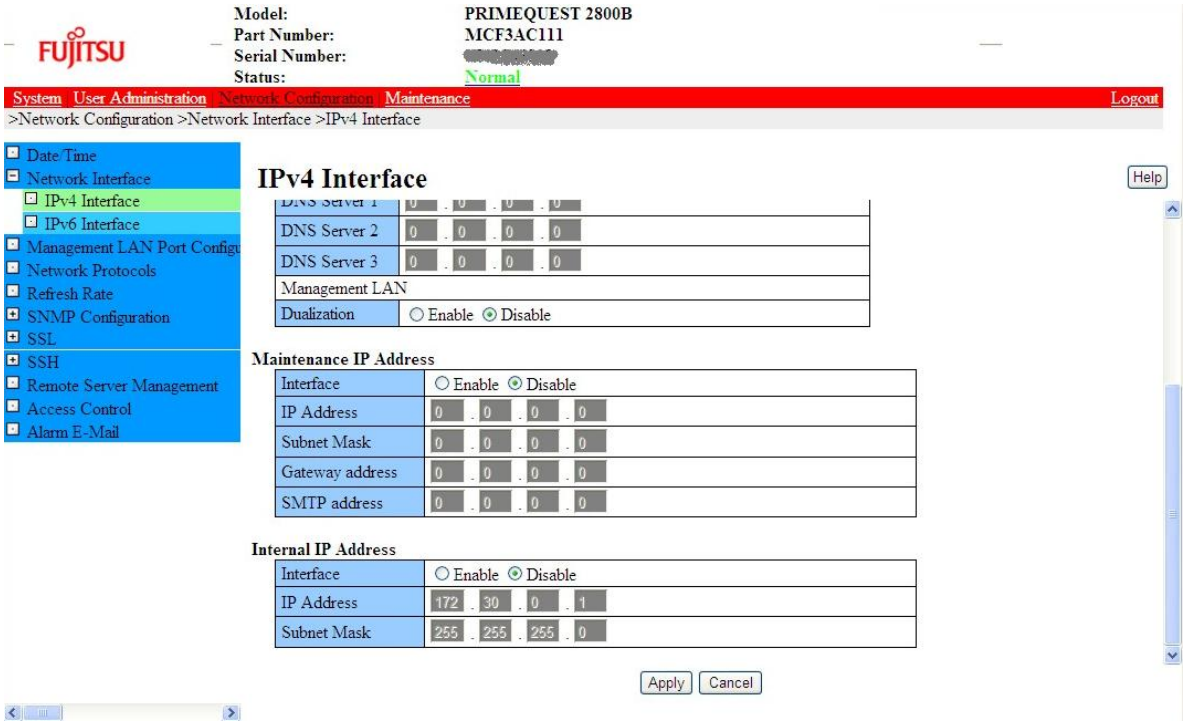


TABLE 1.105 Setting and display items in the [IPv4 Interface] window (PRIMEQUEST 2800B3/2800B2/2800B)

Items	Description
MMB IP Address	
IP Address	
Hostname	Sets the host name in FQDN format. You can enter the following characters: [a-z], [A-Z], [0-9], - (hyphen), . (period). Only the above characters can be specified. Also, the following restrictions apply: ・ The character string must begin with an alphabetic character. ・ The character string cannot begin or end with the following character specified: - (hyphen) or . (period). The default is "PRIMEQUEST" + Product Serial Number. For example, if the serial number is 1020516004, the character string is "PRIMEQUEST1020516004". **Remarks** The setting in FQDN format is not required if you are not operating on the domain.
IP Address	Sets the IP address.
Subnet Mask	Sets the subnet mask.
Gateway address	Sets the gateway IP address.
DNS (optional)	
DNS	Sets whether to use the DNS server. To use the DNS, select Enable. The default is Disable.
DNS Server 1	Sets the IP address of the Primary DNS server.
DNS Server 2	Sets the IP address of the Secondary DNS server.
DNS Server 3	Sets the IP address of the Third DNS server.
Management LAN	
Dualization	Duplicates the management LAN. The default is Disable.
Maintenance IP Address	
Interface	Sets whether to enable or disable the CE/REMCS LAN interface. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is Enable. In case of PRIMEQUEST 2400E/2800E/2800B The default is Disable.
IP Address	Sets the IP address. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is 192.168.1.1.
Subnet Mask	Sets the subnet mask. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is 255.255.255.0.
Gateway address	Sets the gateway IP address.
SMTP address	Sets the SMTP IP address.
Internal IP Address	
Interface	Sets whether to enable or disable the Internal LAN interface. The default is Disable.
IP Address	Sets the IP address.
Subnet Mask	Sets the subnet mask.

TABLE 1.106 Buttons in the [IPv4 Interface] window

Buttons	Description
Apply	Sets the entered information.
Cancel	Restores the original information and does not set the specified information, such as the IP address.

(1) Menu Operation

[Network Configuration] - [Network Interface] - [IPv4 Interface]

(2) Window Operations

1. Select or enter the IP address, or other items of network interface information. Then, click the [Apply] button.
   This sets the specified information, such as the IP address.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
W_00433	The duplicate IP address was found.
W_00538	Invalid hostname was found.
W_00432	Invalid IP Address specified.
I_00221	Unable to change Network Interface because the system is under maintenance.
W_00595	It is IP address that duplicates with Console Redirection IP address.
W_00596	TIt is the same subnet as MMB IP address. Please change to a different subnet.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.2.2 **[IPv6 Interface] window**

You can set the IP address for MMB access and other related items in the [IPv6 Interface] window.

FIGURE 1.95 [IPv6 Interface] window (PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E) (1)

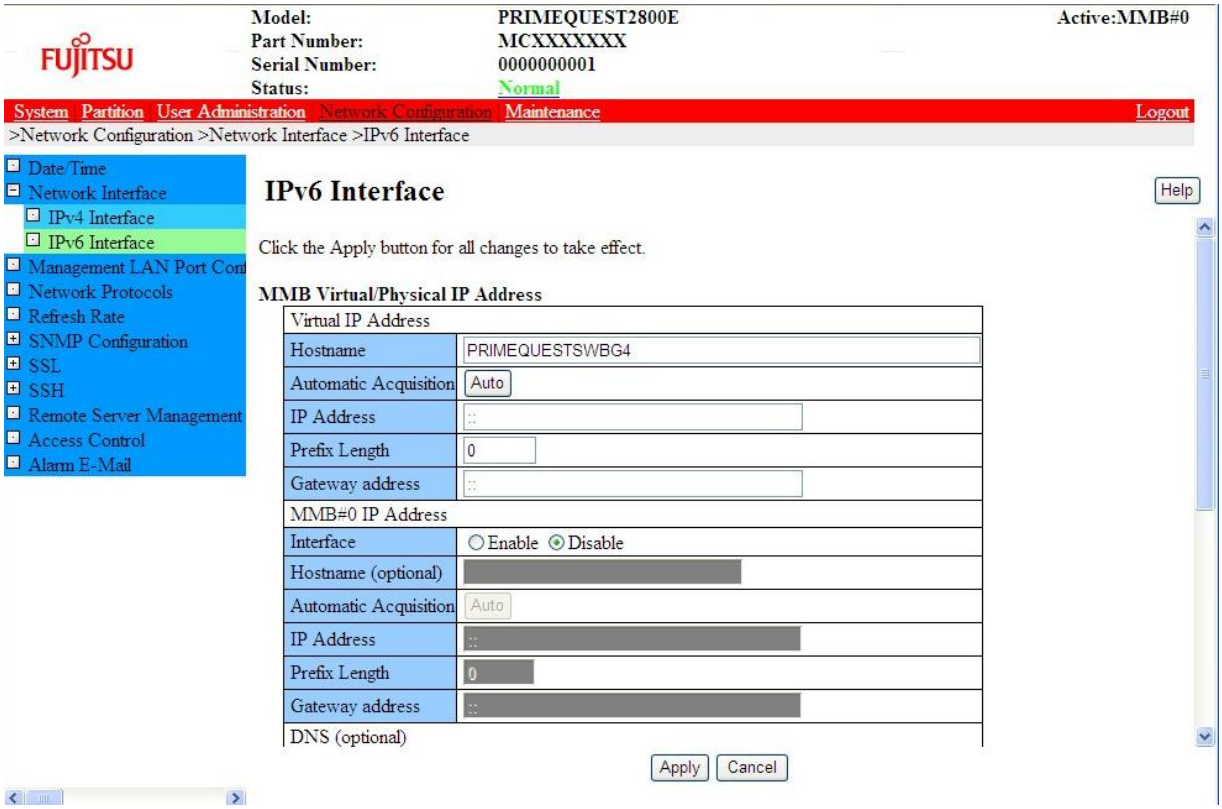


FIGURE 1.96 [IPv6 Interface] window (PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E) (2)

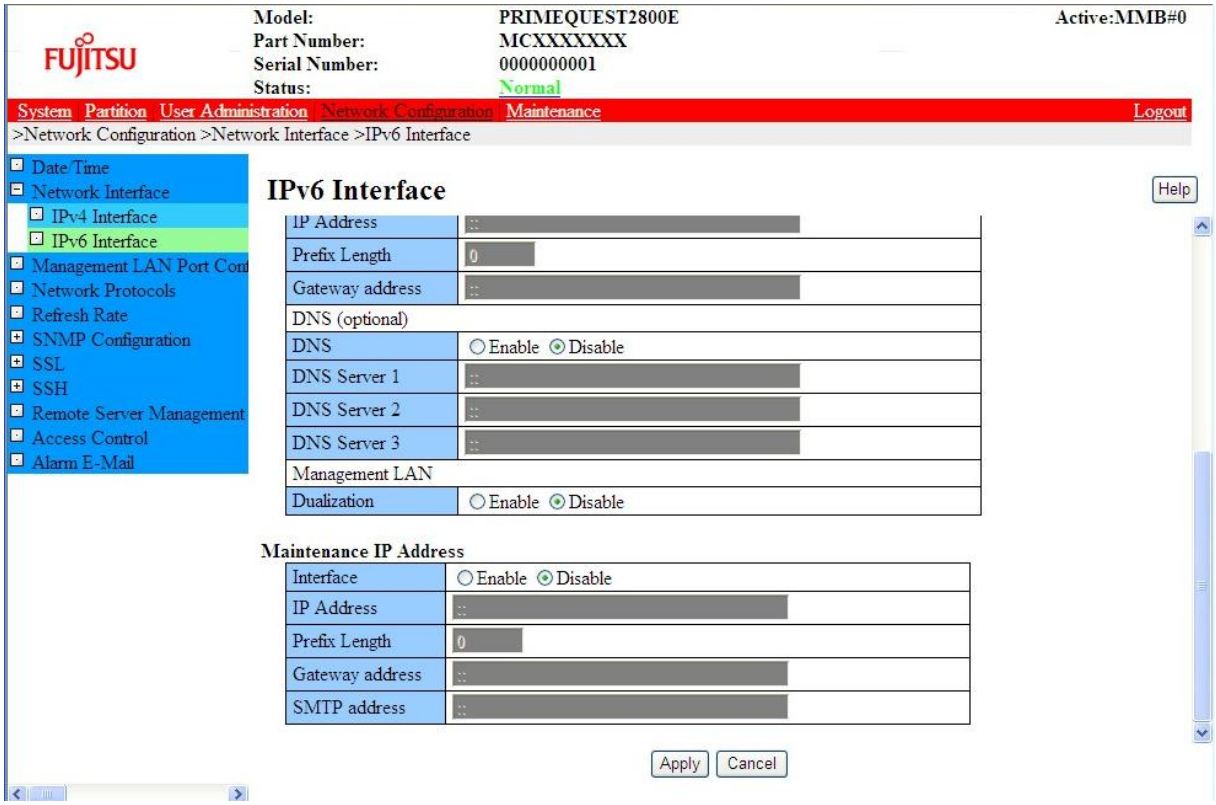


TABLE 1.107 Setting and display items in the [IPv6 Interface] window (PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E)

Items	Description
MMB Virtual/Physical IP Address	
Virtual IP Address	Sets the virtual IPv6 IP address for Web-UI access. If the MMB has a redundant configuration, the switched MMB will take over this virtual IP address.
Hostname	Sets the host name in FQDN format. You can enter the following characters: [a-z], [A-Z], [0-9], - (hyphen), . (period). Only the above characters can be specified. Also, the following restrictions apply: ・ The character string must begin with an alphabetic character. ・ The character string cannot begin or end with the following character specified: - (hyphen) or . (period). The default is "PRIMEQUEST" + Product Serial Number. For example, if the serial number is 1020516004, the character string is "PRIMEQUEST1020516004". **Remarks** The setting in FQDN format is not required if you are not operating on the domain.
Automatic Acquisition	Automatically acquires data with a click of the [Auto] button. The global address, prefix length, and gateway IP address are automatically acquired to overwrite existing data.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.
Gateway address	Sets the gateway IP address.
MMB#0 IP Address	Sets the physical IP address assigned to the MMB#0 interface. This item is available only if the system has MMB#0. You cannot access the Web-UI from this interface. Unless MMB#0 is mounted, the window does not display the [MMB#0 IP Address] table.
Interface	Sets whether to enable or disable the MMB#1 physical IP address. The default is Disable.
Hostname (optional)	Sets the host name in FQDN format.
Automatic Acquisition	Automatically acquires data with a click of the [Auto] button. The global address, prefix length, and gateway IP address are automatically acquired to overwrite existing data.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.
Gateway address	Sets the gateway IP address.
MMB#1 IP Address	Sets the physical IP address assigned to the MMB#1 interface. This item is available only if the system has MMB#1. You cannot access the Web-UI from this interface. Unless MMB#0 is mounted, the window does not display the [MMB#1 IP Address] table.
Interface	Sets whether to enable or disable the MMB#1 physical IP address. The default is Disable.
Hostname (optional)	Sets the host name in FQDN format.
Automatic Acquisition	Automatically acquires data with a click of the [Auto] button. The global address, prefix length, and gateway IP address are automatically acquired to overwrite existing data.
IP Address	Sets the IP address.

Items	Description
Prefix Length	Sets the prefix length.
Gateway address	Sets the gateway IP address.
DNS (optional)	Sets whether to use the DNS server
DNS	Sets whether to use the DNS server. To use the DNS, select Enable. The default is Disable.
DNS Server 1	Sets the IP address of the Primary DNS server.
DNS Server 2	Sets the IP address of the Secondary DNS server.
DNS Server 3	Sets the IP address of the Third DNS server.
Management LAN	Duplicates the management LAN.
Dualization	Duplicates the management LAN. The default is Disable.
Maintenance IP Address	
Interface	Sets whether to enable or disable the CE/REMCS LAN interface. The default is Disable.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.
Gateway address	Sets the gateway IP address.
SMTP address	Sets the SMTP IP address.
Internal IP Address	
Interface	Sets whether to enable or disable the Internal LAN interface. The default is Disable.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.

FIGURE 1.97 [IPv6 Interface] window (PRIMEQUEST 2800B3/2800B2/2800B) (1)

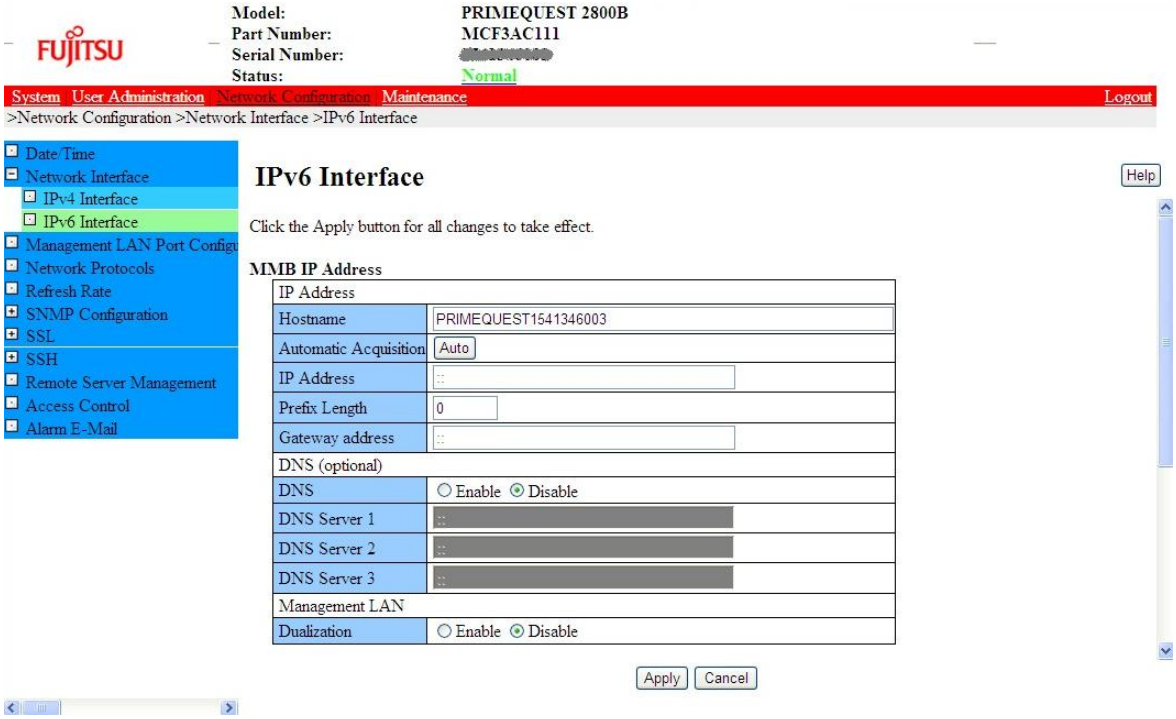


FIGURE 1.98 [IPv6 Interface] window (PRIMEQUEST 2800B3/2800B2/2800B) (2)

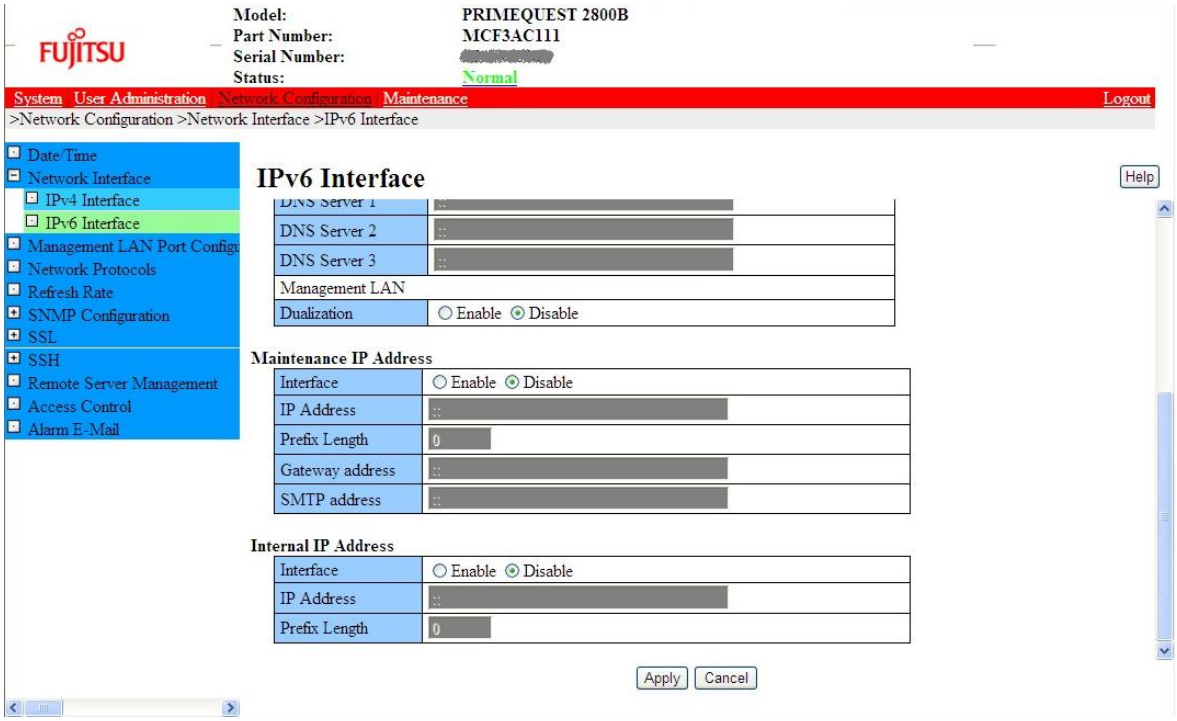


TABLE 1.108 Setting and display items in the [IPv6 Interface] window (PRIMEQUEST 2800B3/2800B2/2800B)

Items	Description
MMB IP Address	
IP Address	Sets the virtual IPv6 IP address for Web-UI access.
Hostname	Sets the host name in FQDN format. You can enter the following characters: [a-z], [A-Z], [0-9], - (hyphen), . (period). Only the above characters can be specified. Also, the following restrictions apply: ・ The character string must begin with an alphabetic character. ・ The character string cannot begin or end with the following character specified: - (hyphen) or . (period). The default is "PRIMEQUEST" + Product Serial Number. For example, if the serial number is 1020516004, the character string is "PRIMEQUEST1020516004". **Remarks** The setting in FQDN format is not required if you are not operating on the domain.
Automatic Acquisition	Automatically acquires data with a click of the [Auto] button. The global address, prefix length, and gateway IP address are automatically acquired to overwrite existing data.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.
Gateway address	Sets the gateway IP address.
DNS (optional)	
DNS	Sets whether to use the DNS server. To use the DNS, select Enable. The default is Disable.
DNS Server 1	Sets the IP address of the Primary DNS server.
DNS Server 2	Sets the IP address of the Secondary DNS server.
DNS Server 3	Sets the IP address of the Third DNS server.
Management LAN	
Dualization	Duplicates the management LAN. The default is Disable.
Maintenance IP Address	
Interface	Sets whether to enable or disable the CE/REMCS LAN interface. The default is Disable.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.
Gateway address	Sets the gateway IP address.
SMTP address	Sets the SMTP IP address.
Internal IP Address	
Interface	Sets whether to enable or disable the Internal LAN interface. The default is Disable.
IP Address	Sets the IP address.
Prefix Length	Sets the prefix length.

TABLE 1.109 Buttons in the [IPv6 Interface] window

Buttons	Description
Auto	A global address and the prefix length, etc. are automatically acquired.
Apply	Sets the entered information.
Cancel	Restores the original information and does not set the specified information, such as the IP address.

(1) Menu Operation

[Network Configuration] - [Network Interface] - [IPv6 Interface]

(2) Window Operations

1. Select or enter the IP address, or other items of network interface information. Then, click the [Apply] button.
   This sets the specified information, such as the IP address.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
W_00433	The duplicate IP address was found.
W_00538	Invalid hostname was found.
W_00432	Invalid IP Address specified.
W_00532	Invalid Prefix Length.
E_00533	Automatic Acquisition failure.
I_00221	Unable to change Network Interface because the system is under maintenance.
W_00595	It is IP address that duplicates with Console Redirection IP address.
W_00596	TIt is the same subnet as MMB IP address. Please change to a different subnet.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.3 [Management LAN Port Configuration] window

You can make the Speed/Duplex setting for each port on the MMB in the [Management LAN Port Configuration] window.

FIGURE 1.99 [Management LAN Port Configuration] window(PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E)

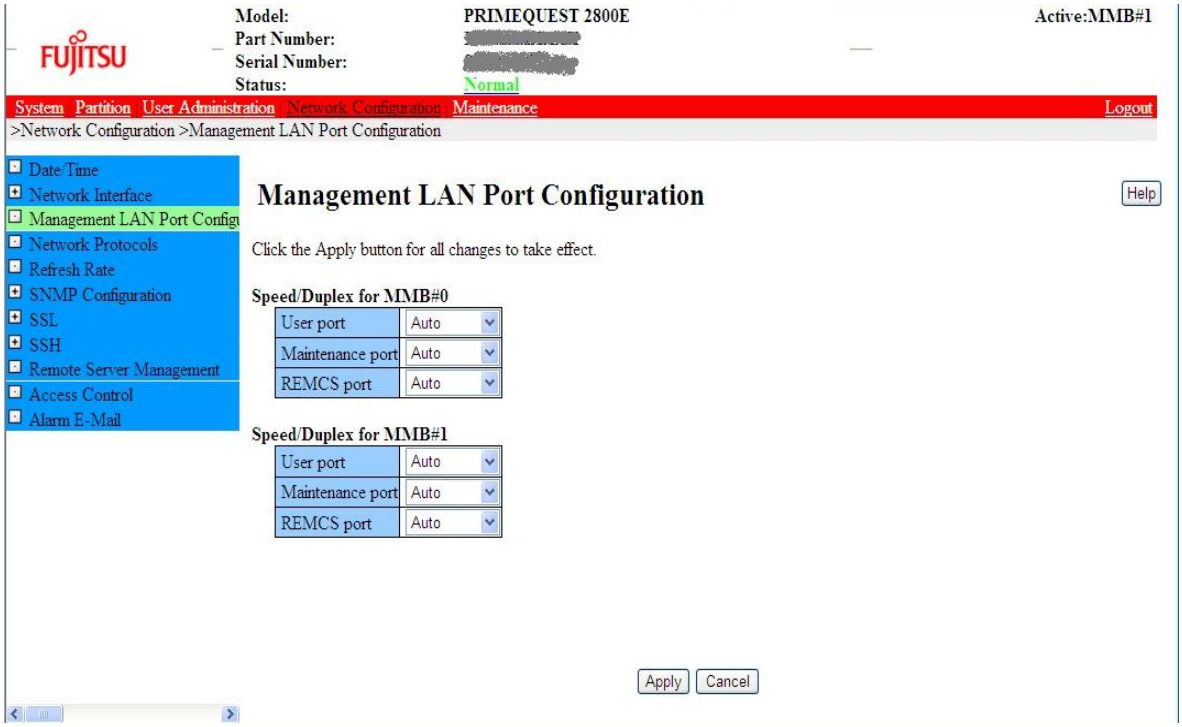


FIGURE 1.100 [Management LAN Port Configuration] window(PRIMEQUEST 2800B3/2800B2/2800B)

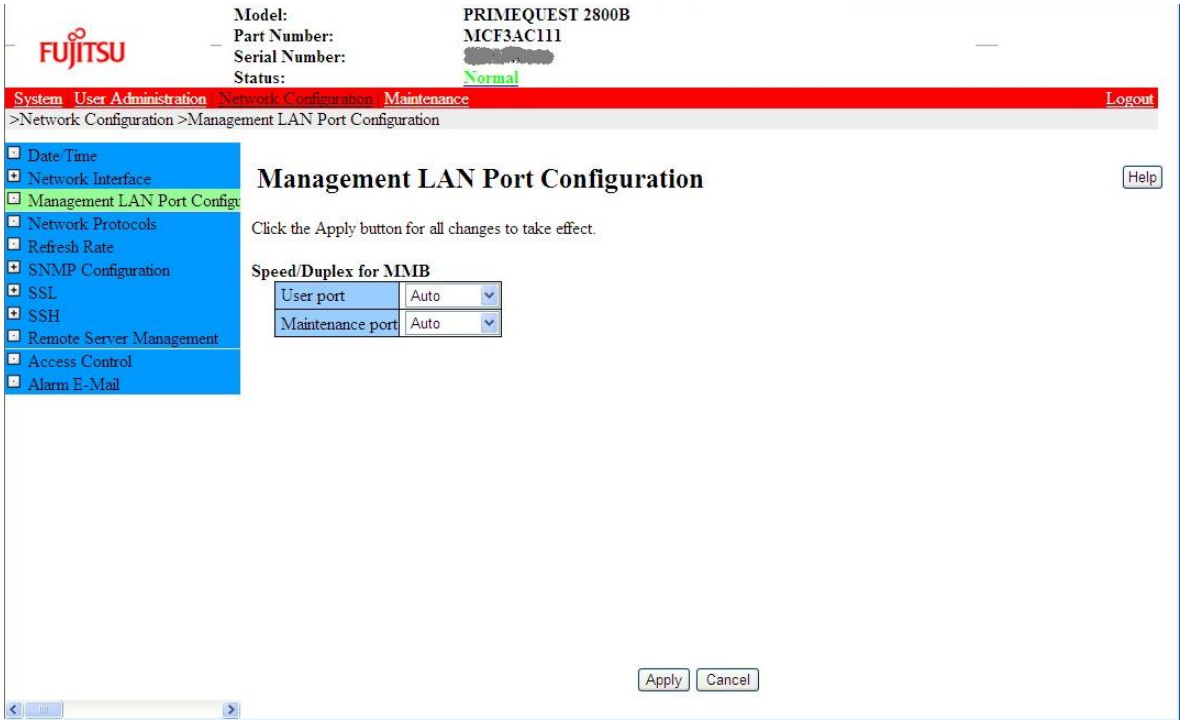


TABLE 1.110 Setting and display items in the [Management LAN Port Configuration] window in case of PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E

Items	Description
Speed/Duplex for MMB#0	
User port	Sets Speed/Duplex for the MMB#0 User port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks The window displays this item only if MMB#0 is mounted. When User Port is used with 1G/Full, Auto is specified.
Maintenance port	Sets Speed/Duplex for the MMB#0 Maintenance port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks The window displays this item only if MMB#0 is mounted.
REMCS port	Sets Speed/Duplex for the MMB#0 REMCS port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks The window displays this item only if MMB#0 is mounted
Speed/Duplex for MMB#1	
User port	Sets Speed/Duplex for the MMB#1 User port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks The window displays this item only if MMB#1 is mounted. When User Port is used with 1G/Full, Auto is specified.

Items	Description
Maintenance port	Sets Speed/Duplex for the MMB#1 Maintenance port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks The window displays this item only if MMB#1 is mounted.
REMCS port	Sets Speed/Duplex for the MMB#1 Maintenance port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks The window displays this item only if MMB#1 is mounted.

TABLE 1.111 Setting and display items in the [Management LAN Port Configuration] window in case of PRIMEQUEST 2800B3/2800B2/2800B

Items	Description
Speed/Duplex for MMB	
User port	Sets Speed/Duplex for the MMB User port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto. Remarks When User Port is used with 1G/Full, Auto is specified.
Maintenance port	Sets Speed/Duplex for the MMB Maintenance port. ・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half The default is Auto.

TABLE 1.112 Buttons in the [Management LAN Port Configuration] window

Buttons	Description
Apply	Sets the entered information.
Cancel	Restores the original information and does not set the specified information for the Speed/Duplex setting.

(1) Menu Operation

[Network Configuration] - [Management LAN Port Configuration]

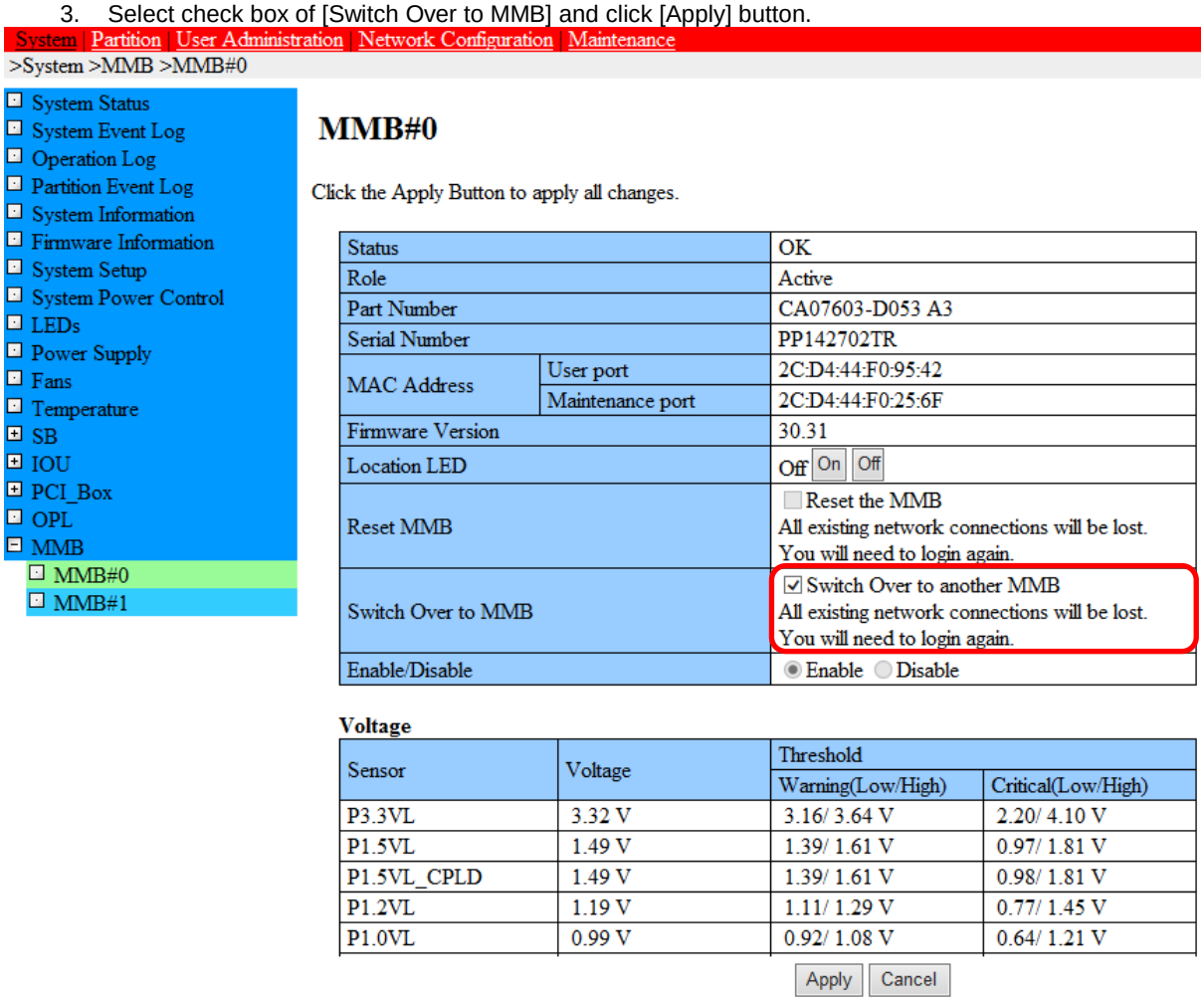
(2) Window Operations

1. Specify Speed/Duplex. Then, click the [Apply] button.
   This sets Speed/Duplex.

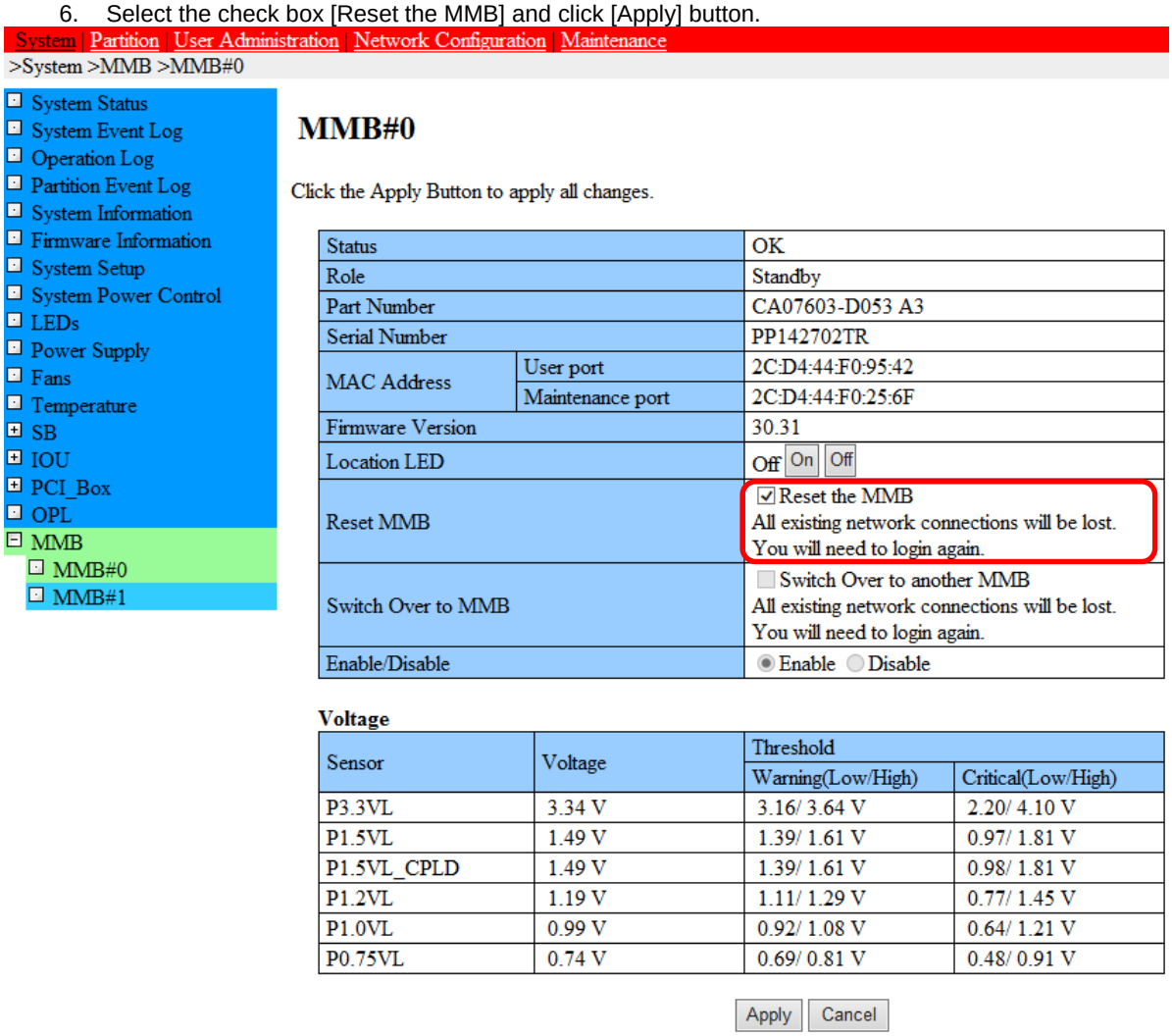
   Remarks
   Reset MMB to initialize communication condition by the following procedure when you change Speed/Duplex.
   The following procedure shows the case when MMB#0 is active MMB.
   If the Active MMB is different, MMB # 0 read MMB # 1 and execute.

【Dual MMB case】

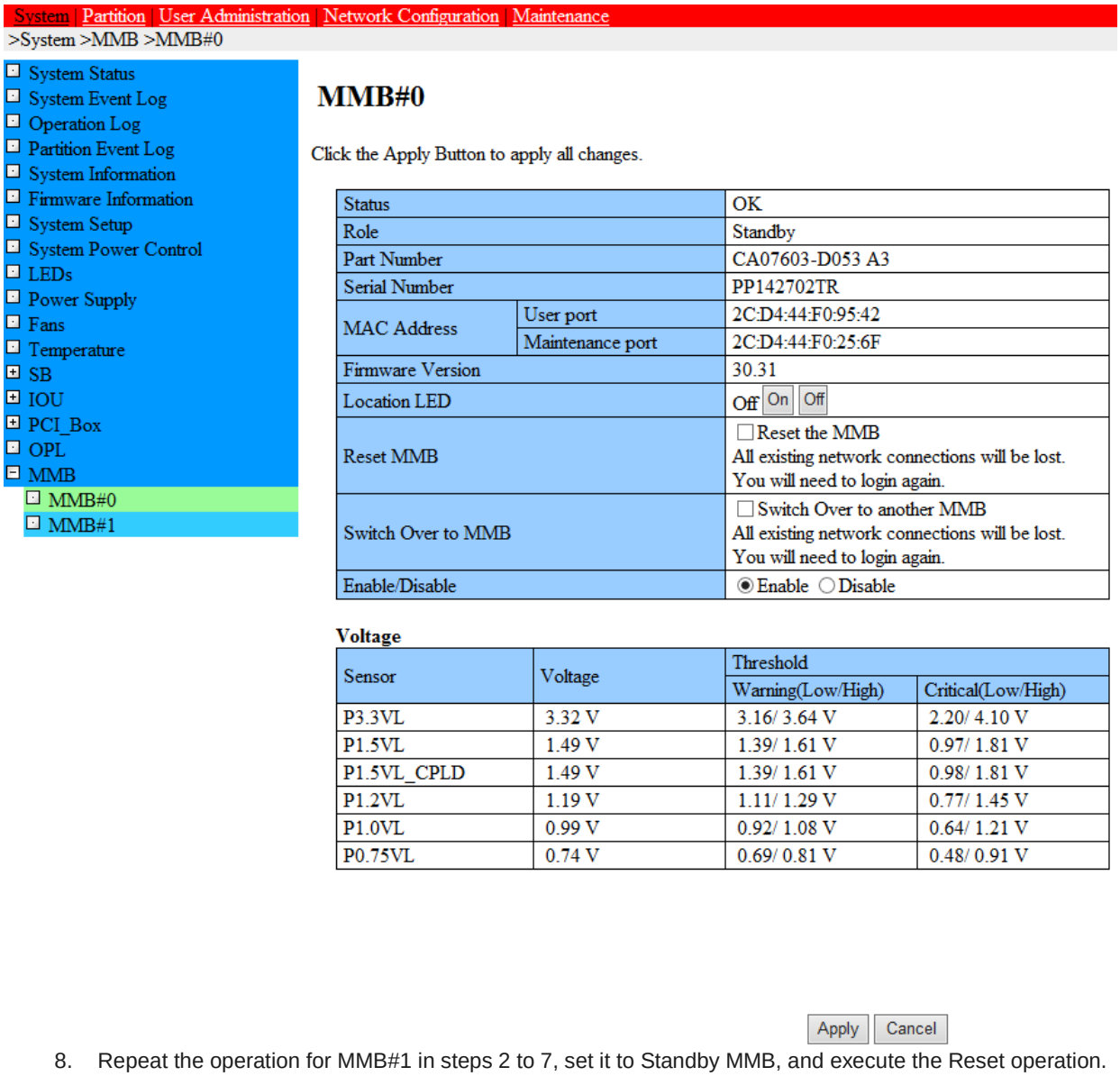
1. Log in to MMB Web-UI.
2. Open Active MMB screen (MMB #0) and switch to Standby MMB.
3. Select check box of [Switch Over to MMB] and click [Apply] button.



4. Log in to MMB Web-UI again.
5. Open MMB#0 screen (Standby MMB) and reset it.
6. Select the check box [Reset the MMB] and click [Apply] button.



7. Confirm that the reset process is completed. Display MMB> MMB#0 of Web-UI and confirm that the items shown below are displayed correctly.
   - Part Number
   - Serial Number
   - Firmware Version
   - Enable



8. Repeat the operation for MMB#1 in steps 2 to 7, set it to Standby MMB, and execute the Reset operation.

【Single MMB case】

1. Open the MMB screen and reset.
2. Select the check box of [Reset the MMB] and click [Apply] button.

I

1.5.4 [Network Protocols] window

You can configure the network protocols of the MMB in the [Network Protocols] window.

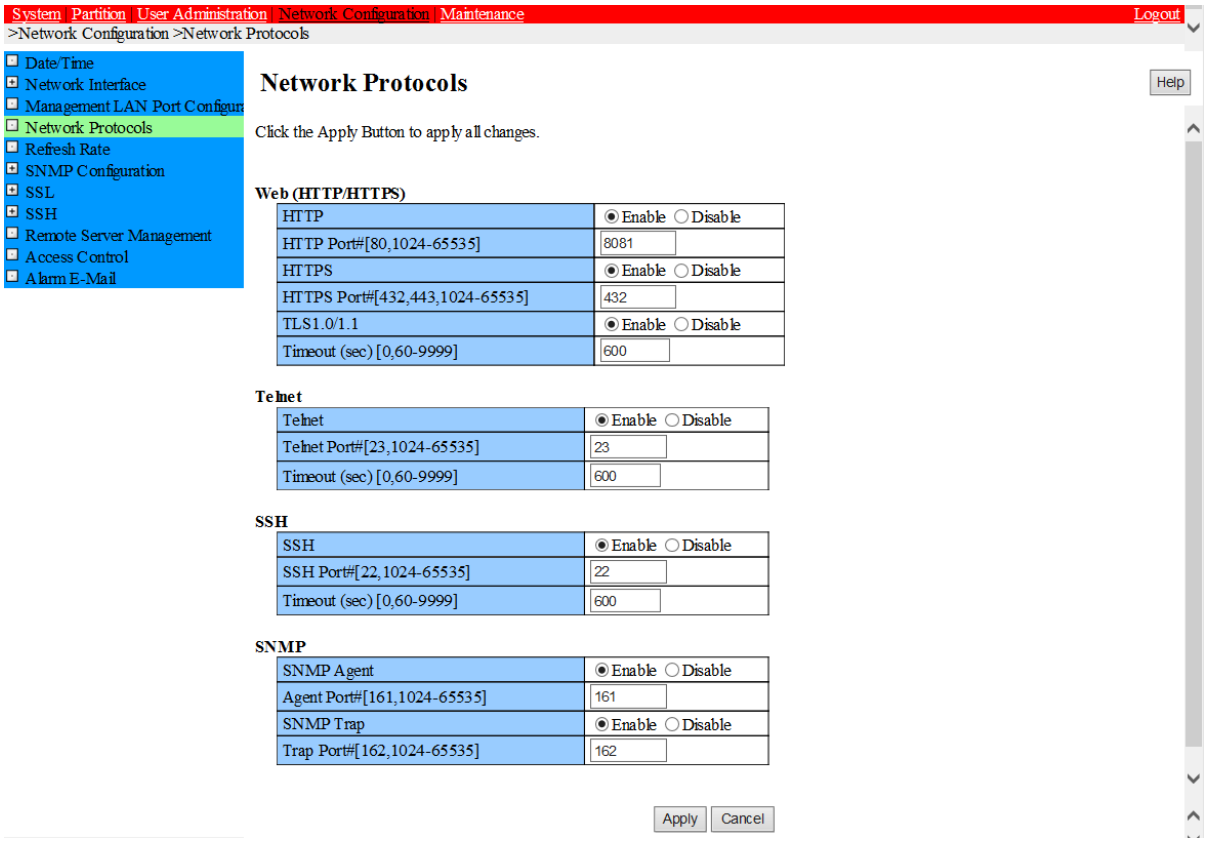


FIGURE 1.101 [Network Protocols] window

TABLE 1.113 Setting and display items in the [Network Protocols] window

Items	Description
Web (HTTP/HTTPS)	
HTTP	Sets Enable or Disable for HTTP. The default is Disable.
HTTP Port#	Sets the port number used for HTTP. The default is 8081.
HTTPS	Sets Enable or Disable for HTTPS. The default is Disable.
HTTPS Port#	Sets the port number used for HTTPS. The default is 432.
TLS1.0/1.1	Set enable/disable of TLS 1.0/1.1/1.2 connection permission of HTTPS. Enable: Permit HTTPS connection with TLS1.0, TLS1.1, TLS1.2. Disable: Permit HTTPS connection with onty TLS1.2 Default is Enable. **Remarks** If you set to Disable, certification is needed to replace.
Timeout	Sets the length of time before a time-out due to no input causes the termination of an HTTP or HTTPS connection. You can specify 0 or a value in a range of 60 to 9999. 0 means there is no time-out. The default is 600 seconds. **Remarks** When Dialog Box is displayed, the no time-out is not applied even if 0 is set.
Telnet	
Telnet	Sets Enable or Disable for Telnet. In case of PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 The default is Enable. In case of PRIMEQUEST 2400E/2800E/2800B The default is Disable.
Telnet Port#	Sets the port number used for Telnet. The default is 23.
Timeout	Sets the length of time before a time-out due to no input causes the termination of a Telnet connection. You can specify 0 or a value in a range of 60 to 9999. 0 means there is no time-out. The default is 600 seconds.
SSH	
SSH	Sets Enable or Disable for SSH. The default is Disable.
SSH Port#	Sets the port number used for SSH. The default is 22.
Timeout	Sets the length of time before the SSH connection is timed out. You can specify 0 or a value in a range of 60 to 9999. 0 means there is no time-out. The default is 600 seconds.
SNMP	
SNMP Agent	Sets Enable or Disable for SNMP Agent. The default is Disable.
Agent Port#	Sets the port number used for SNMP Agent. The specifiable port numbers are 161 and integers from 1024 to 65535.

Items	Description
	The default is 161.
SNMP Trap	Sets Enable or Disable for SNMP Trap. The default is Disable.
Trap Port#	Sets the port number used for SNMP Trap. The specifiable port numbers are 162 and integers from 1024 to 65535. The default is 162.

Remarks

To set HTTPS to [Enable], a valid SSL certificate must be registered.

If you set HTTPS to [Enable] when no valid SSL certificate has been registered, an error message appears.

TABLE 1.114 Buttons in the [Network Protocols] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information, such as port numbers and the time-out time.

(1) Menu Operation
[Network Configuration] - [Network Protocols]

(2) Window Operations
1. Specify the port numbers, time-out time, or other items to set as protocol information. Then, click the [Apply] button.
   This sets the specified information, such as the port numbers and time-out time.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
E_00044	The Port number overlaps.
W_00435	Invalid Port number.
W_00436	Invalid Timeout value.
W_00437	The duplicate Port number was found.
W_00438	Timeout setting is invalid.
E_00439	SSL Server Certificate is not found.
I_00440	HTTP Connection will be lost. You will need to login again. Are you sure?

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.5 [Refresh Rate] window

You can set automatic refresh for those Web-UI windows that display dynamic content, from the [Refresh Rate] window. Each user can make and manage this setting.

FIGURE 1.102 [Refresh Rate] window

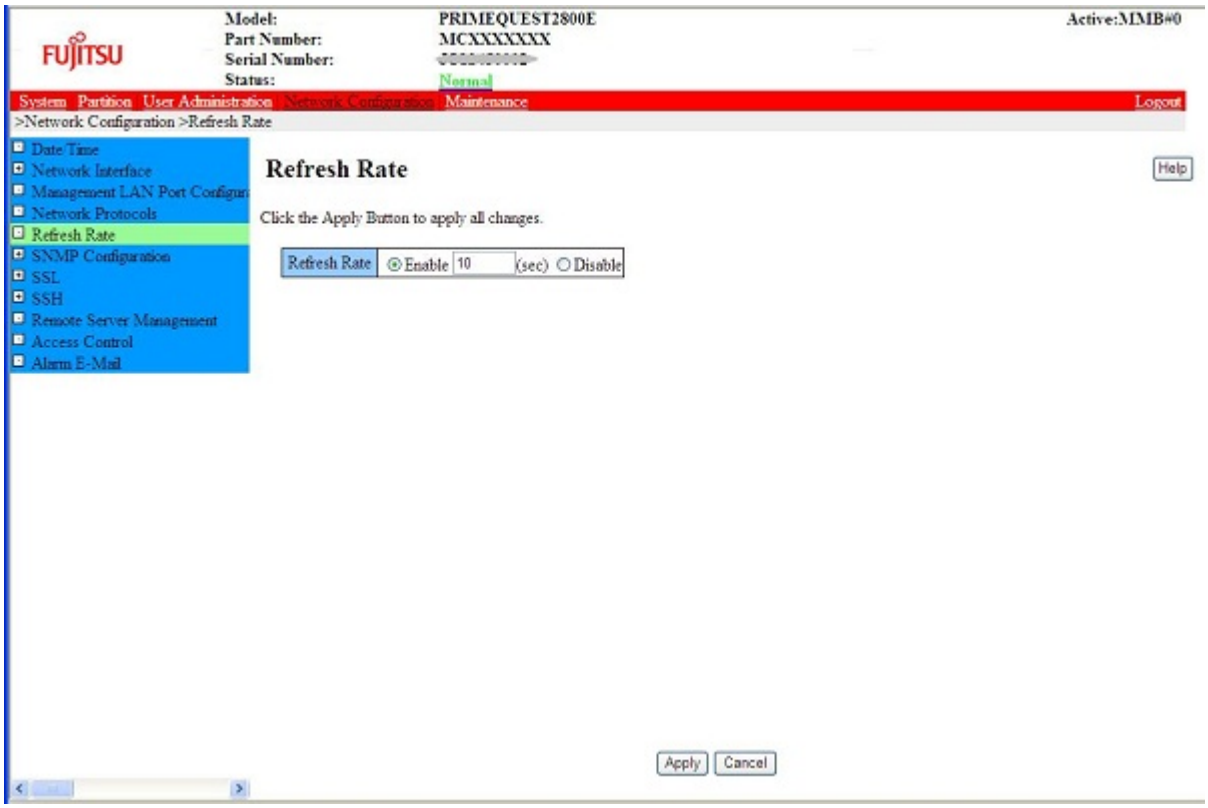


TABLE 1.115 Setting and display items in the [Refresh Rate] window

Items	Description
Refresh Rate	Sets whether to automatically refresh the Web-UI windows that display dynamic content. With [Enable] specified, you can set the time interval of the automatic refresh in units of seconds. The specifiable time interval for [Refresh Rate] is in a range of 5 to 999 seconds. When the setting of Refresh Rate is Disable, it is not refreshed automatically. The default is Disable. **Remarks** When Dialog Box is displayed, Refresh is not automatically done even if Refresh Rate is set in Enable.

TABLE 1.116 Buttons in the [Refresh Rate] window

Buttons	Description
Apply	Sets the specified information on refresh.
Cancel	Restores the original information and does not set the specified refresh information.

(1) Menu Operation

[Network Configuration] - [Refresh Rate]

(2) Window Operations

1. Specify [Enable] or [Disable] in [Refresh Rate].
   If you select [Enable], enter the time interval.
2. Click the [Apply] button.
   This sets the information for automatic refresh.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
W_00441	Range over error.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.6 [SNMP Configuration] window

The [SNMP Configuration] menu has the following windows:

[SNMP Community] window

[SNMP Trap] window

[SNMP v3 Configuration] window

1.5.6.1 [SNMP Community] window

You can configure SNMP in the [SNMP Community] window.

You can specify up to 16 items for [Community/User] from the MMB.

FIGURE 1.103 [SNMP Community] window

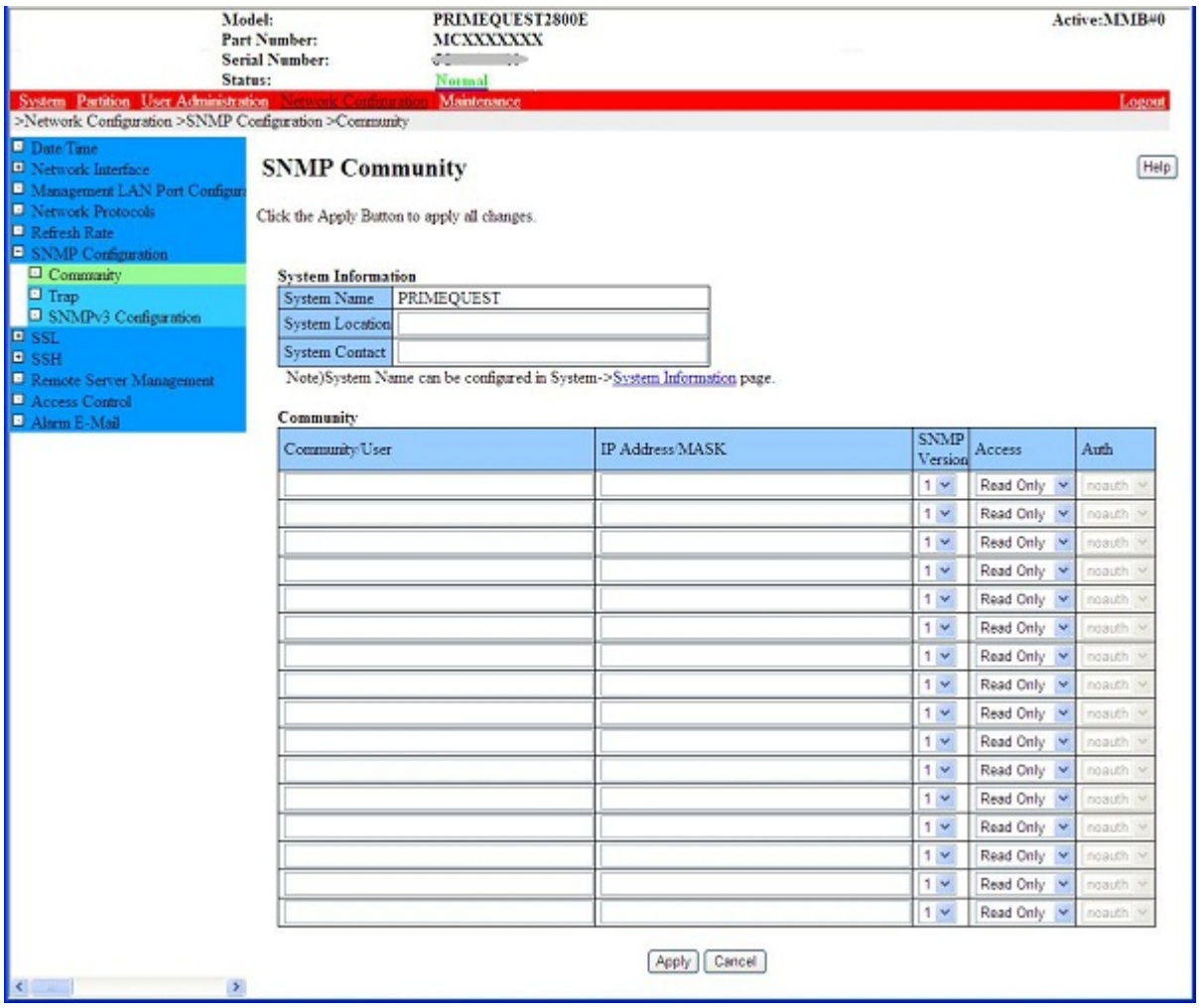


TABLE 1.117 Setting and display items in the [SNMP Community] window

Items	Description
System Name	Displays the SNMP system name.
System Location	Sets the System Location of SNMP. You can use alphanumeric characters, spaces, and the following characters: ! " # $ % & ' ( ) = - ^ ~ ¥ @ ` [ ] { } : ; * + ? < > . , / _ | However, the following restrictions apply: ・ The character string cannot begin with a space or #. ・ The character string cannot end with a space.
System Contact	Sets the System Contact for SNMP. The characters that can be specified for System Contact are the same as those for [System Location].
Community/User	Sets the SNMP Community string for SNMP v1 and v2. Alternatively, it sets the user name for SNMP v3. You can use alphanumeric characters and the following characters: ! " # $ % & '( ) * + , - . / @ [ ] ^_ ` { | } ~ However, the character string cannot begin with " (double quotation mark), # (number sign), ' (single quotation mark), or ` (back quotation mark).
IP Address/MASK	・ To specify an IP address: Enter the IP address. ・ To specify a subnet: Enter the subnet and mask.
SNMP Version	Sets the SNMP version. (1, 2, 3)
Access	Sets whether to permit only reading or both reading and writing. ・ Read Only ・ Read Write
Auth	Sets the security level. You can specify this only if [3] is selected for [SNMP Version]. ・ noauth: Do not use the authentication function. ・ auth: Use the authentication function. ・ priv: Use the authentication function and "privacy" function (data encryption). With [1] or [2] selected for [SNMP Version], this item is grayed out and disabled. In this case, the only available security level is noauth.

TABLE 1.118 Buttons in the [SNMP Community] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information, such as the community or the IP address permitted access.

(1) Menu Operation

[Network Configuration] - [SNMP Configuration] - [Community]

(2) Window Operations

- Configuring information such as the community
  1. Enter information such as the community, the IP address permitted access, the SNMP version, the access permission, and the authentication. Then, click the [Apply] button.
     This sets the entered information.

- Deleting information such as the community
  1. Delete the community and the IP address permitted access. Then, click the [Apply] button.
     This clears the specified information.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
W_00595	It is IP address that duplicates with MMB IP address.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.6.2 [SNMP Trap] window

You can set SNMP trap destinations in the [SNMP Trap] window.

You can set up to 16 trap destinations.

FIGURE 1.104 [SNMP Trap] window

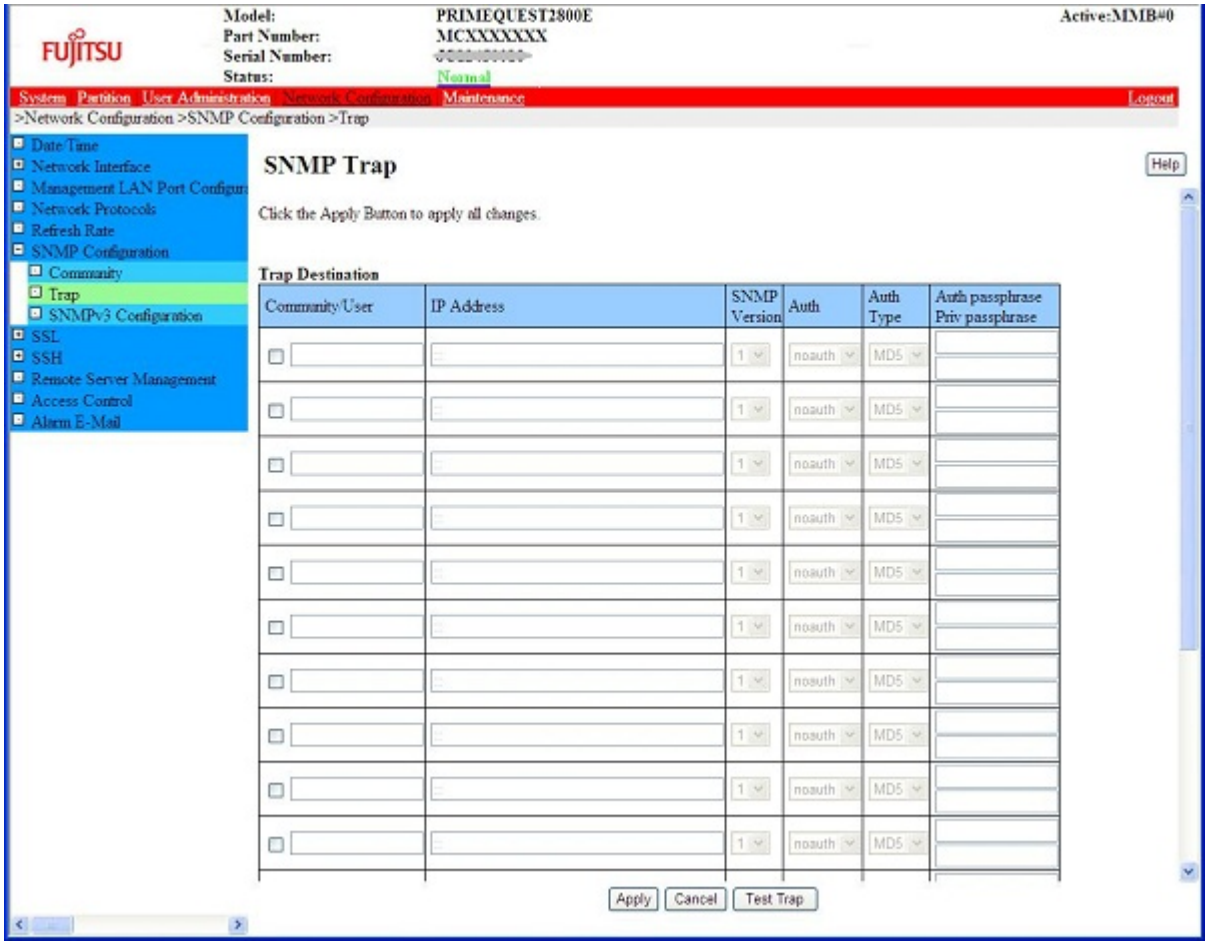


TABLE 1.119 Setting and display items in the [SNMP Trap] window

Items	Description
Community/User	Sets the SNMP community string for SNMP v1 and v2. Alternatively, it sets the user name for SNMP v3.
IP Address	Sets the IPv4 or IPv6 IP address of the trap destination.
SNMP Version	Sets the SNMP version. (1, 2, 3)
Auth	Sets the security level. You can specify this only if [3] is selected in [SNMP Version]. ・ noauth: Do not use the authentication function. ・ auth: Use the authentication function. ・ priv: Use the authentication function and "privacy" function (data encryption). With [1] or [2] selected for [SNMP Version], this item is grayed out and disabled. In this case, the available security level will be only noauth.
Auth Type	Sets the hash function to encrypt passwords. ・ MD5 ・ SHA This item takes effect only if [3] is selected for [SNMP Version]. With [1] or [2] selected for [SNMP Version], this item is grayed out and disabled.
Auth passphrase	Sets a passphrase for authentication. This item takes effect only if [3] is selected for [SNMP Version] and [auth] or [priv] is selected for [Auth].
Priv passphrase	Sets a passphrase for encryption. This item takes effect only if [3] is selected for [SNMP Version] and [priv] is selected for [Auth].

TABLE 1.120 Buttons in the [SNMP Trap] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information, such as the community or user name, and the IP address of a trap destination.
Test Trap	Sends a test trap to the specified trap destination.

(1) Menu Operation

[Network Configuration] - [SNMP Configuration] - [SNMP Trap]

(2) Window Operations

- Configuring SNMP trap information
  1. Enter the community or user name, the IP address of a trap destination, the SNMP version, and the authentication level. Then, click the [Apply] button.
     This sets the entered information.

- Sending a test trap
  1. Click the [Test Trap] button.
     This sends a test trap.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
W_00595	It is IP address that duplicates with MMB IP address.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.6.3 [SNMP v3 Configuration] window

You can set a unique Engine ID and users for SNMP v3 in the [SNMP v3 Configuration] window.

You can register a maximum of 16 users for SNMP v3. The window displays the user names of registered users.

Remarks

If you change the Engine ID or IP address, you need to reconfigure all the settings for the users set for SNMP v3 access.

The changes for the specified users take effect only after the SNMP Service is stopped and restarted. For this reason, clicking the [Apply] button temporarily stops SNMP Service and then automatically restarts it.

FIGURE 1.105 [SNMP v3 Configuration] window

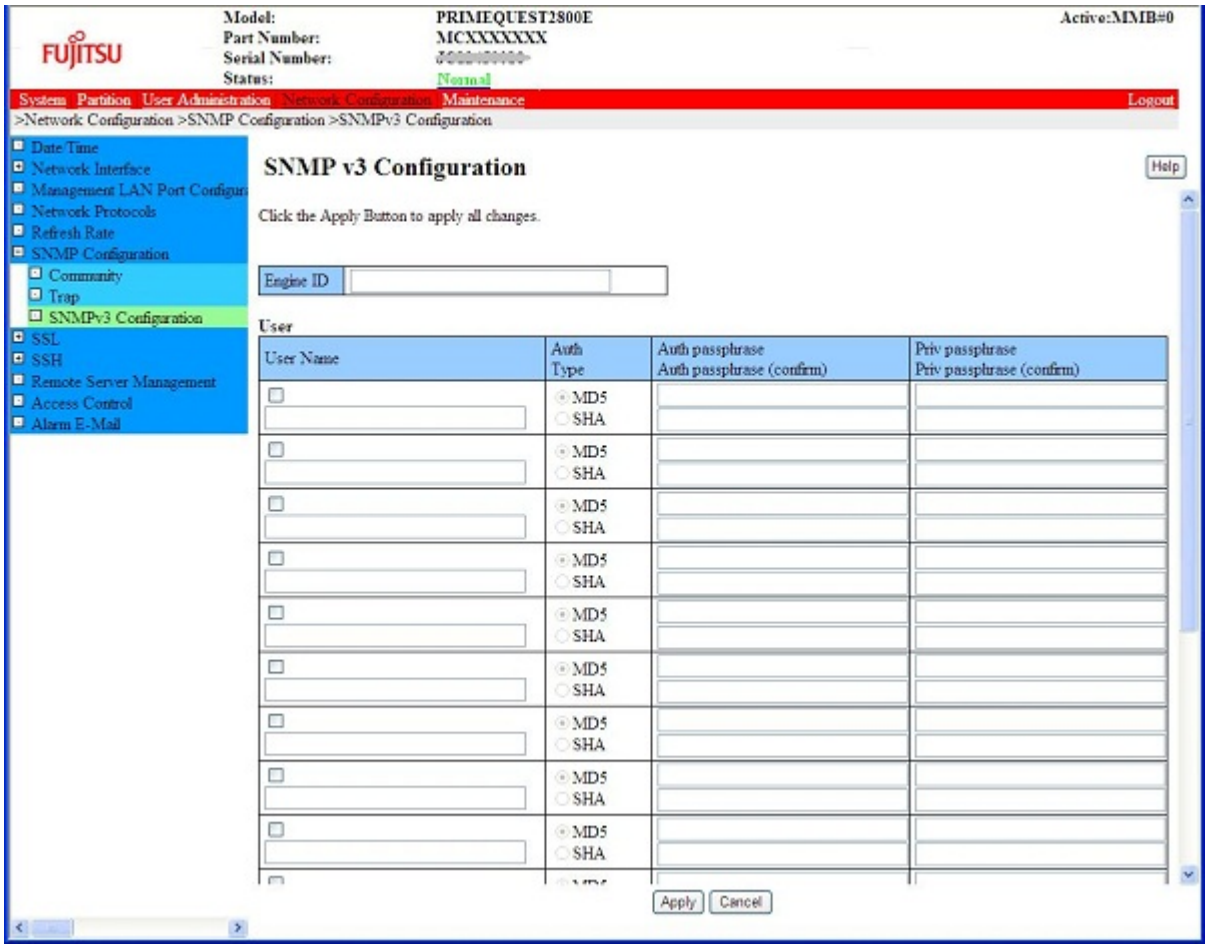


TABLE 1.121 Setting and display items in the [SNMP v3 Configuration] window

Items	Description
Engine ID	Sets the Engine ID. You can use alphanumeric characters, spaces, and the following characters: ! " # $ % & ' ( ) = - ^ ~ ¥ @ ` [ ] { } : ; * + ? < > . , / _ | However, the following restrictions apply: ・ The character string cannot begin with a space or #. ・ The character string cannot end with a space.

For an explanation of the setting and display items other than [Engine ID], see TABLE 1.119 Setting and display items in the [SNMP Trap] window.

TABLE 1.122 Buttons in the [SNMP v3 Configuration] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information.

(1) Menu Operation

[Network Configuration] - [SNMP Configuration] - [SNMPv3 Configuration]

(2) Window Operations

- Correcting the information on the selected user
  1. Check the check box of the user. Then, enter any necessary information. Finally, click the [Apply] button.
     This enables the information on the selected user. Meanwhile, the SNMP Service stops once and then restarts.

- Disabling the selected user
  1. Check the check box of the user to set to disable. Leave the [User Name] blank. Then, click the [Apply] button.
     This disables the selected user.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.7 [SSL] menu

The [SSL] menu has the following windows:

[Create CSR] window

[Export Key/CSR] window

[Import Certificate] window

[Create Selfsigned Certificate] window

1.5.7.1 [Create CSR] window

You can create a secret key and the corresponding CSR (certificate signing request) in the [Create CSR] window.

The following input items follow the guidelines issued by each certificate authority independently. Therefore, enter these items in accordance with the guidelines of the certificate authority selected as the destination.

FIGURE 1.106 [Create CSR] window

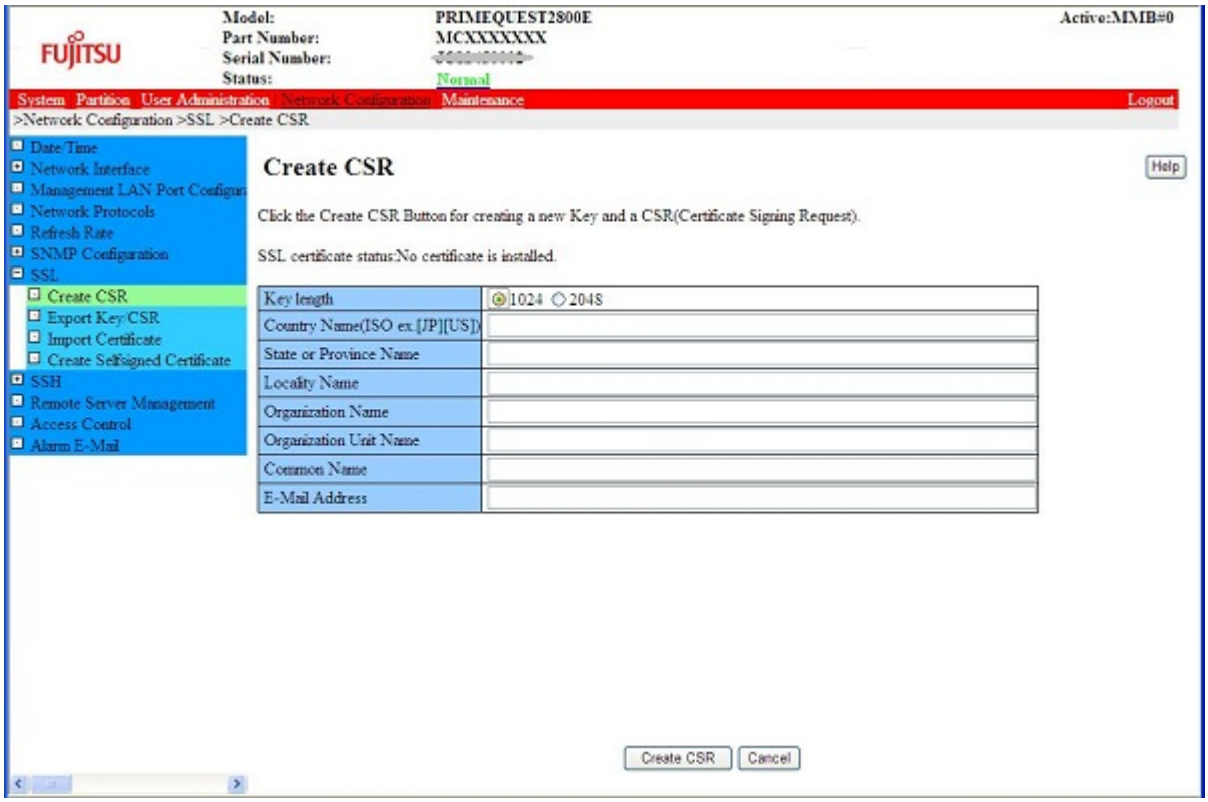


TABLE 1.123 Setting and display items in the [Create CSR] window

Items	Description
SSL certificate status	Displays the current installation status of a SSL certificate. ・ No certificate is installed. ・ CSR has been generated. ・ A signed certificate is installed.
Key length	Used to select the length of the secret key to be created (in bits). ・ 1024 ・ 2048
Country Name	Sets the ISO country code for the owner specified in the created CSR. The country code must be two alphabetic characters. Example: Japan: JP; USA: US
State or Province Name	Sets the state or province name of the owner specified in the created CSR. The name must consist of up to 56 specifiable characters.
Locality Name	Sets the locality name of the owner specified in the created CSR. The name must consist of up to 56 specifiable characters.
Organization Name	Sets the organization name (company name) of the owner specified in the created CSR. The name must consist of up to 56 specifiable characters.
Organization Unit Name	Sets the organization unit name of the owner specified in the created CSR. The name must consist of up to 56 specifiable characters.
Common Name	Sets the FQDN of the server of the owner specified in the created CSR. The FQDN must consist of up to 56 specifiable characters (e.g., www.mycompany.com). The browser uses this information to identify the website. To establish secure connections, some browsers reject an electronic certificate if the Common Name in it does not match the server name. [Common Name] cannot include an http:// protocol specifier, port number, or path name. Also, IP addresses and wildcard characters such as * or ? are prohibited.
E-Mail Address	Sets the e-mail address of the owner specified in the created CSR. The address must consist of up to 40 specifiable characters.

TABLE 1.124 Buttons in the [Create CSR] window

Buttons	Description
Create CSR	Creates a secret key and a CSR.
Cancel	Restores the original information and does not set the specified information.

(1) Menu Operation

[Network Configuration] - [SSL] - [Create CSR]

(2) Window Operations

1. Specify information such as the length of a secret key and the ISO country code of the owner. Then, click the [Create CSR] button.
   A dialog box appears with a message stating that the previous secret key will be unusable once a new secret key is created.
2. Click the [OK] button in the dialog box.
   This creates a new secret key and CSR. They can take a few minutes to create. When creation is completed, a confirmation dialog box appears.

FIGURE 1.107 Confirmation dialog box

3. Click the [OK] button in the confirmation dialog box to set the new secret key.
   After the new secret key is set, the [Export Key/CSR] window appears.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
W_00426	Invalid values specified.
I_00444	Previous private key will be overwritten with new private key. Are you sure?
I_00465	A new Key and a CSR are generated successfully. To use the new Key, click "OK" button.
E_00012	One or more errors occurred while setting.
E_00018	Information acquisition failed.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.7.2 [Export Key/CSR] window

You can export a secret key or CSR (certificate signing request) stored on the MMB from the [Export Key/CSR] window.

Remarks

For security reasons, be careful with the storage of a secret key.

Also, you need this secret key to use the electronic certificate for the key. We recommend you create a backup of the secret key.

FIGURE 1.108 [Export Key/CSR] window

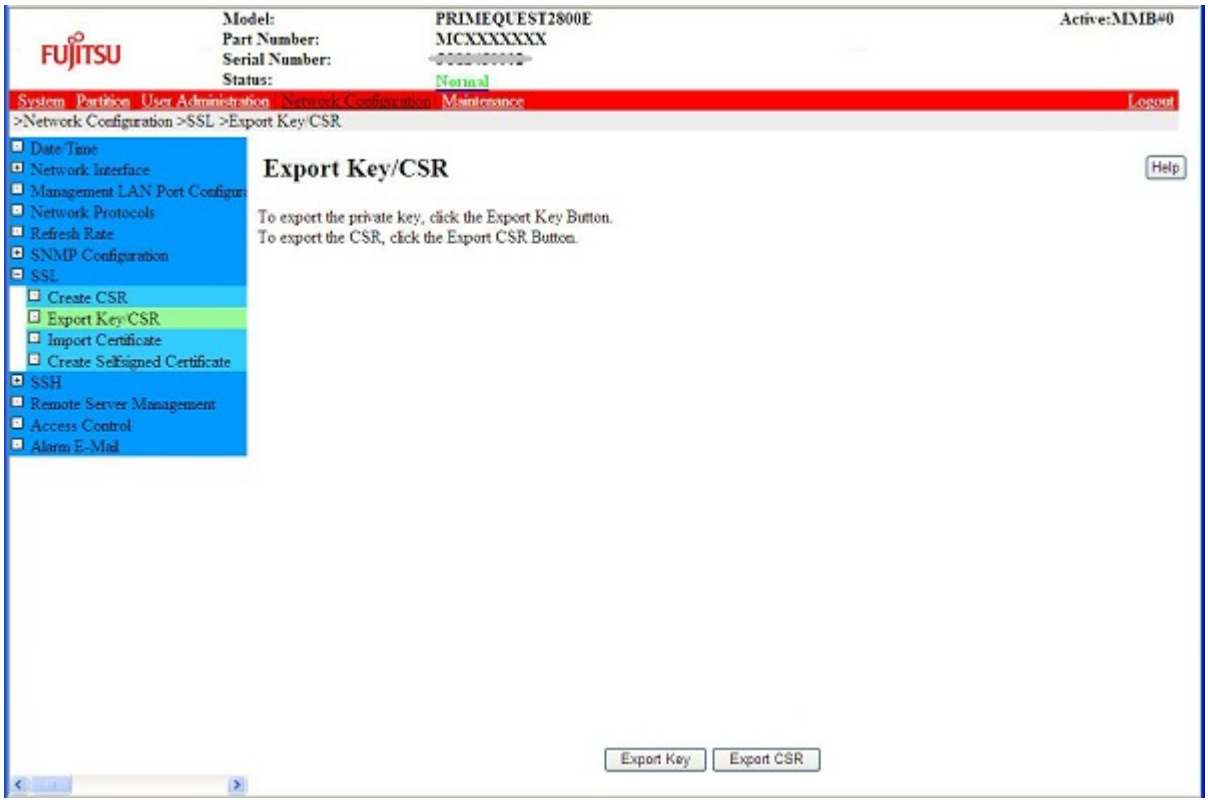


TABLE 1.125 Buttons in the [Export Key/CSR] window

Buttons	Description
Export Key	Exports the secret key.
Export CSR	Exports the CSR.

(1) Menu Operation

[Network Configuration] - [SSL] - [Export Key/CSR]

(2) Window Operations

- Exporting the secret key
  1. Click the [Export Key] button.
     A dialog box appears.
  2. Specify the save path.
     This saves the secret key to the specified path.

- Exporting the CSR
  1. Click the [Export CSR] button.
     A dialog box appears.
  2. Specify the save path.
     This saves the CSR to the specified path.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
I_00445	Private Key is exported. Are you sure?
I_00446	CSR is exported. Are you sure?
W_00447	Private Key doesn't exist.
W_00448	CSR doesn't exist.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.7.3 [Import Certificate] window

You can import a signed electronic certificate from a certificate authority to the MMB in the [Import Certificate] window.

FIGURE 1.109 [Import Certificate] window

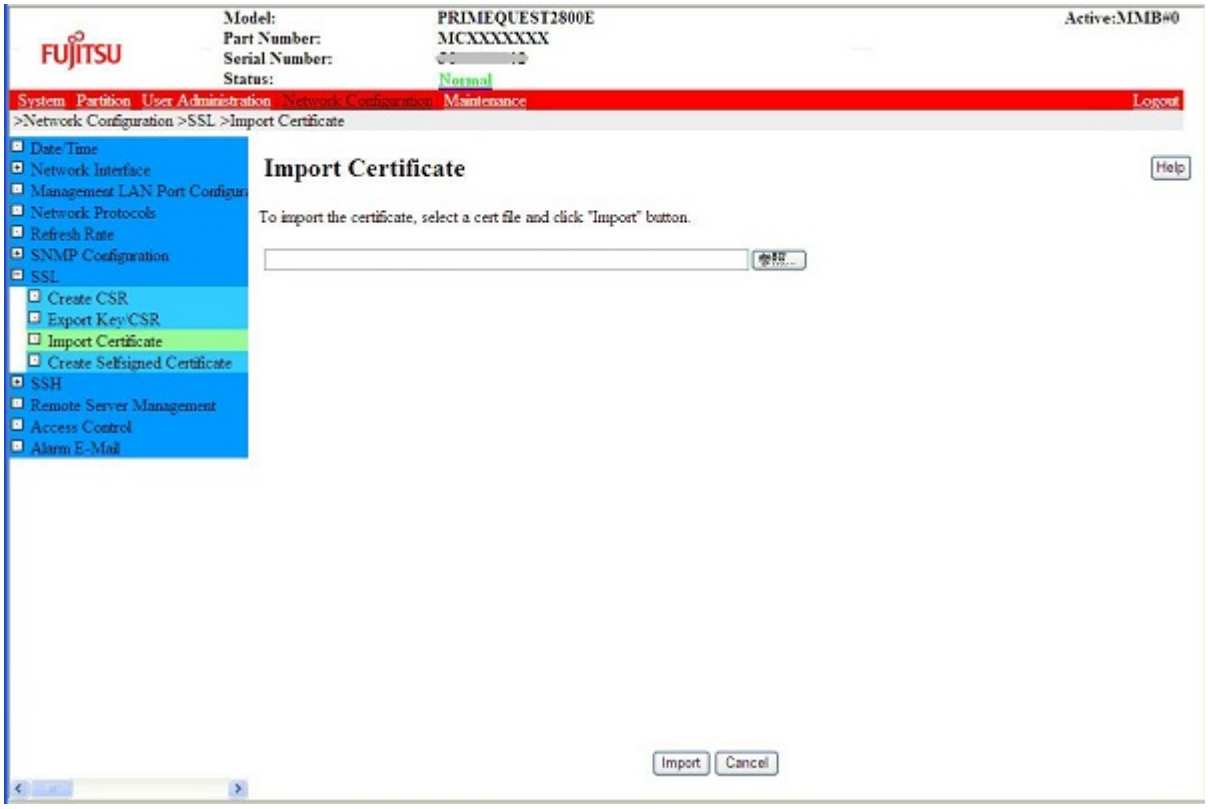


TABLE 1.126 Buttons in the [Import Certificate] window

Buttons	Description
[Browse...]	Displays the window used to select an imported electronic certificate.
Import	Imports the electronic certificate.
Cancel	Cancels importing.

(1) Menu Operation

[Network Configuration] - [SSL] - [Import certificate]

(2) Window Operations

1. Click the [Browse...] button to select an imported file. Then, click the [Import] button.
   This imports the electronic certificate.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
I_00046	Importing has completed.
E_00047	Importing failed.
W_00449	A certificate file is not selected yet.
I_00450	%aa is imported. Are you sure?

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.7.4 [Create Selfsigned Certificate] window

You can create a selfsigned certificate in the [Create Selfsigned Certificate] window.

Remarks

Before creating a selfsigned certificate, confirm that [HTTPS] is set to [Disable] in the [Network Protocols] window. If it is set to [Enable], change it to [Disable]. Then, proceed to the operations in this window.

FIGURE 1.110 [Create Selfsigned Certificate] window

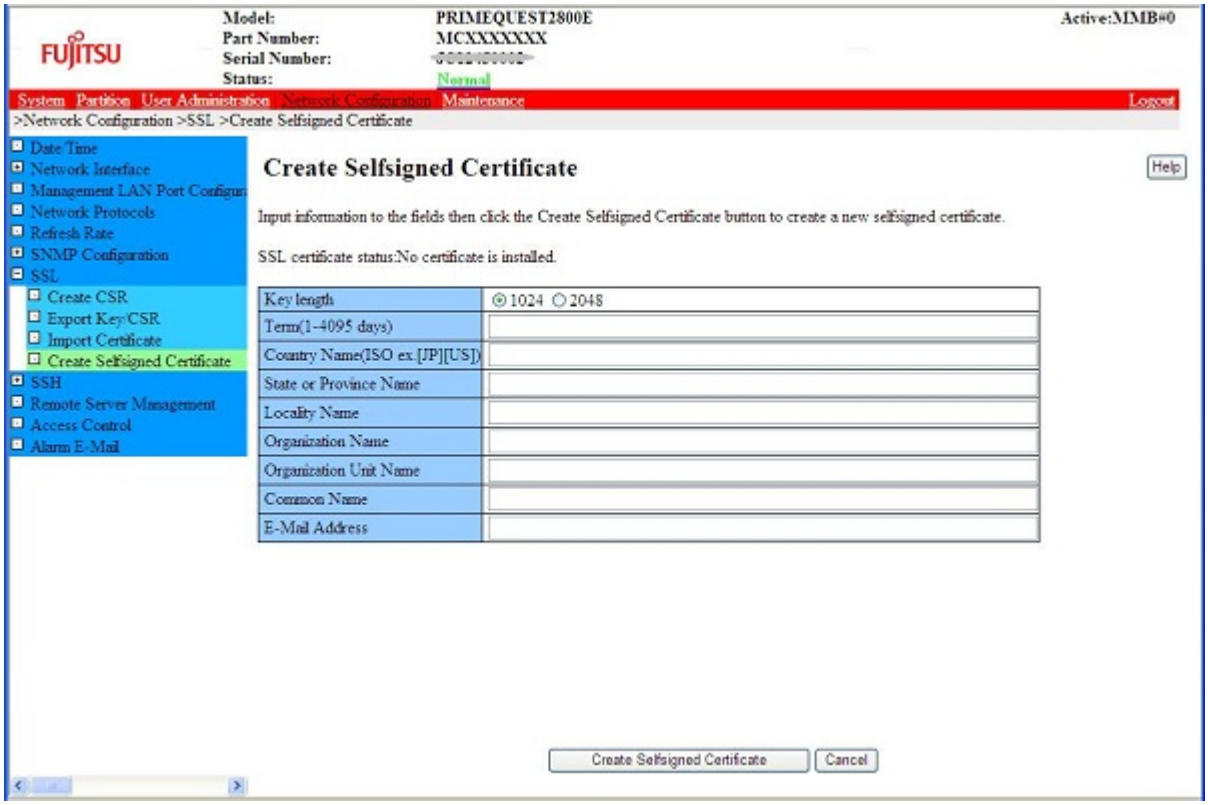


TABLE 1.127 Display items in the [Create Selfsigned Certificate] window

Items	Description
Term	Sets the valid term of a selfsigned certificate as a number of days.
For details on other items, see [Create CSR] window.	

TABLE 1.128 Buttons in the [Create Selfsigned Certificate] window

Buttons	Description
Create Selfsigned Certificate	Creates a selfsigned certificate.
Cancel	Cancels the creation of the certificate.

(1) Menu Operation

[Network Configuration] - [SSL] - [Create Selfsigned Certificate]

(2) Window Operations

1. Before creating a selfsigned certificate, confirm that [HTTPS] is set to [Disable] in the [Network Protocols] window.
2. Specify information such as the length of the secret key and the ISO country code of the owner. Then, click the [Create Selfsigned Certificate] button.
   A confirmation dialog box appears.
3. Click the [OK] button in the dialog box.
   This creates the selfsigned certificate. It takes a few minutes to create. When creation is completed, the window is updated. This updated window displays the message "SSL certificate status: A signed certificate is installed."

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
W_00426	Invalid values specified.
I_00444	Previous private key will be overwritten with new private key. Are you sure?

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.8 [SSH] menu

The [SSH] menu has the [Create SSH Server Key] window.

☐ [Create SSH Server Key] window

You can create a private key for the SSH server in the [Create SSH Server Key] window.

*Private Key necessary to make the SSH function of MMB effective is made.

Remark
If you do not create a private key, it will be recreated when MMB is restarted with firmware update or power off / on. To use it permanently, you need the following work.

FIGURE 1.111 [Create SSH Server Key] window

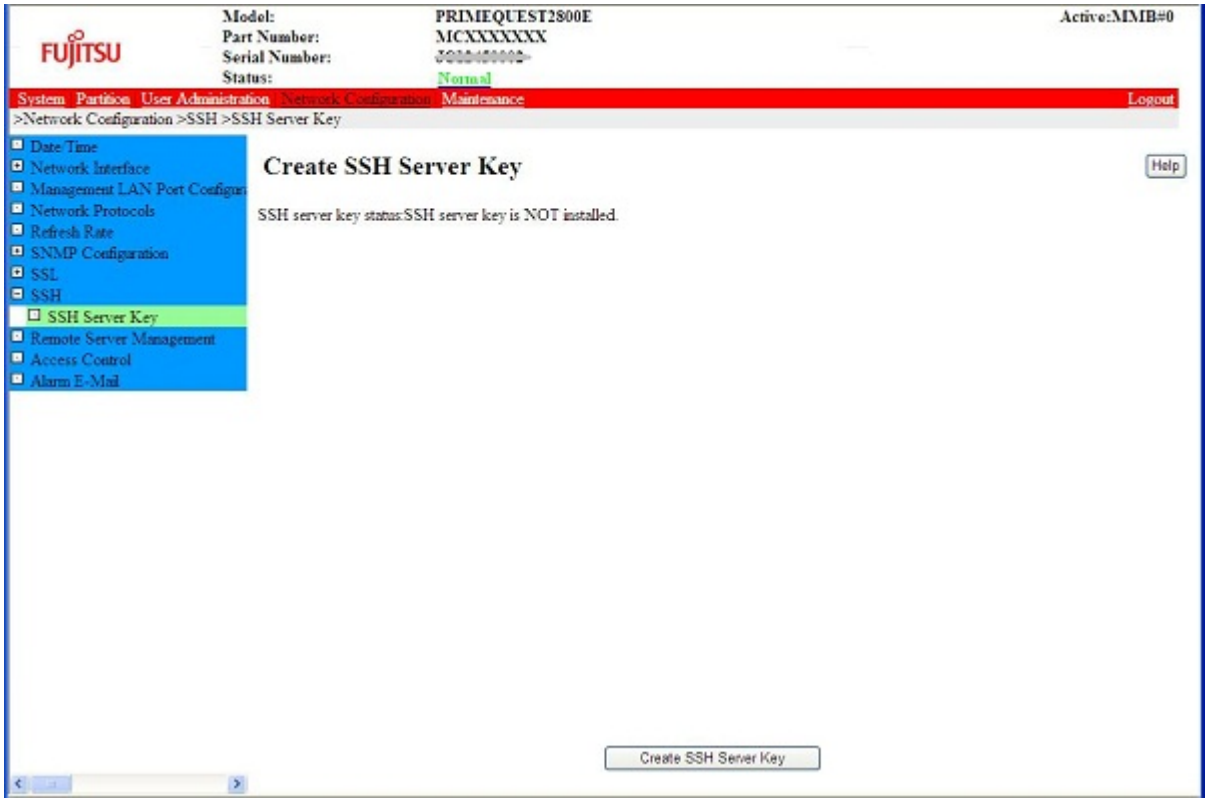


TABLE 1.129 Buttons in the [Create SSH Server Key] window

Buttons	Description
Create SSH Server Key	Creates a private key for the SSH server.

(1) Menu Operation
[Network Configuration] - [SSH] - [Create SSH Server Key]

(2) Window Operations
1. Before you create a private key, confirm that [SSH] is set to [Disable] in the [Network Protocols] window.
2. Click the [Create SSH Server Key] button.
   This creates the private key. It can take a few minutes to create. When creation is completed, a confirmation dialog box appears.
3. To register the newly created private key, click the [OK] button. This registers the new private key.
   To cancel registration of the new private key, click the [Cancel] button. This discards the new private key.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
I_00453	SSH Server Key is generated successfully. To install this new SSH Server Key click "OK" button.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.9 [Remote Server Management] window

You can specify the users who need to remotely manage the MMB via RMCP, in the [Remote Server Management] window.

Up to 24 users can be registered.

The default settings for all users are [Disabled] status and [No Access]. Also, a default user name from [User1] to [User24] is assigned to each user.

For remote management of the MMB via RMCP, you need to specify [User Name], [Password], and [Privilege] to place the users of the managed MMB in the [Enabled] status.

Remote access authentication uses the user name and password of a user in the [Enabled] status.

FIGURE 1.112 [Remote Server Management] window

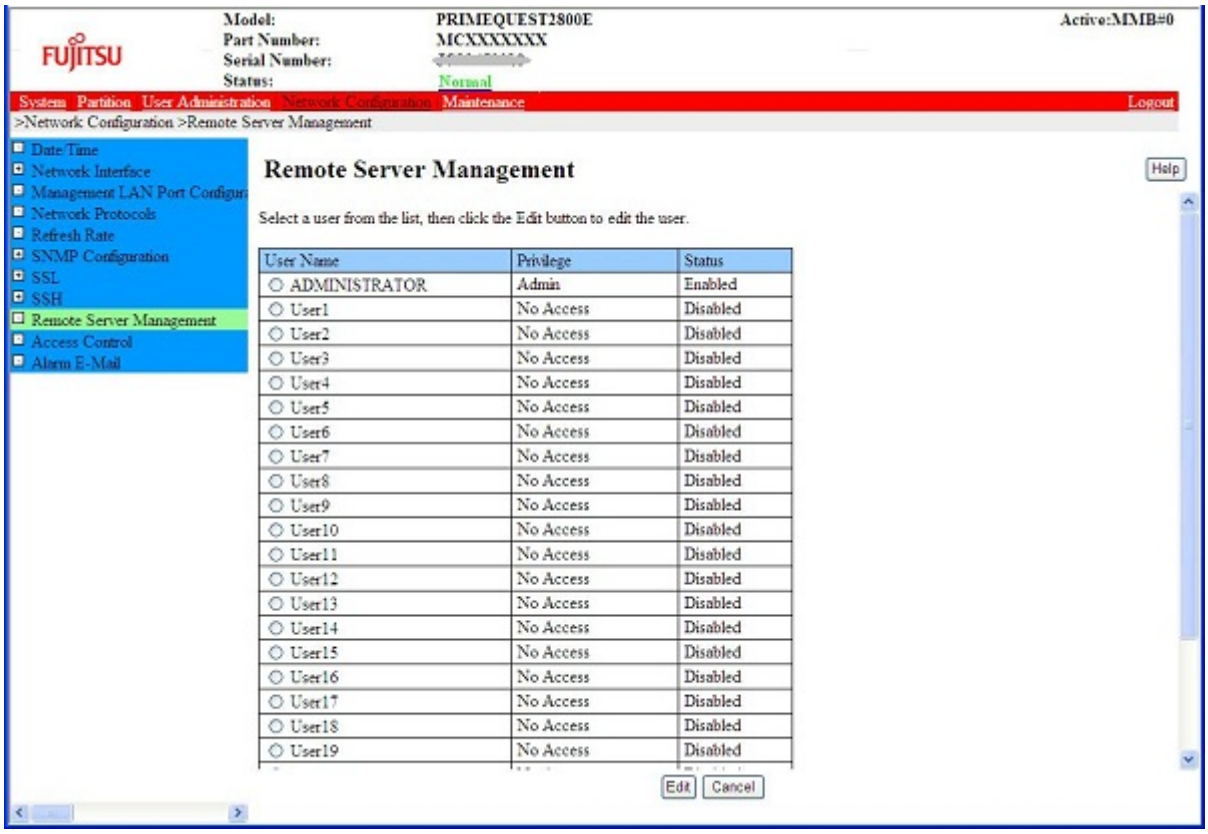


TABLE 1.130 Display and setting items in the [Remote Server Management] window

Items	Description
User Name	Displays a user name. The name can have a total of 3 to 16 characters.
Privilege	Displays the privileges of the user account. ・ Admin ・ Operator ・ User ・ CE ・ No Access (Users for which [No Access] is selected will no longer have the capability of remote access.)
Status	Displays the current status of the account. ・ Enabled ・ Disabled

TABLE 1.131 Buttons in the [Remote Server Management] window

Buttons	Description
Edit	Displays the [Edit User] window.
Cancel	Restores the original information and does not set the management information for the selected user.

(1) Menu Operation

[Network Configuration] - [Remote Server Management]

(2) Window Operations

1. Click the radio button of the user you want to specify. Then, click the [Edit] button.
   you want to specify. Then, click the [Edit] button.
2. Specify the user management information in the [Edit User] window.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
E_00053	Failed to get user status. Retry 60 seconds later.
W_00413	Nothing is selected.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

☐ [Edit User] window

You can change the management information on a user in the [Edit User] window.

FIGURE 1.113 [Edit User] window

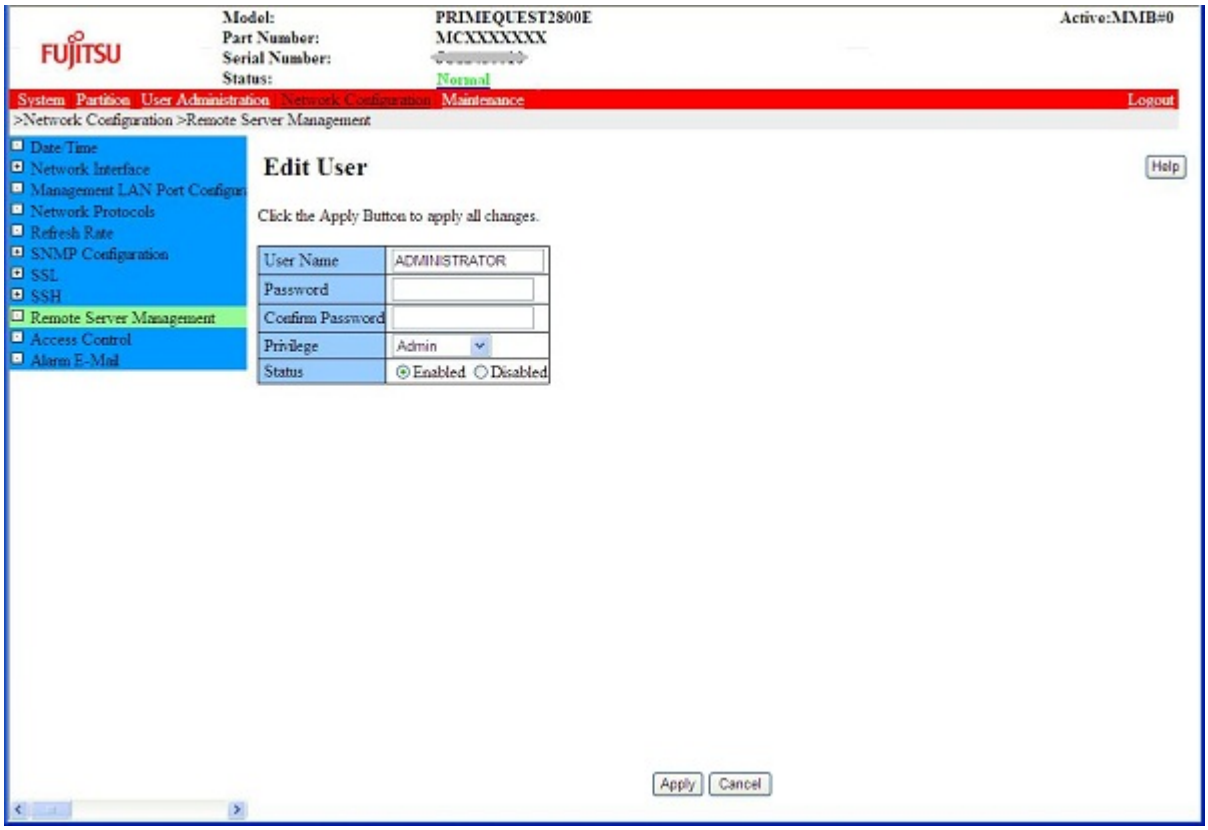


TABLE 1.132 Display and setting items in the [Edit User] window

Items	Description
User Name	Specifies a user name. The name can have a total of 3 to 16 characters. The user name can contain the following characters: 0 to 9, a to z, and A to Z (alphanumeric characters only).
Password	Specifies a password. The name can have a total of 8 to 16 characters. The password can contain the following characters: 0 to 9, a to z, and A to Z (alphanumeric characters only).
Confirm Password	Used to reenter a password for confirmation.
Privilege	Specifies the privileges of the user account. ・ Admin ・ Operator ・ User ・ CE ・ No Access (Users for which [No Access] is selected will no longer have the capability of remote access.)
Status	Specifies the current status of the account. ・ Enabled ・ Disabled

TABLE 1.133 Buttons in the [Edit User]

Buttons	Description
Apply	Sets the specified management information.
Cancel	Restores the original information and does not set the specified information, such as a user name and password.

(1) Menu Operation

[Network Configuration] - [Remote Server Management] - [Edit] button

(2) Window Operations

1. Specify the user management information, such as a user name and password. Then, click the [Apply] button.
   This sets the user management information.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
W_00401	Username is too short.
W_00402	Password is too short.
W_00454	%aa is duplicated.
W_00406	Invalid character is included in User Name.
W_00403	Invalid character is included in Password.
W_00455	Both passwords are mismatched. Please try again.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.10 [Access Control] window

You can control access through network protocols to ensure MMB security in the [Access Control] window.

You can configure up to 64 filters. These filters are displayed alphabetically by protocol name.

Remarks

You can register multiple access control filters with the same configuration. These filters do not affect operation.

FIGURE 1.114 [Access Control] window

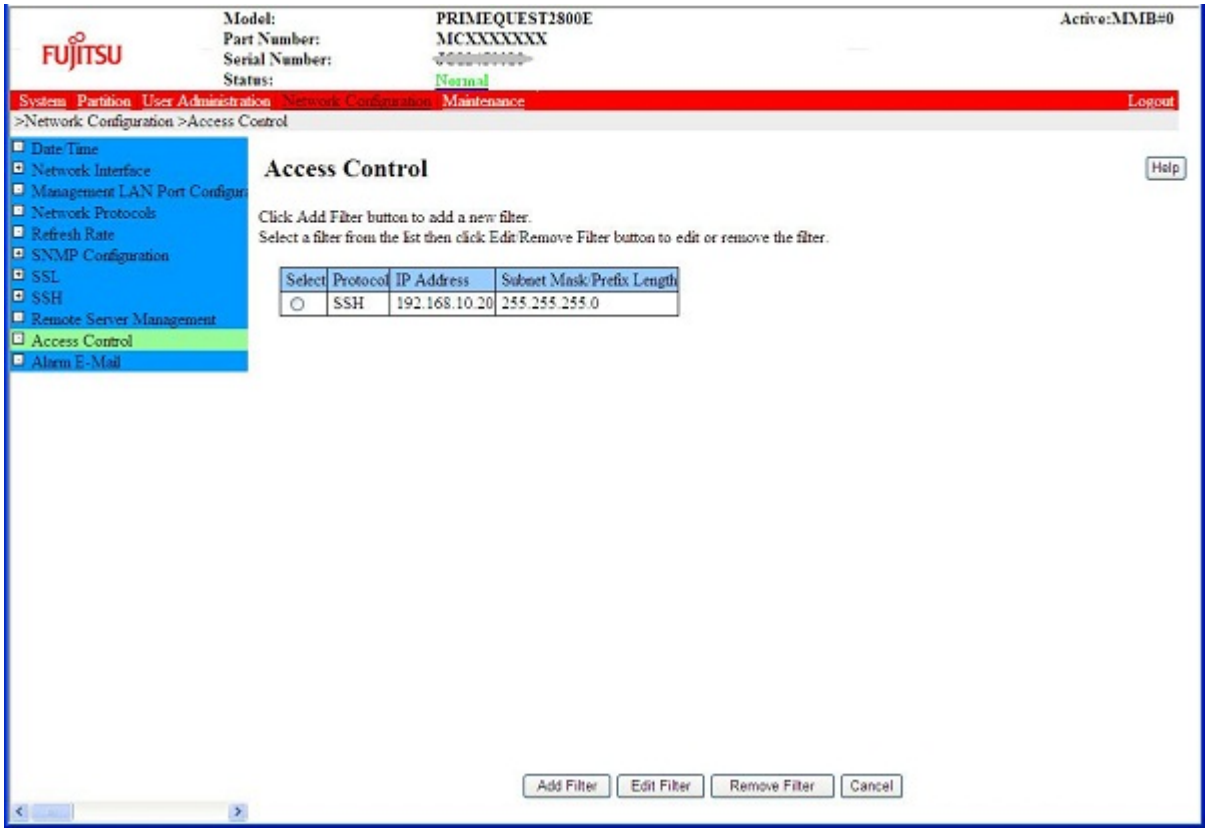


TABLE 1.134 Setting and display items in the [Access Control] window

Items	Description
Select	Used to select the filter for which you want to change the setting.
Protocol	Displays the protocol for IP filtering. ・ HTTP ・ HTTPS ・ Telnet ・ SSH ・ SNMP
IP Address	Displays the IP address permitted to connect.
Subnet Mask/ Prefix Length	For IPv4, the subnet mask of the IP address that has permission to connect is displayed. For IPv6, the prefix length is displayed.

TABLE 1.135 Buttons in the [Access Control] window

Buttons	Description
Add Filter	Displays the [Add Filter] window to add a new filter.
Edit Filter	Displays the [Edit Filter] window to edit a filter.
Remove Filter	Deletes the selected filter.
Cancel	Restores the original information and does not set the specified information.

(1) Menu Operation

[Network Configuration] - [Access Control]

(2) Window Operations

- Adding a new filter
  1. Click the [Add Filter] button.
     The [Add Filter] window appears.
  2. Configure the filter in the [Add Filter] window. Then, click the [Apply] button.
     This adds the new filter.

- Editing a filter
  1. Click the radio button of a filter in the [Select] column so that you can edit the filter. Then, click the [Edit Filter] button.
     The [Edit Filter] window appears.
  2. Specify the save path.
     Edit the filter in the [Edit Filter] window. Then, click the [Apply] button.

- Deleting a filter
  1. Click the radio button of a filter in the [Select] column so that you can delete the filter. Then, click the [Remove Filter] button.
     A deletion confirmation dialog box appears.
  2. Click the [OK] button.
     This deletes the filter. The browser returns to the [Access Control] window.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00013	Setting completed.
E_00412	You need an empty entry.
W_00413	Nothing is selected.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

☐ [Add Filter]/[Edit Filter] window

Click the [Add Filter] button or [Edit Filter] button in the [Access Control] window to display the [Add Filter] window or [Edit Filter] window, respectively.

Although the [Add Filter] window and [Edit Filter] window have different window titles, their setting items are the same. This section describes these items in the [Add Filter] window.

FIGURE 1.115 [Add Filter] window

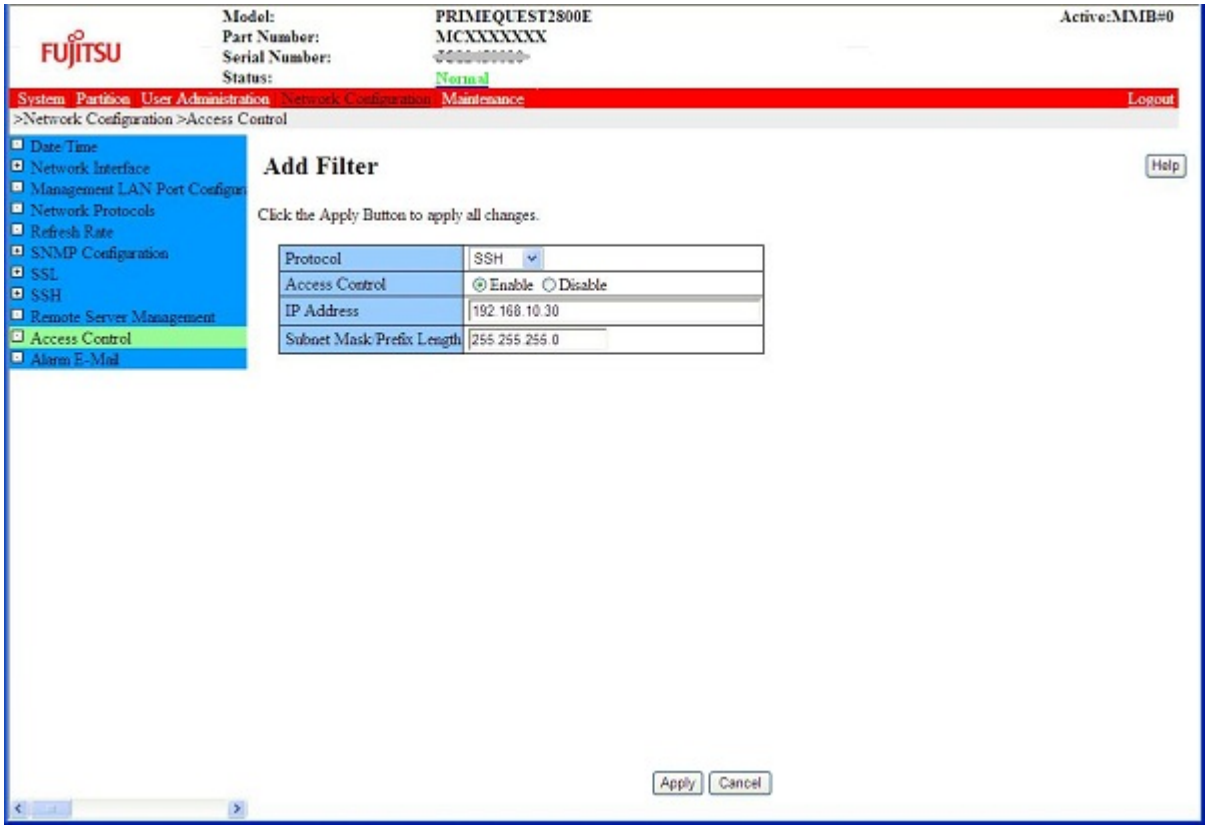


TABLE 1.136 Setting and display items in the [Add Filter] window

Items	Description
Protocol	Sets the protocol for the IP filtering. You can select one of the following items from the pull-down menu: ・ HTTP ・ HTTPS ・ Telnet ・ SSH ・ SNMP
Access Control	Sets whether to execute access control. ・ Disable: Permits access by all IP addresses via the protocol selected in [Protocol]. Selecting this disables input to [IP Address] and [Subnet Mask]. ・ Enable: Specifies [IP Address] and [Subnet Mask] to permit access via the protocol selected in [Protocol].
IP Address	Sets the IP address (for IPv4 or IPv6) that will have permission to connect. **Remarks** For IPv4, to permit connection by only a specific IP address in a subnet, specify the IP address and then "255.255.255.255" in [Subnet Mask]. For IPv6, the prefix length is displayed. Example: Permitting access from a specific IP address range (e.g., 192.168.60.60/255.255.255.0) IP Address: 192.168.60.60 Subnet Mask: 255.255.255.0 (because the IP address is used with a 24-bit subnet mask) ・ The above setting will enable access not only from the IP address 192.168.60.60, but also from IP addresses within the subnet 192.168.60.0/24.
Subnet Mask/ Prefix Length	For IPv4, the subnet mask of the IP address that has permission to connect is displayed. For IPv6, the prefix length is displayed.

TABLE 1.137 Buttons in the [Add Filter] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information, such as protocols and access control.

(1) Menu Operation

[Network Configuration] - [Access Control] - [Add Filter] button/[Edit Filter] button

(2) Window Operations

1. Specify [Protocol] and [Access Control].
2. If you specify [Enable] in [Access Control], enter values for [IP Address] and [Subnet Mask]. Then, click the [Apply] button.
   If you specify [Disable] in [Access Control], simply click the [Apply] button.
   This adds or edits the filter.

[Message]

The following table lists the messages displayed in this window.

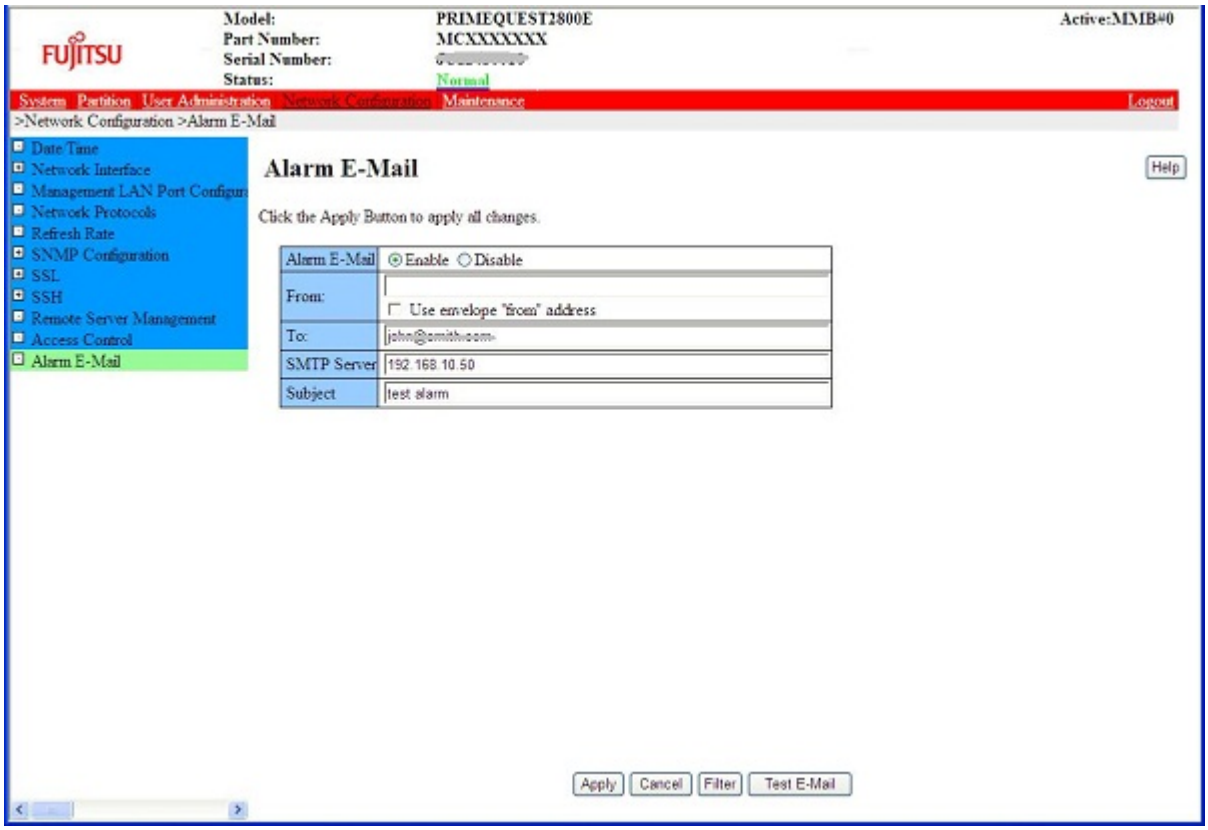
Message Number	Message
I_00013	Setting completed.
W_00432	Invalid IP Address specified.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.5.11 [Alarm E-Mail] window

You can set e-mail notification for when an event occurs in the PRIMEQUEST 2000 series server in the [Alarm E-Mail] window.

FIGURE 1.116 [Alarm E-Mail] window



The format of the message of Alarm E-Mail is as follows.

MMB P#x yyyy-mm-dd hh:mm:ss L uuuuuuu EID#eeeeee ddddddd Part#ppppppp Serial#sssssss

P#x : Partition ID (x is a decimal notation)
S is displayed for the system.
It delimits by the normal-width blank and P#x is displayed for two or more partitions.

yyyy-mm-dd hh:mm:ss : Event generation date

L : Level
E : Error / W : Warning / I : Information

uuuuuuuuu : Unit name
Form of SB#0-DIMM#0A0

EID#eeeeee : Event ID
ID that corresponds to event message with one to one.

ddddddddd : Event message (The same content as SEL message)

Part#ppppppp : Part number stored on SEL record

Serial#sssssss : Serial number stored on SEL record

Examples:

MMB P#0 P#1 P#2 P#3 2015-12-03 15:32:59 W MMB#0-+5VL EID#020100FF Lower Non-critical - going low Assert 0.21V threshold: 4.59V Part#CA07125-D053 Serial#PP0948012P

TABLE 1.138 Setting and display items in the [Alarm E-Mail] window

Items	Description
Alarm E-Mail	Sets whether to send Alarm E-Mail notification for an event that has occurred. ・ Enable ・ Disable
From:	Sets the e-mail address of the sender. If the [Use envelope "from" address] check box is checked, the [From:] address is set as the sender's e-mail address used when sending an e-mail. The default is unchecked. Upon receiving an alarm e-mail, the mail server sets the set [From:] address for Return-Path in the e-mail header. Also, if a mailing list is used, the Return-Path setting is the administrator's address on the mailing list instead of the set [From:] address. However, the Return-Path setting depends on the mail server settings. Therefore, Return-Path may not be set.
To:	Sets the e-mail address of the recipient. To specify multiple e-mail addresses, delimit them with a comma (,).
SMTP Server	Sets the IP address or FQDN of the SMTP server. You can set the FQDN only if a DNS is set. (After selecting [Network Configuration] - [Network Interface], you can specify a DNS server.)
Subject	Sets an e-mail title.

The e-mail address consists of "user name"@"domain name". The specifiable characters in "user name" and "domain name" conform to RFC 2822 and RFC 1034.

Examples:

- "user name" can contain alphanumeric characters and the following symbols: !# $ % & ' * + - / = ? ^ _ ` { | }~ .
- However, "#" cannot be used for the heading character. "." (period) cannot be used for the heading character and the last character. Moreover, "." cannot be used 2 pieces continuously. For details, see RFC 2822.

The "domain name" can contain alphanumeric characters and "-" (hyphen) only. However, it must begin with an alphabetic character and end with an alphanumeric character. For details, see RFC 1034.

The "Subject" can contain alphanumeric characters, blank spaces, and the following symbols:
! # " $ % & ' ( ) * + - . / _ ~

TABLE 1.139 Buttons in the [Alarm E-Mail] window

Buttons	Description
Apply	Sets the specified information.
Cancel	Restores the original information and does not set the specified information, such as the [Enable] or [Disable] setting in [Alarm E-Mail] or the e-mail address of the sender.
Filter	Displays the [Alarm E-Mail Filtering Condition] window for setting conditions for the events for which alarm e-mail is sent.
Test E-Mail	Sends a test alarm e-mail to the specified destination.

(1) Menu Operation
[Network Configuration] - [Alarm E-Mail]

(2) Window Operations
1. Specify information such as the sender's e-mail address and whether to enable or disable Alarm E-Mail.
2. To set a filter for an event for which alarm e-mail is sent, click the [Filter] button.
   The [Alarm E-Mail Filtering Condition] window appears.
3. Specify the filter in the [Alarm E-Mail Filtering Condition] window.
4. To send a test alarm e-mail, click the [Test E-Mail] button.
   This sends a test alarm e-mail to the specified sender.
5. Click the [Apply] button.
   This sets the items specified in the window.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00001	Command Completed
I_00013	Setting completed.
W_00456	Invalid E-Mail address format.
W_00457	Invalid SMTP server address.
I_00458	Please check a Subject.
W_00459	Alarm E-Mail is disabled.
W_00595	It is IP address that duplicates with MMB IP address.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

☐ [Alarm E-Mail Filtering Condition] window

Clicking the [Filter] button in the [Alarm E-Mail] window displays the [Alarm E-Mail Filtering Condition] window. The display item is different depending on the model.

You can set the filtering conditions for the events for which alarm e-mail is sent, in the [Alarm E-Mail Filtering Condition] window.

Each item is evaluated with the AND condition.

FIGURE 1.117 [Alarm E-Mail Filtering Condition] window(PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E)

FIGURE 1.118 [Alarm E-Mail Filtering Condition] window(PRIMQUEST 2800B3/2800B2/2800B)

TABLE 1.140 Setting and display items in the [Alarm E-Mail Filtering Condition] window

Items	Description
Severity	Sets the severity level to be displayed. Multiple options can be selected. ・ Error ・ Warning ・ Info Everything is selected by default.
Partition	Sets the partitions to be displayed. The selected radio button is either [All] or [Specified]. All: Filtering by [Partition] is not applied. Specified: Filtering by unit can be set. Check the check boxes for the units to be displayed. The default is All **Remark** This item is not displayed in case of PRIMEQUEST 2800B3/2800B2/2800B model.
Unit	Sets the units to be displayed. The selected radio button is either [All] or [Specified]. All: Filtering by [Unit] is not applied. Specified: Filtering by unit can be set. Check the check boxes for the units to be displayed. The default is All. **Remark** In case of PRIMEQUEST 2400E3/2400E2/2400E model, the Unit display is as follows: *1 SB：SB#0, SB#1 In case of PRIMEQUEST 2800B3/2800B2/2800B model, the Unit display is as follows: MMB：MMB In case of PRIMEQUEST 2800B3/2800B2/2800B model, PCI_Box is not displayed.
Source	Used to select the sources to be displayed. The selected radio button is either [All] or [Specified]. All: Filtering by [Source] is not applied. Specified: Filtering by source can be set. Check the check boxes of the sources to display. The default is All. Remarks Specify both CPU and Chipset when filtering as Source with the unit of CPU.

*1: The state of SB#0 – SB#3 is displayed for PRIMEQUEST 2400E3/2400E2 Model in the case that Memory Scale-up Board is used.

TABLE 1.141 Buttons in the [Alarm E-Mail Filtering Condition] window

Buttons	Description
Apply	Sets the filtering conditions.
Cancel	Restores the original information and does not set the specified information, such as [Severity], [Partition], and [Unit].

(1) Menu Operation

[Network Configuration] - [Alarm E-Mail] - [Filter] button

(2) Window Operations

1. Specify the items such as [Severity], [Partition], and [Unit]. Then, click the [Apply] button.
   This sets the specified filtering conditions.

1.6 [Maintenance] Menu

You can perform maintenance on the PRIMEQUEST 2000 series server from the [Maintenance] menu.

1.6.1 [Firmware Update] menu

The [Firmware Update] menu has the following window:

[Unified Firmware Update] window

☐ [Unified Firmware Update] window

You can unify a firmware update in the [Unified Firmware Update] window.

The firmware complete set is up-loaded to MMB, and the firmware in the new publication is maintained.

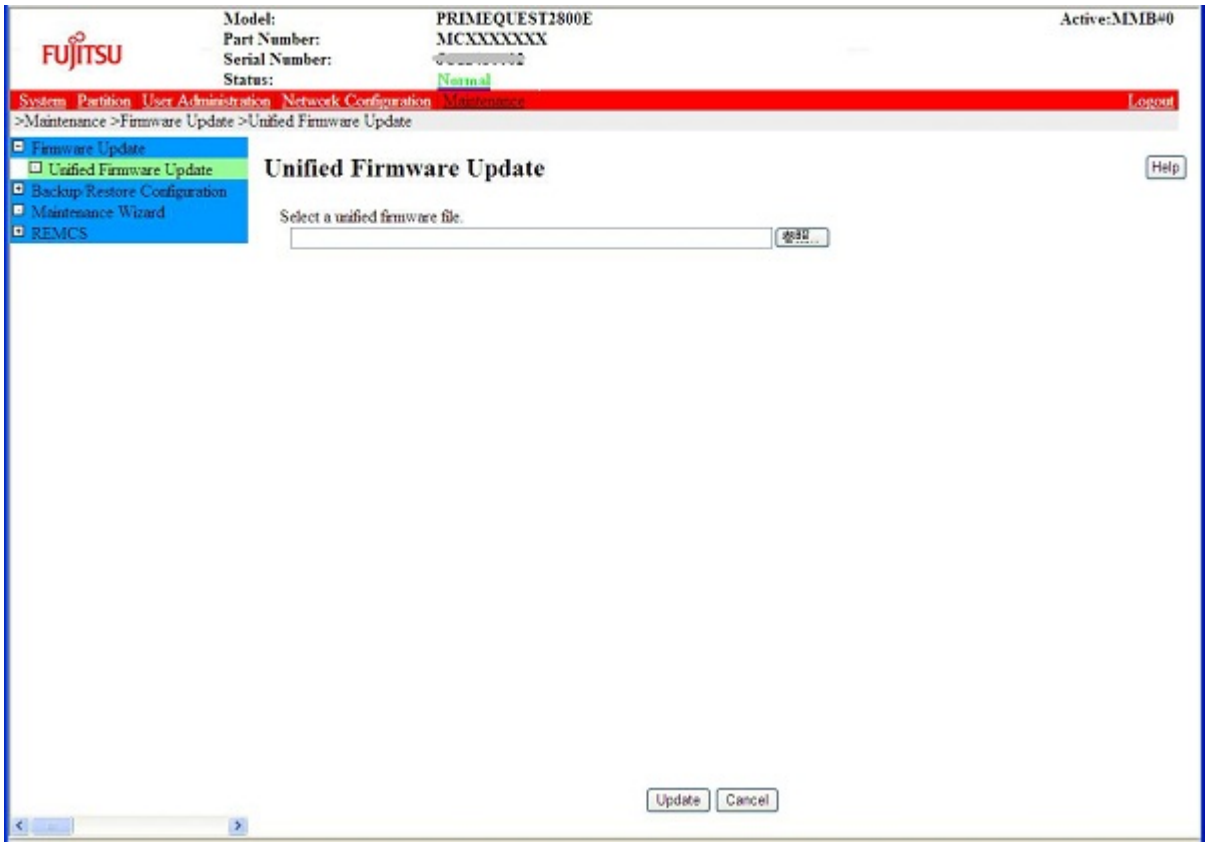
Confirm the version of each firmware. Update the firmware only if those versions are not the same.

The online firmware update does not update the same version number situation.

Note

If the MMB or SB has failed, perform maintenance on it before updating the firmware. Do not update the firmware in a configuration that has a faulty MMB or SB.

FIGURE 1.119 [Unified Firmware Update] window



(1) Menu Operation

[Maintenance] - [Firmware Update] - [Unified Firmware Update]

(2) Window Operations

1. Click the [Browse...] button to select a unified firmware update file.
2. Click the [Update] button.
   This displays the window for confirming the versions for the unified firmware update.
3. To perform the update, click the [OK] button.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
E_00098	Failed to get Unified Firmware version.
E_00098	Failed to get Individual Firmware version.
E_00098	Failed to get Lock Manager Process.
E_00098	Failed to get Lock Control.
I_00236	The xx.zz firmware update has been completed successfully.
W_00238	Specified file is not a firmware file. Please select a valid firmware file.
W_00241	Specified firmware file aaa is invalid. Please select a valid firmware file.
W_00242	Specified file size is invalid. Please select a valid firmware file.
I_00474	Unable to execute SEL download due to resource lock.Please retry after waiting a while.
I_00474	Unable to execute Firmware Update due to resource lock.Please retry after waiting a while.
W_00476	Unable to execute the online update. Please try the update after the system power off.
W_00477	Select the file of update.
W_00478	Unable to execute the update. Standby MMB is fault or disable.
W_00479	Unable to execute the update. TPM is effective.
I_00502	The firmware is updating.
E_00529	Unable to execute Firmware Update because the chassis information could not be retrieved.
E_00530	Unable to execute Firmware Update because the chassis information is invalid.
I_00556	The xx.zz online firmware update has been completed successfully. Please shutdown all partitions.
I_00557	The xx.zz online firmware update has been completed successfully. Please shutdown running partitions.
W_00583	Unable to execute Firmware Update. Please check the machine status.
W_00590	The Unified Firmware Version is unknown. Please retry to update the firmware.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.6.2 [Backup/Restore Configuration] menu

The [Backup/Restore Configuration] menu has the following windows:

[Backup/Restore MMB Configuration] window

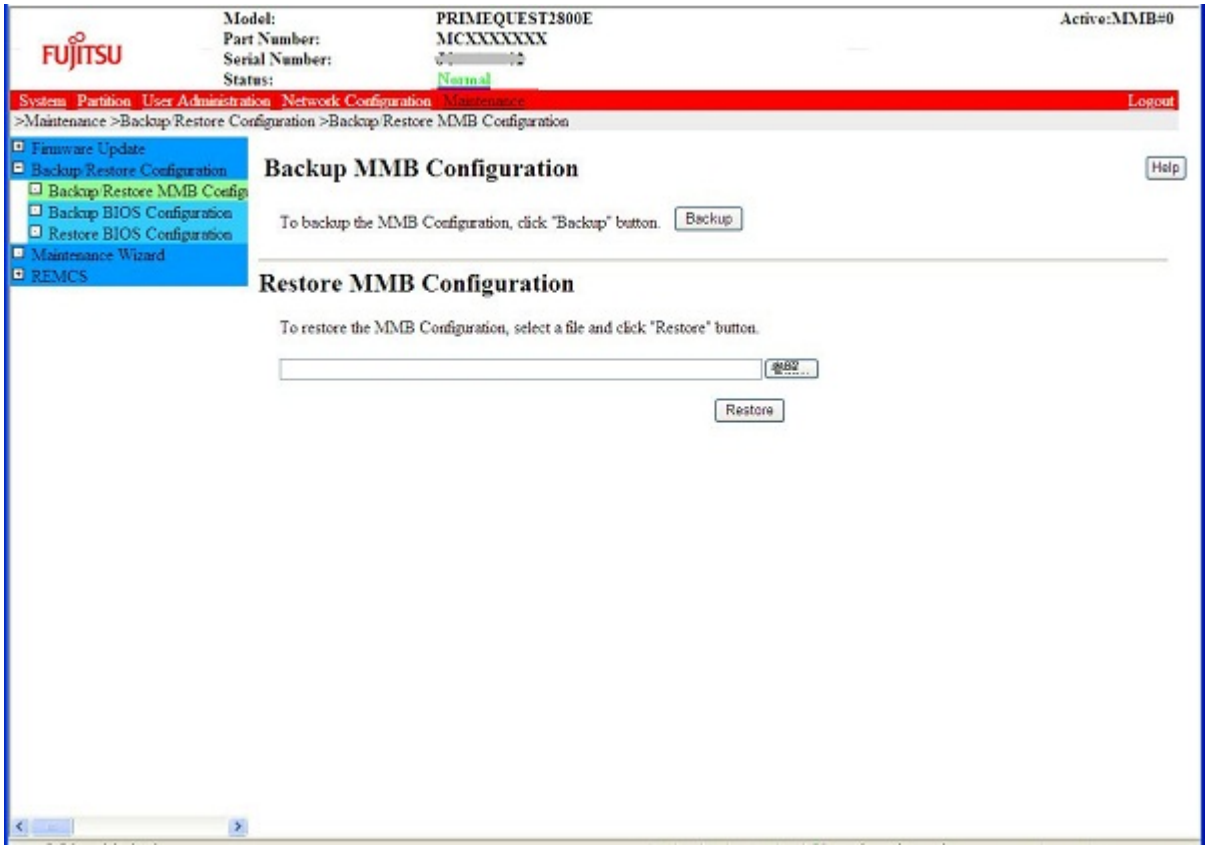
[Backup BIOS Configuration] window for PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E

[Restore BIOS Configuration] window for PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E
[Backup/Restore BIOS Configuration] window for PRIMQUEST 2800B3/2800B2/2800B

1.6.2.1 [Backup/Restore MMB Configuration] window

You can back up and restore the MMB configuration information from the Backup/Restore MMB Configuration window.

FIGURE 1.120 Backup/Restore MMB Configuration window



(1) Menu Operation

[Maintenance] - [Backup/Restore Configuration] - [Backup/Restore MMB Configuration]

(2) Window Operations

- Backing up MMB configuration information
  1. Click the [Backup] button.
     The save destination dialog box of the browser appears.
  2. Select the save destination path in the save destination dialog box. Then, click the [OK] button.
     This downloads the MMB configuration file.
     The default name of the backup file of the MMB configuration information is as follows:
     MMB_(backup date)_(MMB version).dat

- Restoring MMB configuration information
  1. Confirm that the system has completely stopped.
  2. Click the [Browse...] button to select the backup file of the MMB configuration.
  3. Click the [Restore] button.
     This sends the file to the MMB. To confirm restoration, the [MMB Configuration File Information:] dialog box appears.
  4. Click the [OK] button in the [MMB Configuration File Information:] dialog box.
     This restores the MMB configuration information.
  5. The MMB is rebooted to enable the restored data.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00054	Restore completed. Now rebooting.
I_00486	Select a file.
E_00055	Failed to restore the MMB Configuration.
E_00056	Failed to backup the MMB Configuration.
E_00057	Specified file can not restore.
E_00058	File format error.
E_00060	Specified file is the one of another machine.
E_00061	Failed to get serial number.
E_00062	Can't restore the MMB Configuration. Please power off the chassis.
E_00063	Failed to reset the MMB. Please turn off the breaker to enable the settings.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.6.2.2 [Backup BIOS Configuration] window for PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E

This window is displayed only in PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E.
You can back up BIOS configuration information to the PC running the browser, from the [Backup BIOS Configuration] window.

FIGURE 1.121 Backup BIOS Configuration window

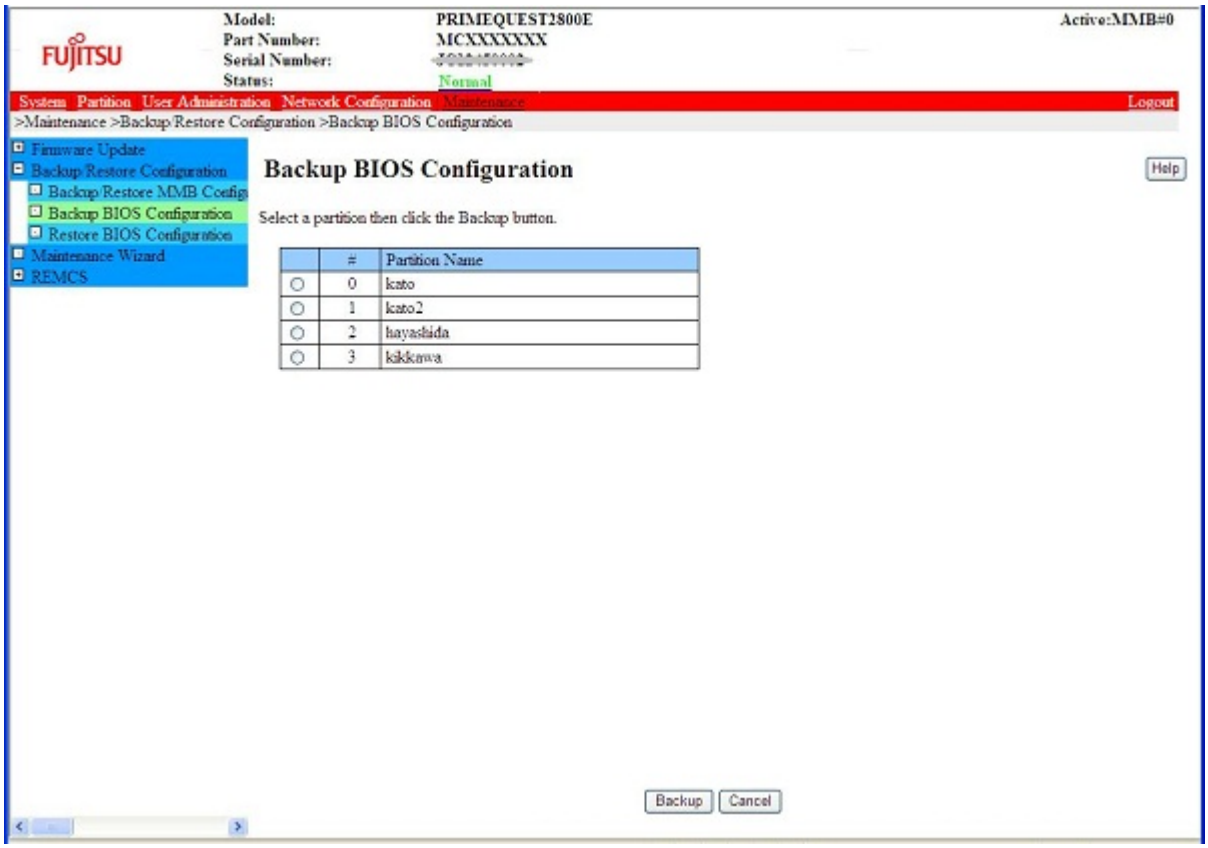


TABLE 1.142 Buttons in the [Backup BIOS Configuration] window

Buttons	Description
Backup	Backs up the BIOS configuration information.
Cancel	Cancels backup of the BIOS configuration information.

(1) Menu Operation

[Maintenance] - [Backup/Restore Configuration] - [Backup BIOS Configuration]

(2) Window Operations

1. Select the radio button of the partition to which to back up BIOS configuration information. Then, click the [Backup] button.
   A save destination dialog box appears.
2. Select the save destination path in the save destination dialog box. Then, click the [OK] button.
   This downloads the BIOS configuration information file.
   The default name of the backup file of the BIOS configuration information is as follows:
   (partition number)_(backup date)_(BIOS version).dat

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
I_00066	Failed to backup the BIOS Configuration.
I_00427	Select a partition.
E_00006	Authorization required.
E_00040	Partition not defined.
E_00098	Failed to get the partition status.
E_00098	Failed to get the screen information.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.6.2.3 [Restore BIOS Configuration] window for PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E

This window is displayed only in PRIMEQUEST 2400E/2800E.
You can restore BIOS configuration information in the [Restore BIOS Configuration] window.

FIGURE 1.122 [Restore BIOS Configuration] window (1)

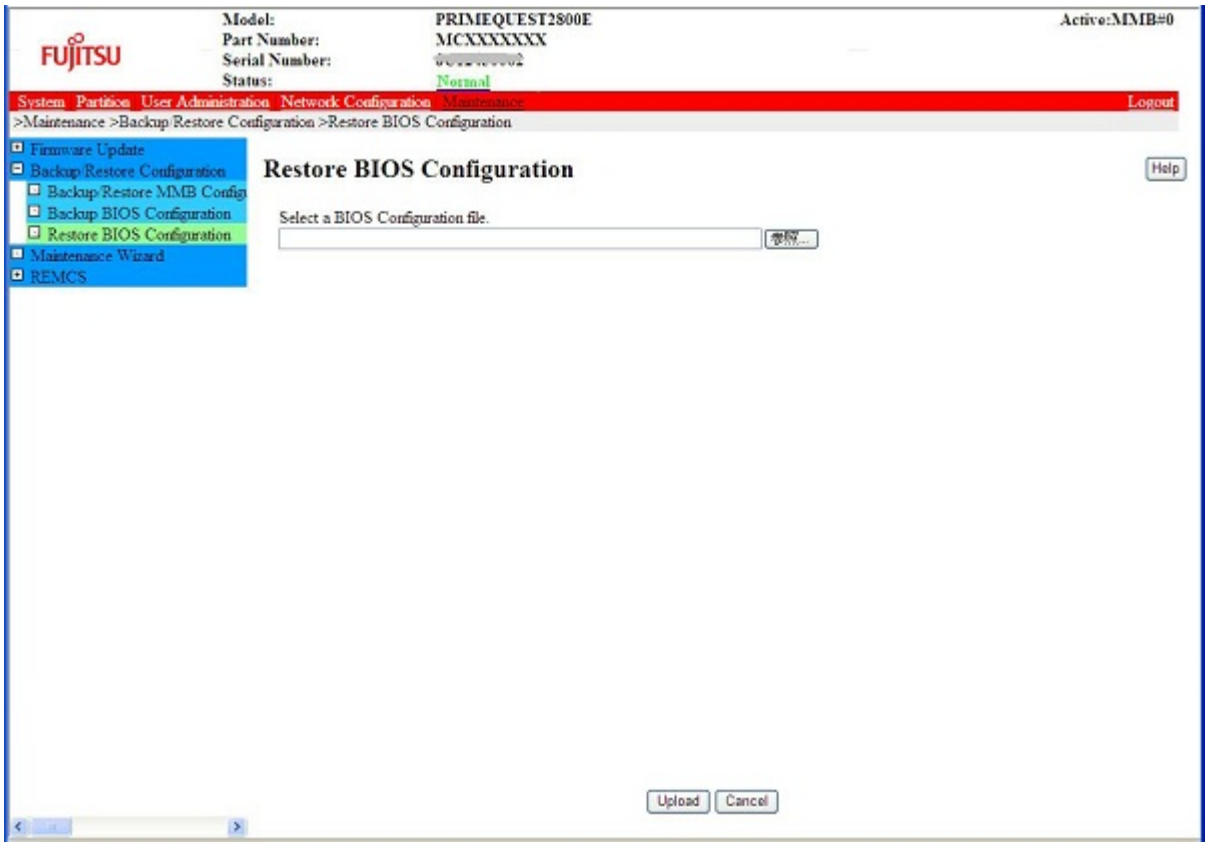


FIGURE 1.123 [Restore BIOS Configuration] window (2)

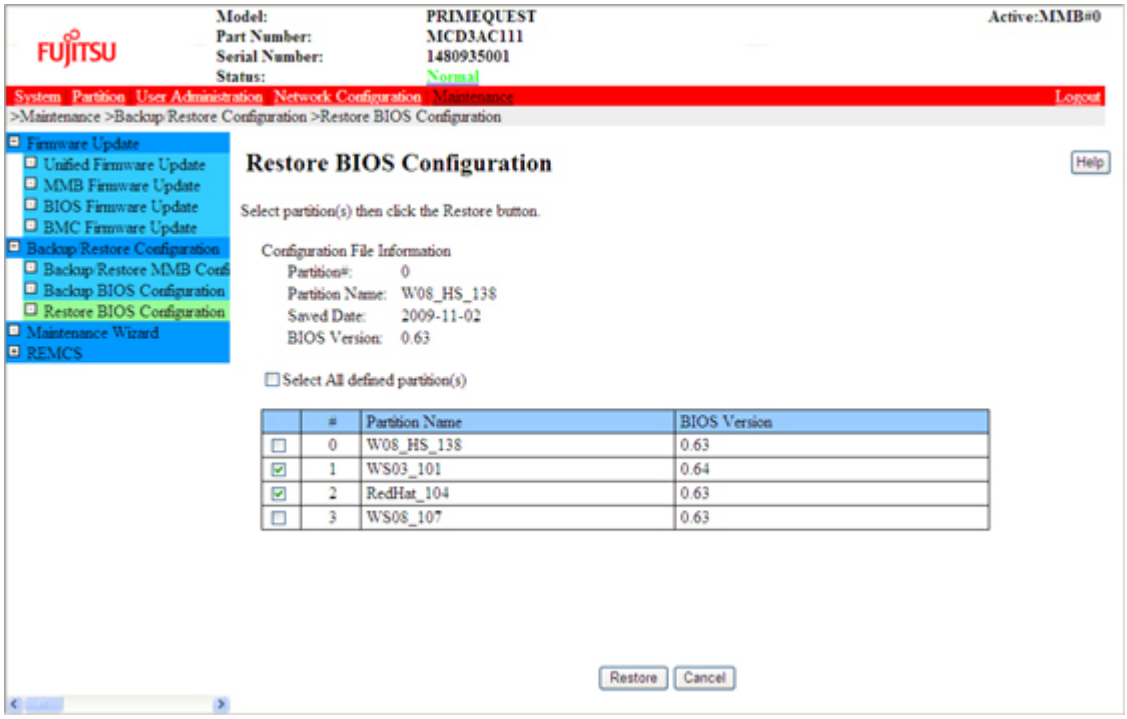


TABLE 1.143 Setting and display items in the [Restore BIOS Configuration] window (2)

Items	Description
Select All defined partitions(s)	Restores the BIOS configuration information in all the partitions if this check box is checked.
#	Displays a partition identification number (0 to 3). You can select a partition for restoration by checking a check box on the left.
Partition Name	Displays the name assigned to the partition.
BIOS Version	Displays the current BIOS version installed on the partition.

TABLE 1.144 Buttons in the [Restore BIOS Configuration] window (2)

Buttons	Description
Restore	Restores the BIOS configuration information file.
Cancel	Cancels restoration of the BIOS configuration file.

(1) Menu Operation

[Maintenance] - [Backup/Restore Configuration] - [Restore BIOS Configuration]

(2) Window Operations

1. Click the [Browse...] button in the [Restore BIOS Configuration] window (1). Select the BIOS configuration backup file stored on a remote PC.
2. Click the [Upload] button.
   This sends the BIOS configuration file to the MMB and displays the [Restore BIOS Configuration] window (2).
3. Select the partition for restoration in the [Restore BIOS Configuration] window (2). Then, click the [Restore] button.
   This restores the BIOS configuration information file.

[Message]

The following table lists the messages displayed in this window.

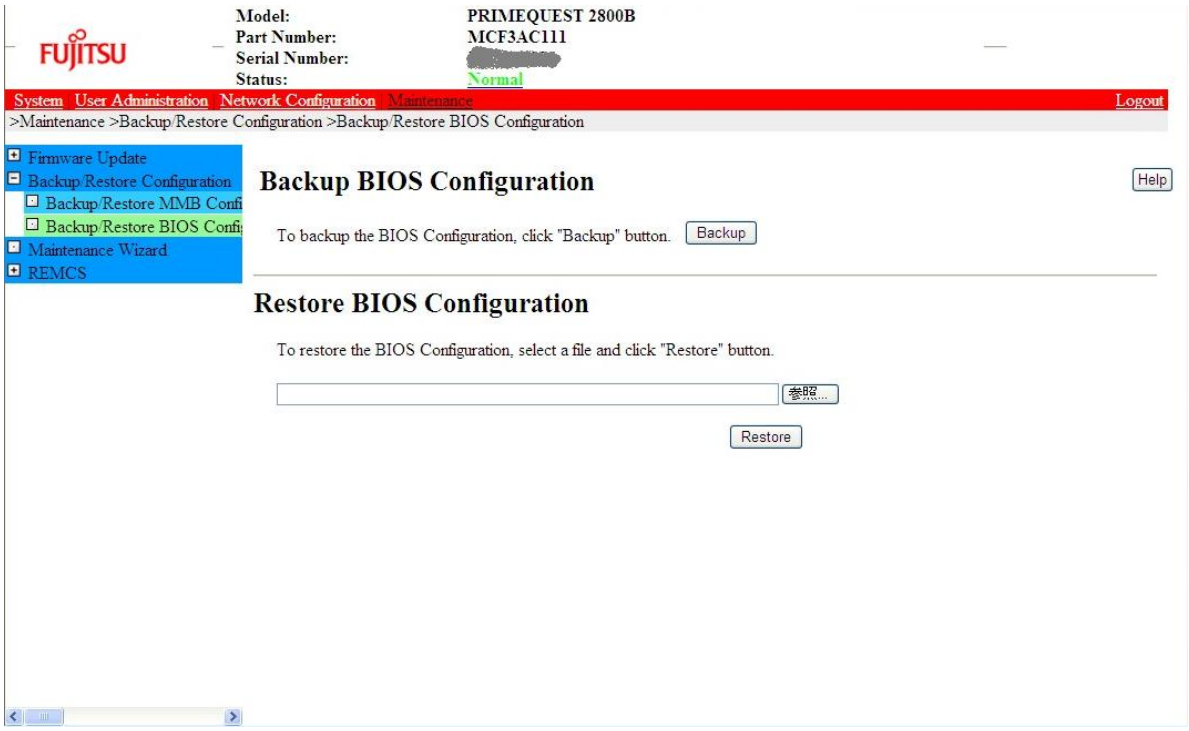
Message Number	Message
I_00064	Restore completed.
I_00486	Select a file.
W_00258	Unable to restore the BIOS configuration because a BIOS configuration information file is being restored by another user in the same partition now.
W_00485	Home SB not defined.
E_00024	Installing failed.
E_00027	Installing failed. Size of uploaded file is zero.
E_00039	Uploading failed.
E_00057	Specified file can not restore.
E_00058	File format error.
E_00065	Failed to restore the BIOS Configuration.
E_00067	Can't restore the BIOS Configuration. Please power off the partition(s).

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

☐ [Backup/Restore BIOS Configuration] window for PRIMEQUEST 2800B3/2800B2/2800B

This window is displayed only in PRIMEQUEST 2800B3/2800B2/2800B.
You can back up and restore the BIOS configuration information from the Backup/Restore BIOS Configuration window.

FIGURE 1.124 Backup/Restore BIOS Configuration window



(1) Menu Operation

[Maintenance] - [Backup/Restore Configuration] - [Backup/Restore BIOS Configuration]

(2) Window Operations

- Backing up BIOS configuration information
  1. Click the [Backup] button.
     The save destination dialog box of the browser appears.
  2. Select the save destination path in the save destination dialog box. Then, click the [OK] button.
     This downloads the BIOS configuration file.
     The default name of the backup file of the BIOS configuration information is as follows:
     BIOS_(backup date)_(BIOS version).dat

- Restoring BIOS configuration information
  1. Confirm that the system has completely stopped.
  2. Click the [Browse...] button to select the backup file of the BIOS configuration.
  3. Click the [Restore] button.
     This sends the file to the MMB. To confirm restoration, the [BIOS Configuration File Information:] dialog box appears.
  4. Click the [OK] button in the [BIOS Configuration File Information:] dialog box.
     This restores the BIOS configuration information.
  5. The BIOS is rebooted to enable the restored data.

[Message]

The following table lists the messages displayed in this window.

Message Number	Message
E_00057	Specified file can not restore.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.6.3 [Maintenance Wizard] window

The [Maintenance Wizard] window has a wizard to support maintenance of units. This window is designed for maintenance personnel.

(1) Menu Operation
[Maintenance] - [Maintenance Wizard]

1.6.4 [REMCS] menu

You can operate and configure REMCS from the [REMCS] menu.

For details on REMCS, see the *PRIMEQUEST 2000 Series REMCS Installation Manual* (CA92344-0542).

1.7 [System] Menu for PRIMEQUEST 2800B3/2800B2/2800B

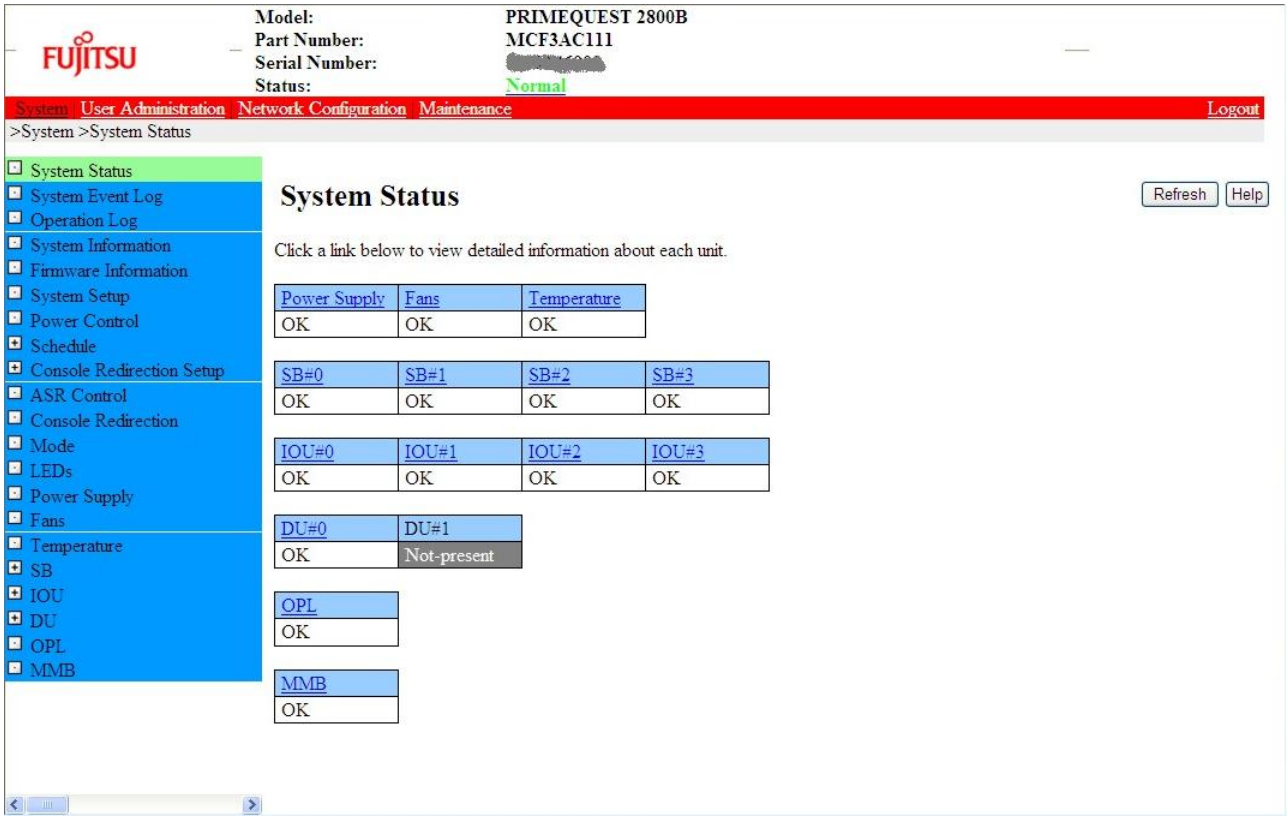
In [System] menu, it is possible to display and set the status of all the hardware components in the PRIMEQUEST 2800B3/2800B2/2800B system.
A display and a set item of [System] menu are different in PRIMEQUEST 2400E3/2400E2/2400E and PRIMEQUEST 2800E3/2800E2/2800E.
Refer to Chapter 1.3 for details.
Follow Chapter 1.2-Chapter 1.6 about the menu not described in this chapter.

Remarks
If “Read Error” is displayed for [Part Number] and [Serial Number] on MMB Web-UI (contents area and information area), confirm the problem by referring to “11.2 Troubleshooting” of *PRIMEQUEST 2000 Series Administration Manual* (CA92344-0537). If the error could not be resolved, contact your sales representative or repairs assistance service. Confirm the model name and serial number shown on the label affixed on the main unit and report it.

1.7.1 [System Status] window

[System Status] window shows the status of entire PRIMEQUEST 2800B3/2800B2/2800B model. The contents displayed may differ depending on the configuration of the unit.
You can also display details of each unit by clicking the link displayed in the frame.
.

FIGURE 1.125 [System Status] window



The contents which are displayed as the status of unit are as follows.
[OK] : It is shown for the unit which operates normally without any trouble.
[Not-present] : It is shown for the unit which is not mounted. It is shown in gray colored background.
[Warning] : Though it is not serious, it shows the unit where a problem may occur. It is shown by icon.
[Failed] : It shows the unit, where failure has occurred, and it must be disconnected. It is shown by icon.
[Degraded] : It shows that a failure has occurred in the component of a certain unit, and the unit is operated without disconnecting the failed component. It is shown by icon.

TABLE 1.145 Status of Unit and its Icons

Status	Display Color	Icon
Normal (Normal state)	Green	None
Warning, Degraded	Yellow	Black '!' mark in yellow triangle.
Failed	Red	White 'X' in red circle.

Each unit is linked with the window showing the detailed status. However, for units which are not mounted, there is no window showing the details. Therefore, these units are not linked.

TABLE 1.146 Items displayed in [System Status] Window

Items	Description
Power Supply	Shows the status of PSU
Fans	Shows the status of FAN
Temperature	Shows the status of temperature sensor
SB#0 ~ SB#3	Shows the status of system board
IOU#0 ~ IOU#3	Shows the status of IOU
DU#0 ~ DU#1	Shows the status of DU
OPL	Shows the status of OPL
MMB	Shows the status of MMB

(1) Menu Operation

[System] – [System Status]

(2) Window Operations

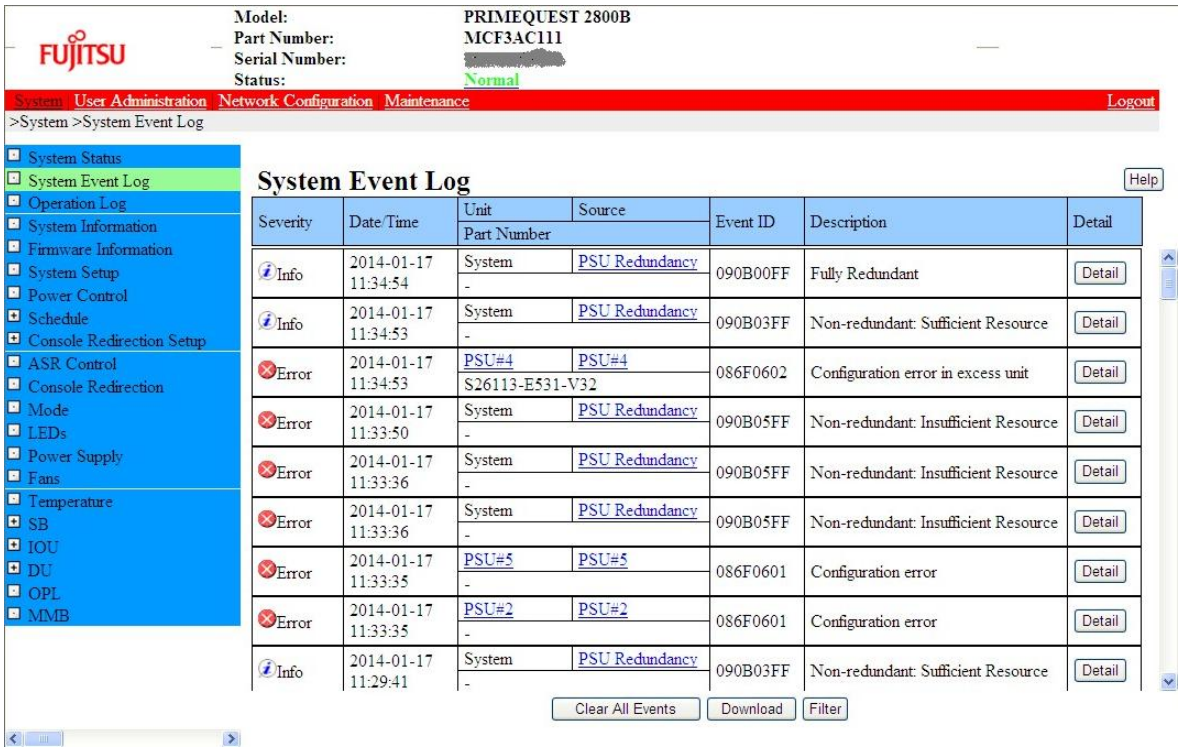
1. Click the link corresponding to each unit when the detailed status of unit is to be confirmed. The window showing detailed status of each unit appears.

1.7.2 [System Event Log] Window

Among the events generated in the PRIMEQUEST 2800B3/2800B2/2800B model, events of MMB and BMC stored in the current MMB system event log are displayed on the [System Event Log] window in chronological order.

Maximum 32000 events can be stored in system event log. When the entries in the system event log are full, oldest event log is deleted, and latest event log is stored in system event log.

FIGURE 1.126 [System Event Log] window



Severity	Date/Time	Unit / Part Number	Source	Event ID	Description	Detail
Info	2014-01-17 11:34:54	System -	PSU Redundancy	090B00FF	Fully Redundant	Detail
Info	2014-01-17 11:34:53	System -	PSU Redundancy	090B03FF	Non-redundant: Sufficient Resource	Detail
Error	2014-01-17 11:34:53	PSU#4 S26113-E531-V32	PSU#4	086F0602	Configuration error in excess unit	Detail
Error	2014-01-17 11:33:50	System -	PSU Redundancy	090B05FF	Non-redundant: Insufficient Resource	Detail
Error	2014-01-17 11:33:36	System -	PSU Redundancy	090B05FF	Non-redundant: Insufficient Resource	Detail
Error	2014-01-17 11:33:36	System -	PSU Redundancy	090B05FF	Non-redundant: Insufficient Resource	Detail
Error	2014-01-17 11:33:35	PSU#5 -	PSU#5	086F0601	Configuration error	Detail
Error	2014-01-17 11:33:35	PSU#2 -	PSU#2	086F0601	Configuration error	Detail
Info	2014-01-17 11:29:41	System -	PSU Redundancy	090B03FF	Non-redundant: Sufficient Resource	Detail

In the [System Event Log] Window, only the contents and not the title in the table can be scrolled. When there are no events to be displayed, a message showing “There is no Event Logs.” is displayed instead of the table.

TABLE 1.147 Items displayed in [System Event Log] Window

Items	Description
Severity	Displays the severity of the event and error ・ Error : Severe errors like hardware error ・ Warning : Not a severe error, but an error is likely in future ・ Info : Shows the information like 'Partition power ON'
Date/Time	Displays the local time when an event or error occurred. Format: YYYY-MM-DD HH:MM:SS
Source	Displays the name of the sensor where an event or error occurred.
Unit	Displays the unit with the sensor where an event or error occurred. For example, displays [SB#0] if an error occurs in CPU#0 of SB#0. This unit retrieves FRU with this sensor from Entity ID of the sensor, and also retrieves Parent Entity from Entity Association Record. It displays Board/Unit name described in FRU Record of parent entry. It is linked to the window (Window on which part number and serial number of each unit can be referenced) showing detailed status of each unit.
Part Number	Displays the part number stored in system event log. If part number is not stored, "□" is displayed.
Event ID	Displays the ID (8 digits in hexadecimal system) for identifying contents of Event. For details on the allocation of the Event ID, see "Chapter 2 MMB Message" of *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).
Description	Displays the contents of Events and Errors. **Remarks** For the event of insertion/removal of the board, part number and serial number of board are displayed.

TABLE 1.148 Buttons on [System Event Log] Window

Buttons	Description
Clear All Events	When you click [Clear All Events] button, all the events saved in system event log, are cleared. This is used only if Field engineer instructs to do so.
Download	After the confirmation message is displayed, [System Event Log (Collect)] window appears.
Filter	When you click [Filter] button, [System Event Log Filtering Condition] window for entering filter conditions appears.
Detail	When you click [Detail] button, the details of corresponding event are displayed on [System Event Log (Detail)] window.

(1) Menu Operation

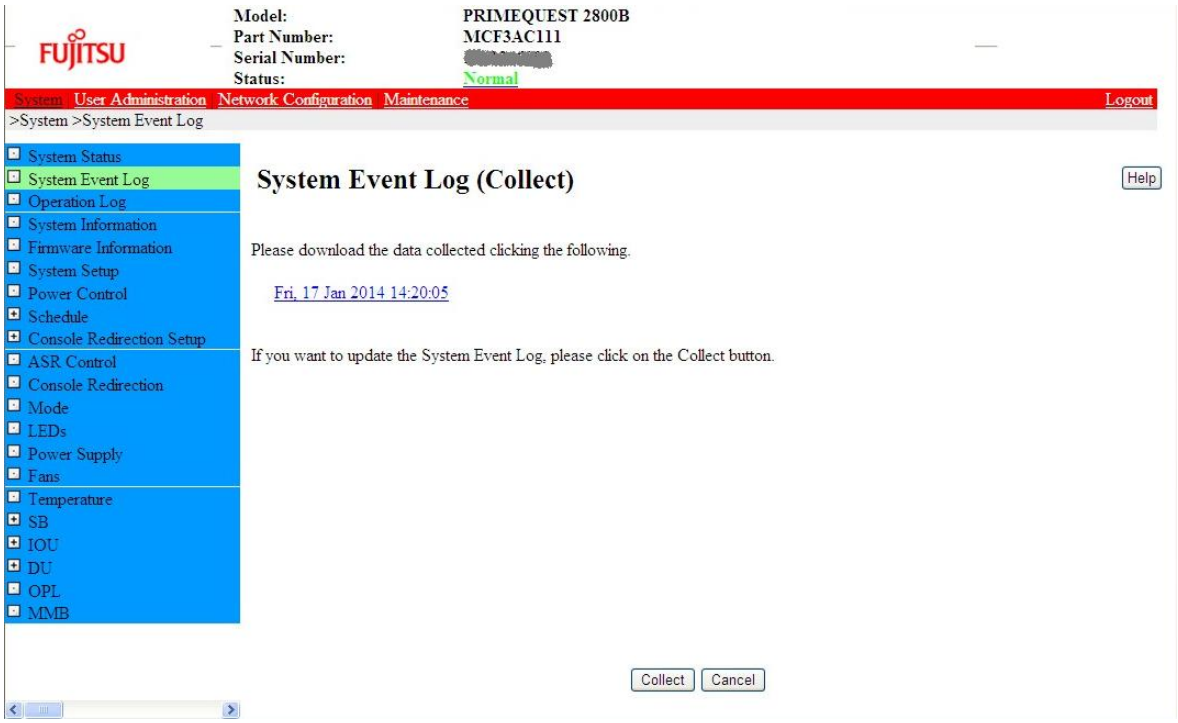
[System] – [System Event Log]

(2) Window Operations

- When the event data saved in system event log is downloaded (if the system event log collected in advance does not exist)
  1. When you click [Download] button, a message showing [I_00417 Are you sure?] is displayed. Click [OK] button.
  2. The collection of system event log information is starts automatically; [Progress] window appears.
  3. [System Event Log (Collect)] window appears, and the link to event data which is collected, is displayed with date information. When you click the link, dialog box appears. By specifying the file name and path name, event data can be downloaded to the PC which displays Web-UI.

- When the event data saved in system event log is downloaded (if the system event log which is collected in advance, exists)
  1. When you click [Download] button, a message showing [I_00417 Are you sure?] is displayed. Click [OK] button.
  2. [System Event Log (Collect)] window appears, and the link to system event log information collected in advance, is displayed.
  3. Click [Collect] button to collect the latest system event log. A message showing [I_00417 Are you sure?] is displayed. Click [OK] button. [Progress] window appears while the system event log information is collected.
  4. [System Event Log (Collect)] window appears, and the link to event data which is collected, is displayed with date information. When you click the link, a dialog box appears. By specifying the file name and path name, event data can be downloaded to the PC which displays Web-UI.

FIGURE 1.127 [System Event Log (Collect)] Window



- Narrowing down the events displayed in the window
  1. Click the [Filter] button.
     The [System Event Log Filtering Condition] window for entering filtering conditions appears.
  2. Enter the conditions in the [System Event Log Filtering Condition] window. Then, click the [Apply] button. The browser returns to the [System Event Log] window. The window displays the events that satisfy the specified conditions.

☐ [System Event Log Filtering Condition] Window

Click [Filter] button on the [System Event Log] window. The [System Event Log Filtering Condition] window for entering filtering conditions appears.

The filtering conditions of events which are displayed in [System Event Log] window can be set in the [System Event Log Filtering Condition] window.

FIGURE 1.128 [System Event Log Filtering Condition] Window

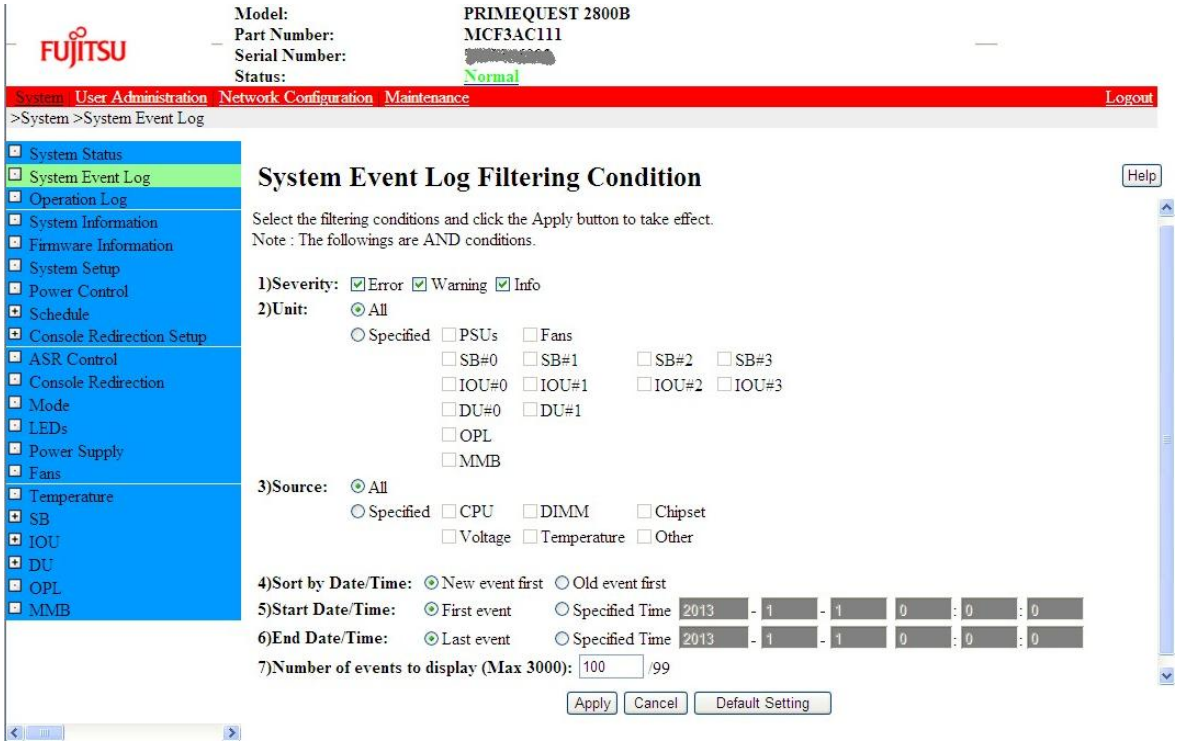


TABLE 1.149 Display and Setting Items on [System Event Log Filtering Condition] Window

Items	Description
Severity	Check the Severity check box. Multiple selections are possible. ・ Error ・ Warning ・ Info ・ Monitor All are ON by default. **Note** [Monitor] check box is displayed only when login is done with CE privilege.
Source	Select target source to be displayed. Select [All] or [Specified] by Radio button. ・ All: Filtering is not done by Source. ・ Specified: Filtering of Source unit can be set. Select the Source to be displayed. Default setting is All.
Unit	Select the target unit to be displayed. Select [All] or [Specified] by Radio button. ・ All: Filtering is not done by Unit. ・ Specified: Filtering of Unit can be set. Select the Source to be displayed. Default setting is All.
Sort by Date/ Time	Specifies either display by new order or display by old order by using the radio button. ・ New event first ・ Old event first The default setting is New event first.
Start Date/ Time	Specifies either display from recent event or specify the time, by using the radio button. ・ First event: Display by recent event ・ Specified Time: Specify the time. In case of Specified Time, enter the Start Date and Time. The default setting is First event.
End Date/ Time	Specifies either display till last event or specify the time, by using the radio button. ・ Last event: Display till Last event ・ Specified Time: Specify the time. In case of Specified Time, enter the End Date and Time. The default setting is Last event.
Number of events to display	Specifies the number of log to be displayed. As for the denominator, display the total number of events that are logged. A maximum of 3000 events can be specified. The default setting is 100 events.

TABLE 1.150 [System Events Log Filtering Condition] Window Buttons

Buttons	Description
Apply	Log which matches with the specified conditions will be listed on [System Event Log] window by clicking the [Apply] button.
Cancel	Returns to [System Event Log] window by clicking the [Cancel] button.
Default Setting	Selected value returns to the default value.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00413	Nothing is selected.
W_00414	Invalid Date Format.
W_00426	Invalid Values Specified.
W_00434	Invalid Time Format.
W_00441	Range over error.
I_00417	Are you sure?
I_00468	Are you sure you want to clear the SEL?

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.7.3 [Operation Log] Window

As for the display, the operation is the same as the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E model. Refer to chapter 1.2.3.

1.7.4 [System Information] Window

[System Information] window displays the information, such as name of the systems and name of the products etc., related to the PRIMEQUEST 2800B3/2800B2/2800B model.
Moreover, names and Asset Tag (Property management number) corresponding to the PRIMEQUEST 2800B3/2800B2/2800B model(Chassis) can be set.

FIGURE 1.129 [System Information] Window

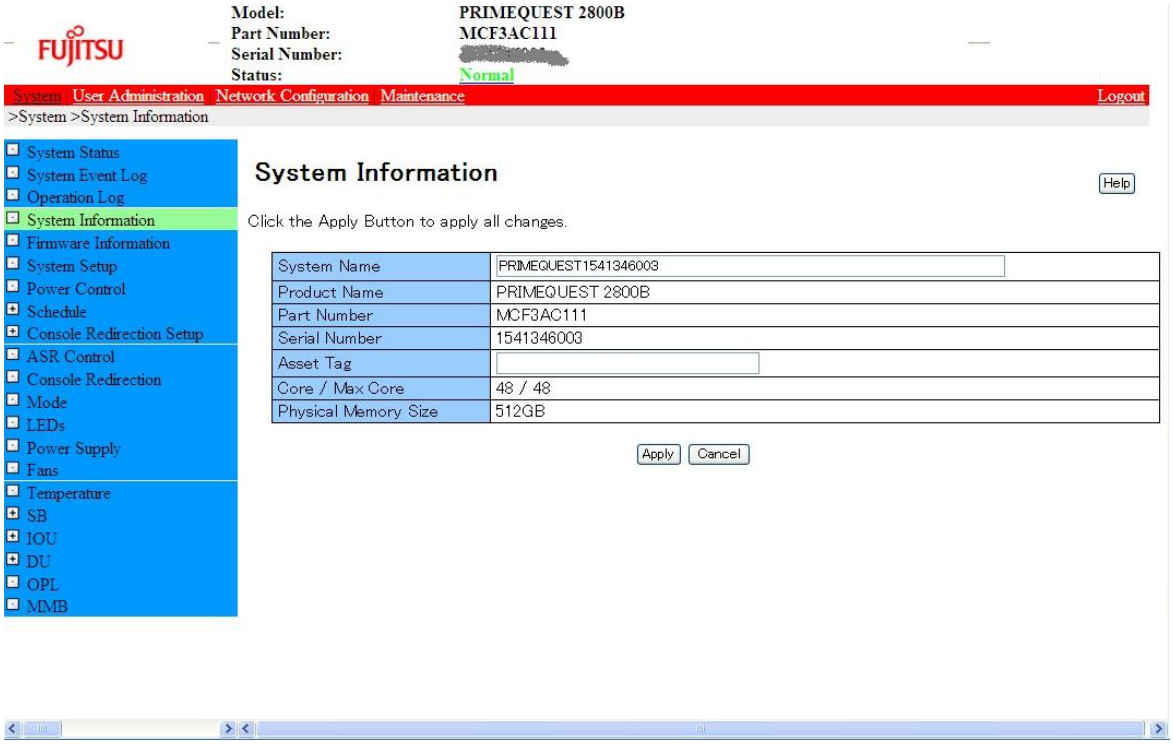


TABLE 1.151 Display and Set Items of [System Information] window

Items	Description
System Name	System name of PRIMEQUEST 2000 series is displayed. User with Administrator privilege can change system name. Maximum 64 characters can be entered. **Remarks** · Characters which can be entered: Alphanumeric characters, half-width space. The following characters can also be entered. ! " # $ % & ' ( ) = - ^ ~ ¥ @ ` [ ] { } : ; * + ? < > . / _ | However, there is a limitation. · # and half-width space cannot be used as first character. · Half-width space cannot be used as last character. Default is < PRIMEQUEST +Product serial number>. When [system Name] is blank, it becomes system name of default.
Product Name	Product name of PRIMEQUEST 2000 series is displayed.
Part Number	Model name of PRIMEQUEST 2000 series is displayed.
Serial Number	Serial number of PRIMEQUEST 2000 series is displayed.
Asset Tag	Property administration information (Asset Tag) is displayed. User with the administrator privilege can change Asset Tag information. Maximum 32 characters can be entered. No default value.
Core / Max Core	Display the CPU core number and Max Core number included in the system. The Max Core number contains the number of Disable core. **Remarks** Degenerated CPU is not included in the number.
Physical Memory Size	Displays the physical memory volume that is included in the system. **Remarks** The memory size does not include degraded DIMMs.

TABLE 1.152 Buttons on the [System Information] Window

Buttons	Description
Apply	When the characters are entered in the [System Name] or [Asset Tag] fields and click the [Apply] button is clicked, the entered information is set.
Cancel	When the [Cancel] button is clicked, the system is restored to the original condition without setting the information entered in the [System Name] or [Asset Tag]

(1) Menu Operation

[System] – [System Information]

(2) Window Operations

1. Change the items of [System Name] or [Asset Tag] and click the [Apply] button.
   Information in each field is set.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
W_00431	Invalid character included.
W_00407	Input characters are too long.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

In the [Operation Log] window, only the table contents can be scrolled without scrolling the title of the table.
When there is no event to be displayed, a message “There is no Event Logs”; would be displayed instead of table.

1.7.5 [Firmware Information] Window

Latest version number of applied Firmware, information of the Firmware version which is operating inside the system and the information of the Firmware version with backup is displayed on the [Firmware Information] window.

FIGURE 1.130 [Firmware Information] Window

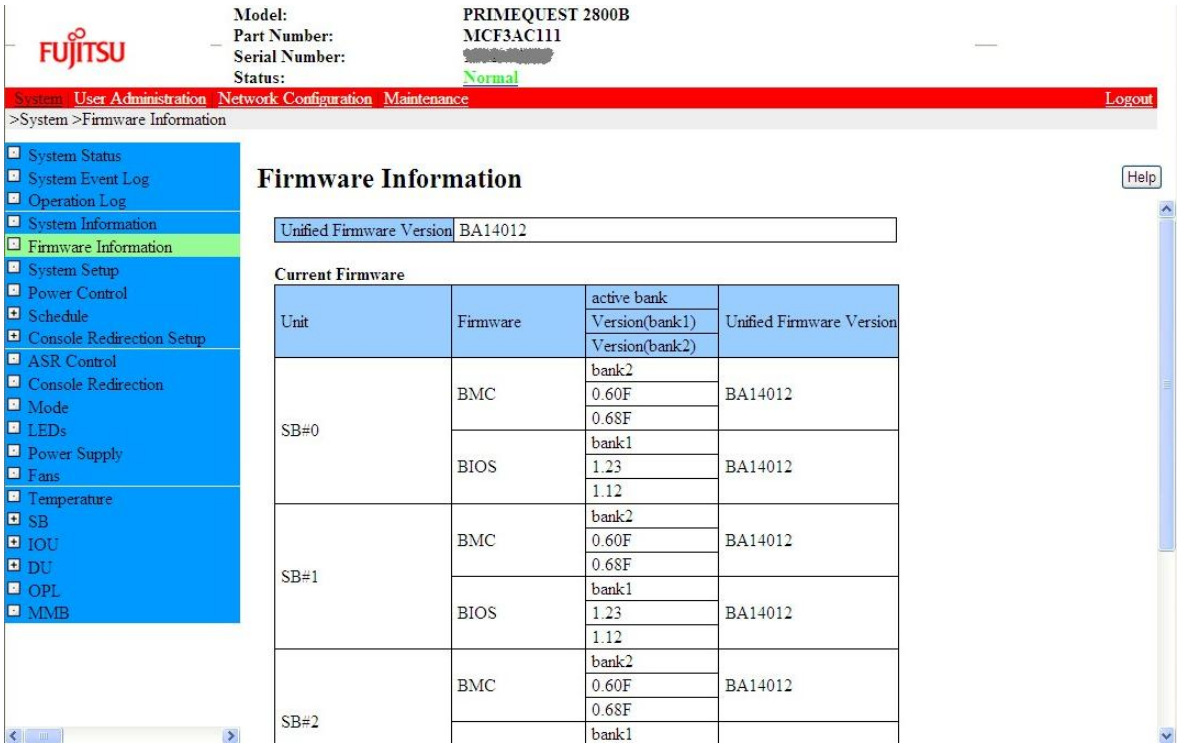


TABLE 1.153 Display Item of [Firmware Information] Window

Items	Description
Unified Firmware Version	Latest version number of applied Firmware.
Current Firmware	
Unit	Target unit mounted with Firmware is displayed. ・ SB#n ・ MMB
Firmware	Type and Current version (Active) of Firmware are displayed. ・ BMC ・ BIOS ・ MMB ・ Not-present: It shows that Unit is not mounted. Gray color background is displayed.
active bank	Bank (bank1 or bank2) of the memory that is operating now is displayed.. After start/restart of the partition, latest Firmware information is reflected in this display.
Version (bank1)	Firmware Version of bank1 is displayed. [Version display format] Firmware maintains Version information in the following format. ・ Major Version=1Byte data (Binary format) ・ Minor Version=1Byte data (BCD format) This data is displayed as follows. X.YY X displays Major version in decimal (0~255) Y displays Minor version as it is by double digit in BCD format (Binary coded decimal) (00~99).
Version (bank2)	Firmware Version of bank2 is displayed. [Version display format] Same as bank1
Unified Firmware version	Displays firmware version of target unit. Firmware maintains version information in the following format. ・ Model identification XX=1 byte data (01h=SA) ・ Last two digits of the year YY=1 byte data (BCD format) 09-99 ・ Month MM=1 byte data (BCD format) 01-12 ・ Serial number N=1 byte data (Binary format) 1-9 This data is displayed as below. XXYYMMN Example: BA13012 In case of uncertain version number “-” is displayed.

After start/restart of the system is executed by the system administrator, the latest written Firmware is reflected.

Remarks

After executing Firmware update, it is recommended to reflect in the Firmware by prompt start/restart of the system.

(1) Menu Operation
[System] – [System Information]

(2) Window Operations
None

1.7.6 [System Setup] Window

In [System Setup] window, Power supply of PRIMEQUEST 2800B3/2800B2/2800B model and restoration action etc. can be set.

FIGURE 1.131 [System Setup] Window

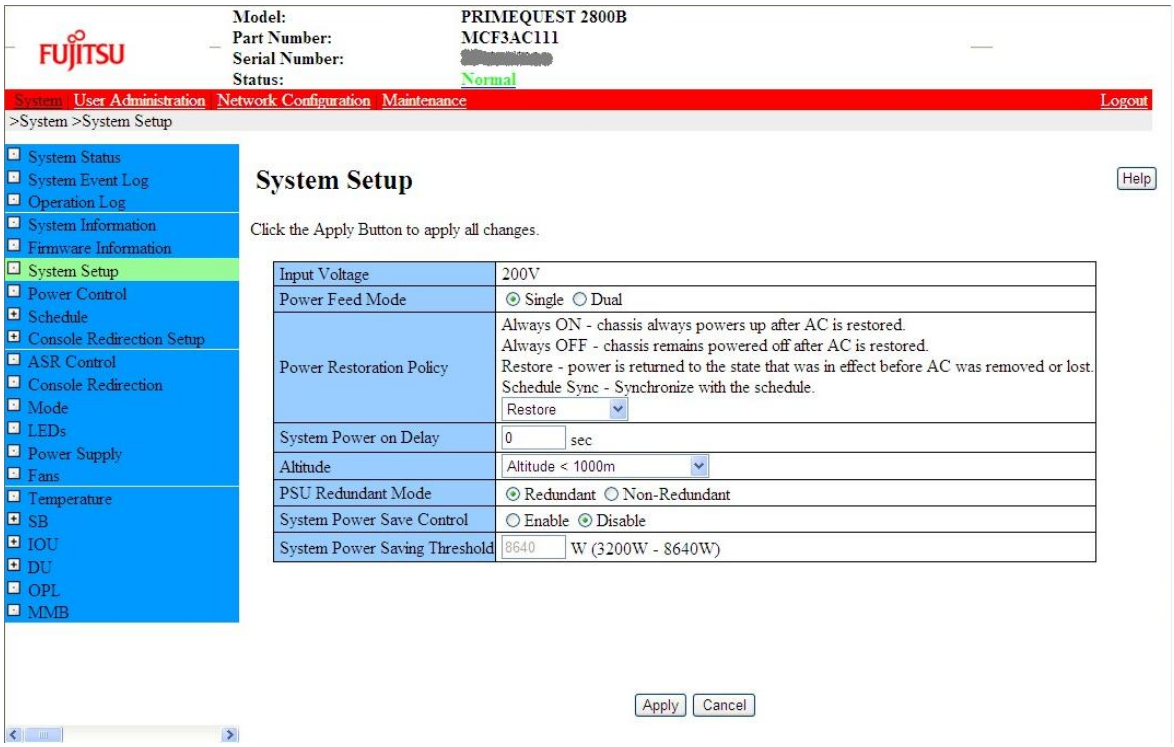


TABLE 1.154 Display Items and Setting Items in [System Setup] Window

Items	Description
Input Voltage	Displays input voltage. ・ 100V ・ 200V When information cannot be acquired, it is displayed as 200V.
Power Feed Mode	Whether power supply of PRIMEQUEST 2000 system is configured in primary power feed mode or dual power feed mode is set. ・ Single: primary power feed mode ・ Dual: dual power feed mode Default setting is Single.
Power Restoration Policy	Sets the display of the restoration action after power failure. ・ Always off: Maintains the power-off status after the power restoration. ・ Always on: Regardless of the condition at the time of power failure, the partition is powered on after the power restoration. ・ Restore: Restores the status immediately before the power failure. If the power was on when the power failure occurred, it restores the power-on status of the partition. If the power was off, the partition power stays off. ・ Schedule Sync: If the partition is in the operating time zone, power of partition turns on automatically depending on the schedule operations at the time of restoration of power. (attention) The schedule set with Special is applied only on the specified day. Default setting is Restore.
System Power On Delay	Sets the standby time utill power on of system is specified as per the restoration power policy that is set after the AC power is On (also includes restoration power). Specifies within the range of 0~9999 seconds. Default value is 0 seconds. (attention) Other start processing is not executed until the processing of system Power On Delay ends.
Altitude	Sets the altitude where PRIMEQEST 2800B model is installed or placed. ・ Altitude < 1000 m ・ 1000 m <= Altitude < 1500 m ・ 1500 m <= Altitude < 2000 m ・ 2000 m <= Altitude Default value is Altitude < 1000 m. Setting error of altitude condition is possible up to ±100m.
PSU Redundant Mode	Sets whether PSU is redundantly operated. ・ Redundant ・ Non-redundant When Power Feed Mode is Single, it is by default Non-Redundant. When Power Feed Mode is Dual, it is always Redundant.
System Power Save Control	Sets enable/disable for Power Saving function for entire system. ・ Enable ・ Disable Power Saving function supports only PSU_P 200V. Default is Disable. When the Power Saving function is used, it is necessary to set all partitions in the system from the UEFI menu as follows. ・ "Power Technology" is set to "Energy Efficient" or "Custom". ・ When "Power Technology" is set to "Custom", "Speed Step" is additionally set to "Enabled".

Items	Description
System Power Saving Threshold	Sets the power consumption threshold (Limit value) of entire system. Minimum value is 3200W. Maximum value is as shown below. · PRIMEQUEST 2400E3/2400E2/2400E : 8640W · PRIMEQUEST 2800E3/2800E22800/E : 8640W · PRIMEQUEST 2800B3/2800B2/2800B : 8640W Setting is possible only when System Power Save Control is Enable, gray-out at the time of disable. Default value is the maximum value of each model.

TABLE 1.155 [System Setup] window button

Buttons	Description
Apply	When items such as [Power Feed Mode] and [Power Restore Policy] are specified and [Apply] button is clicked, the information is set.
Cancel	When [Cancel] button is clicked, returns to the original status without setting the changed or input items.

(1) Menu Operation

[System] – [System Setup]

(2) Window Operations

Specify the items such as [Power Feed Mode] and [Power Restoration Policy] and click on the [Apply] button.

Respective information is set.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
E_00100	Failed to set the System Setup
W_00426	Invalid values specified.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

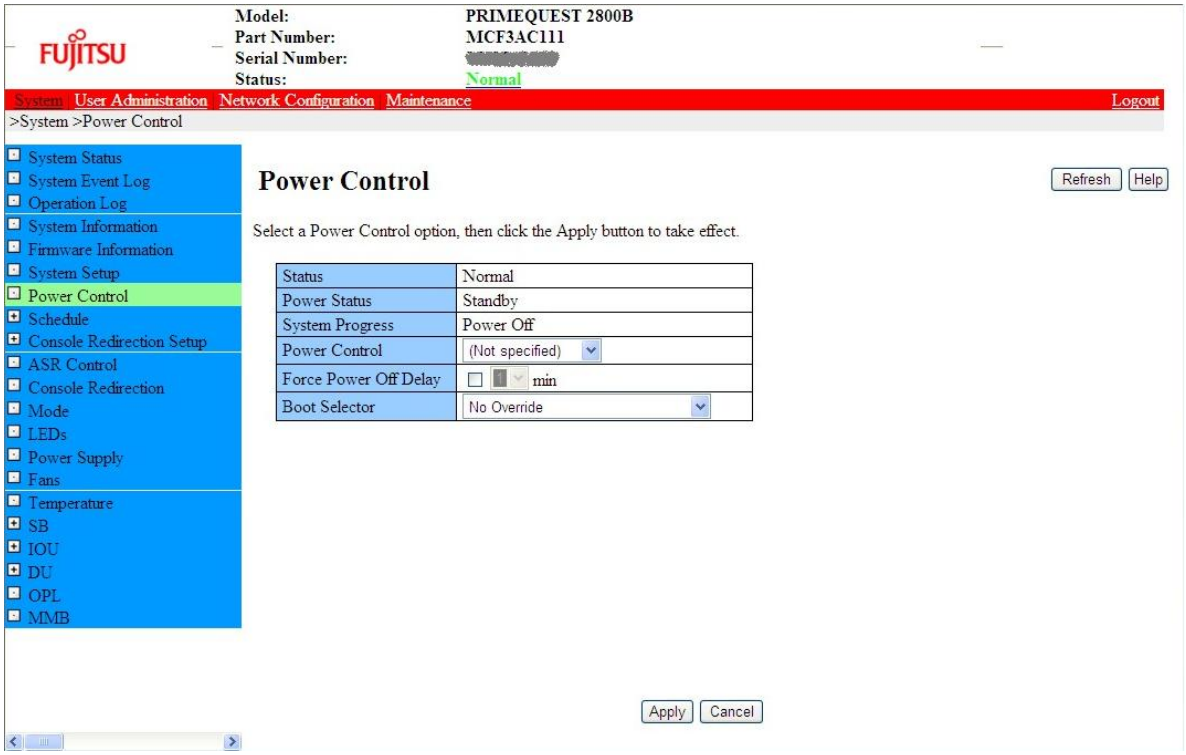
1.7.7 [Power Control] Window

[Power Control] window displays the power control of the system.

Remarks

When the operating system supports ACPI (Advanced Configuration and Power Interface), the power can be turned Off after the operating system is Shutdown by Power Off operation. If ACPI is not supported, power can be Off without the Shutdown of the operating system. Moreover, even if the operating system supports ACPI, and applications running on the operating system are not supported, sometimes power Off is not possible. Since these depend on the specifications of the operating system and applications, for details, refer to the operating system and application specifications.

FIGURE 1.132 [Power Control] Window



1. Select the process executed for the system from Pull-down menu of [Power Control].
   Then, click the [Apply] button.
   Dialog box for confirmation appears.

2. Click the [OK] button to execute the process.
   Click the [Cancel] button to cancel the process.

   When system Power is On, or when Power is Off, and when the specified control is failed, Warning dialog box appears.

When the CPU mounted on the SB of system is not matched at the time of specifying the Power On of system, Warning dialog box appears. Error occurs in the Power On operation.

TABLE 1.156 Display Items and Set Items of [Power Control] Window

Items	Description
Status	Displays the Status of the System. ・ Normal ・ Warning ・ Error
Power Status	Displays the Power Status of the System. ・ On ・ Standby
System Progress	The status of the partition progress is displayed. ・ Power Off: The partition power is off. ・ Power On In Progress: Partition power on is in process. ・ Reset: The status of the partition from the beginning of reset till the completion of the operating system boot. ・ EFI: The UEFI menu screen is displayed. ・ Boot: Operating system is being booted. ・ Operating system Running: Operating system running state ・ Operating system Shutdown: Operating system shutting down. ・ Panic: Panic (Only in RHEL) ・ Power Off In Progress: Partition power off is in process. ・ Fatal: Stopped. ・ Dumping: The dumping is being output. ・ Halt: Halting. **Remarks** ・ When SVAS (Server View Agentless Service) is not installed to system, the display is not switched over in ‘Operating system Running’ even if Operating system is working. Moreover, for ‘Operating system shutdown’, ‘Panic’ commanded by SVAS if SVAS (Server View Agentless Service) is not installed, there is no display. When REMCS Option is installed on Partition of RHEL, "Panic" is displayed. It is not displayed in Windows. SVAS : Specifies the piece of software running on the OS in managed nodes to help BMC with management. Unless SVAgent, it does not provide management interface to the outside.

Items	Description
Power Control	Selects power control specified for the system. However, for the system which is already in power-on state, [Power On] is not displayed. On the contrary, for the system which is already in powered off, [Power Off], [Reset], [NMI], [Power Cycle], [Force Power Off] and [sadump] are not displayed. ・ Power On: System is the powered on. ・ Power Off: System is powered off. From the view point of Operating system, it is same as that the power button of the device is on. Therefore, when the operating system supports the ACPI, power can be turned off after the operating system is shutdown. For details, see Power Specifications (ACPI) of the operating system. When the operating system does not support the ACPI, the power can be turned off without shutting down the operating system. ・ Power Cycle: Powered on again after the partition is forcibly powered on. ・ Reset: Resets the partition. ・ NMI: Produces the NMI interruption for the system. ・ Force Power Off: Turns off the power forcefully. ・ sadump: Specifies the SADUMP for the system. ・ (Not specified): There is no instruction for this system.
Force Power Off Delay	Specifies whether to enforce power off, when power off is done without proper operation of the shutdown instruction for the operating system by [Power Off] on the partition. In case enforced power off has been specified, the specified time (1~9 minutes) can be set. The system is forcibly powered off when the specified time has lapsed. The default setting of check box is Off.
Boot Selector	Specifies the boot device for which the Boot Manager setting of BIOS is Override temporarily. Select the device to be boot from pull-down menu. ・ No Override: Boots by the EFI Boot Manager settings. ・ Force boot into EFI Boot Manager: Waiting for input by the EFI Boot Manager. Boot by selecting the boot device from the EFI Boot Manager ・ Force PXE/iSCSI: Overrides the EFI Boot Manager settings, forcibly tries the PXE. ・ Force boot from DVD: Overrides the EFI Boot Manager settings, and forcibly tries the booting from the System DVD. Default setting is 'No Override'. This setting is applied only for the first system boot setting the value. After the system boots, this setting automatically returns to 'No Override'. Therefore, it is necessary to set the boot for system. In case of constant setting, it is set in the Boot Manager of the UEFI.

TABLE 1.157 [Power Control] Window Buttons

Buttons	Description
Apply	When you click the [Apply] button, the information of power control items is set. Confirm the setting contents if dialog box prompts for Confirmation.
Cancel	When you click the [Cancel] button, returns to source without setting the information of power control items corresponding to partition,.

Remarks

When the operating system supports the ACPI, the operating system can be shutdown by the above mentioned Power Off operation and the power can be turned off. When the operating system is not supported by the ACPI, the power is turned off without shutting down the operating system. Moreover, when the application which is operating in the operating system is not supported even if the operating system is supported by the ACPI, the power cannot be turned off. Since this is according to the operating system and application specifications, for details, see the Operating System and Application Manual.

(1) Menu Operation
[System] – [Power Control]

(2) Window Operations
1. Click the [Status Clear] button. Selects the power control items related to each partition from the pull-down list of [Power Control]. Then click the [Apply] button.
   Dialog box for setting confirmation appears.

2. Click [OK] button to execute the settings.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00141	Unable to power on the System.
E_00142	Unable to power off the System.
E_00002	Command Failed
E_00144	Unable to power off/on the System.
E_00145	Unable to reset the System.
E_00146	Unable to generate an NMI interrupt in the System.
E_00143	Unable to forcibly power off the System.
E_00091	Force Power Off Delay setting failed.
E_00xxx	Unable to power on the system due to CPU mismatch between SBs.
E_00154	Unable to power on due to mismatch between supply voltage and input voltage.
I_00151	Unable to control system power because maintenance is in progress. Release maintenance mode first.
E_00xxx	Unable to power on the system due to CPU composition abnormal.
E_00xxx	Unable to power on the system due to DIMM composition abnormal.
E_00xxx	Unable to power on the system due to DIMM does not satisfy requirements of Mode.
W_00504	The Power On failed, because of switching the Home SB. Please execute it after a while again.
E_00xxx	Unable to power on the system due to abnormal SB composition.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.7.8 [Schedule] Menu

The [Schedule] menu has the [Schedule Control] and [Schedule List] windows. This section describes the windows and the operation.

Note

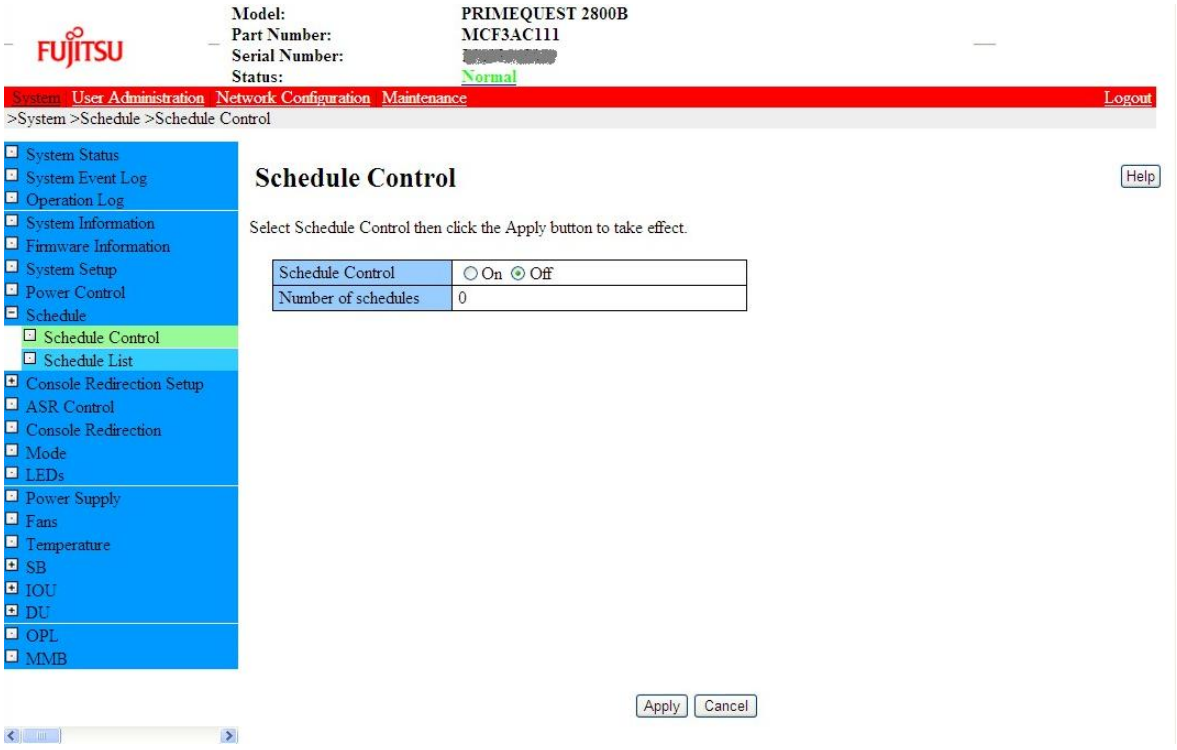
As mentioned below, there may be a delay in the time recorded in SEL compared to the time reserved for scheduled operations.

- After checking the configuration and after performing the start up preparation process, it takes some time until the power is ON. In this case, the SEL display is delayed about from six seconds up to 8 seconds than the time reserved for the scheduled operations.
- The shutdown instructions from MMB to OPERATING SYSTEM take certain time from the set time. However, the following interval times may be changed under the various conditions like setting and the configuration.
- Interval time until shutdown instructions reaches OS from MMB.
- Interval time until MMB notifies SEL begin shutdown after OS begins shutdown.
- Even if the [Power on Delay] is 0 seconds, it takes about 30 seconds ~ 70 seconds from starting the power on up to the reset.

1.7.8.1 [Schedule Control] window

In the [Schedule Control] window, the setting related to the schedule can be set for system.

FIGURE 1.133 [Schedule Control] Window



If the maintenance work (either Hot System Maintenance, Warm System Maintenance or Cold System Maintenance) of the system executed in the schedule execution time, the scheduled operation does not execute the power operation of the system.

If the schedule overlaps on the same day, it is processed according to the following priority levels.

Special > Monthly > Weekly > Daily

- Daily: Schedule executed every day
- Weekly: Schedule executed every week
- Monthly: Schedule executed every month
- Special: Schedule executed on specific day every year

Moreover, if the Power On and Power Off is specified at the same time, the priority is given to Power Off.

Because System does not do Power On in Power On Delay, Schedule Power Off is disregarded. Moreover, when OS does not accept the Shutdown demand, Power Off is not done.

TABLE 1.158 Display Items and Setting Items of [Schedule Control] Window

Items	Description
Schedule Control	Sets whether schedule operation is done for system. ・ On ・ Off Default setting is Off.
Number of schedules	Displays the number of schedules that are set.

TABLE 1.159 [Schedule Control] Window Buttons

Buttons	Description
Apply	When the [Apply] button is clicked, the schedule operation information for the system is set.
Cancel	When the [Cancel] button is clicked, the browser returns to the original status without setting the schedule operation information for the system.

(1) Menu Operation

[System] - [Schedule] - [Schedule Control]

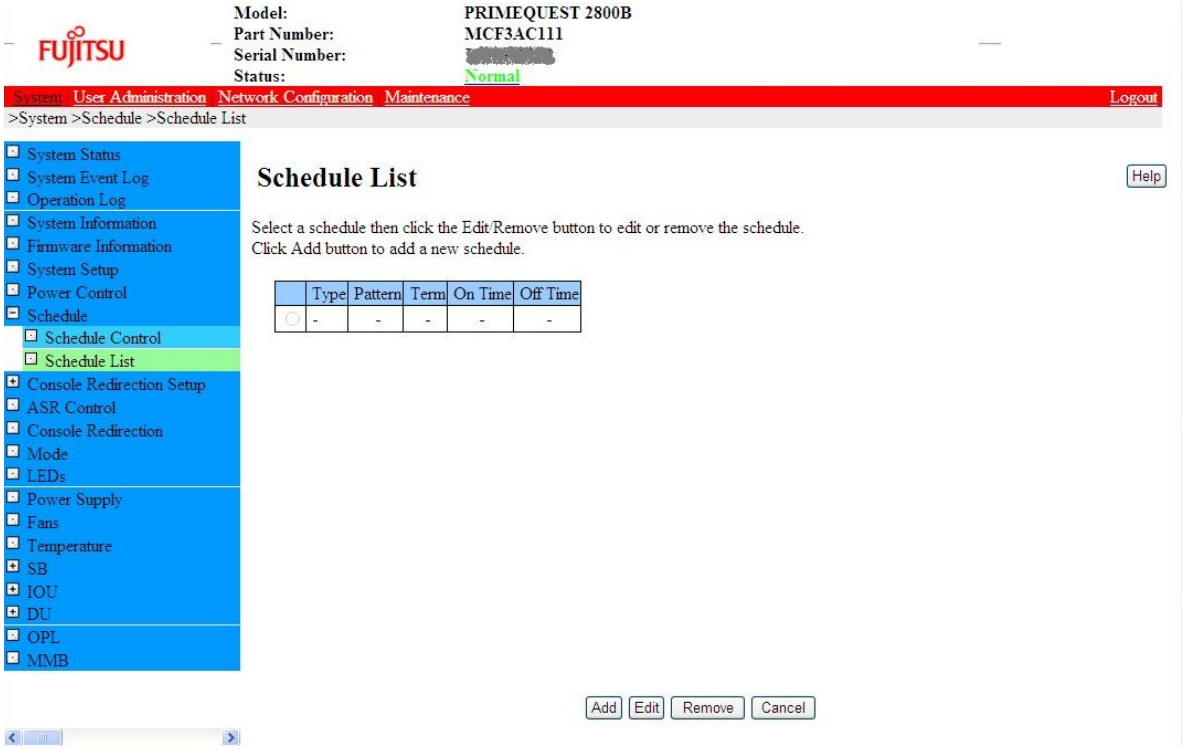
(2) Window Operations

1. Specifies whether schedule operation has to be carried out by Radio button for system.
2. Click the [Apply] button.

1.7.8.2 **[Schedule list] Window**

Up to 1000 instances of system power On / Off schedule can be recorded in the [Schedule list] Window.

FIGURE 1.134 [Schedule List] Window



Schedule will appear in chronological order of the start date of the period.
If the start date are the same, the schedule appears in the sequence in which it is listed.

Remarks
If the Type is Weekly, the start date is considered to be “Oneday”.

TABLE 1.160 Display Items and Set Items of [Schedule List] Window

Items	Description
	Select the schedule to be edited or removed.
Type	Displays the type of schedule set in the system. ・ Daily: Select when you want to execute every day ・ Weekly: Select when you want to execute every week ・ Monthly: Select when you want to execute every month ・ Special: Select when you want to execute on a particular day every year. If the schedule overlaps on the same day, it is processed according to the following priority order. Special > Monthly > Weekly > Daily
Pattern	Displays the schedule pattern corresponding to the type of the schedule. Days of week in Weekly (Sun ~ Sat) The period in Monthly The specific month and day in Special
Term	Displays the period of the schedule according to the type and the pattern of the schedule. ・ Daily: Starting month and date and ending month and date. ・ Weekly: Starting month and ending month. ・ Monthly: Starting month and ending month. Default setting is as follows ・ Daily: From: Jan / 1 To: Jan / 1 Note --- It is executed only on January 1. ・ Weekly: From: Jan To: Jan Note --- It is executed only in January. ・ Monthly: From: Jan To: Jan Note --- It is executed only in January.
On Time	Displays the time when the process of Power On is executed on the specified execution day. Time specifies 24 hours. Minute indicates the interval of 10 minutes, as 00, 10, 20, 30, 40, and 50.
Off Time	Displays the time when the process of Power Off is executed on the specified execution day. Time indicates 24 hours. Minute indicates the interval of 10 minutes, as 00, 10, 20, 30, 40, and 50.

TABLE 1.161 [Schedule List] Window Buttons

Buttons	Description
Add	If [Add] button is clicked, [Add Schedule] window appears and the schedule can be added.
Edit	If [EDIT] button is clicked, [Edit Schedule] window appears and the schedule can be changed.
Remove	If [Remove] button is clicked, the selected schedule can be deleted.
Cancel	If [Cancel] button is clicked, the browser returns to the previous window.

(1) Menu Operation

[System] - [Schedule] - [Schedule List]

(2) Window Operations

・ If the schedule is to be added newly

1. Click [Add] button.
   [Add/Edit Schedule] window appears.
2. Add the schedule to the [Add/Edit Schedule] window.

・ If the schedule is to be changed

1. Select an existing schedule with [Radio] button.
2. Click [Edit] button.
   [Add/Edit Schedule] window appears.
3. Changes an existing schedule in [Add/Edit Schedule] window.

・ If the schedule is to be deleted

1. Select the schedule with [Radio] button.
2. Click [Remove] button.
   The confirmation dialog box appears.
3. Click [OK] button.
   Deletes the schedule.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
E_00412	You need an empty entry.
W_00413	Nothing is selected.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.7.8.3 [Add Schedule] window/ [Edit Schedule] window

In [Add Schedule] window, the schedule of Power On / Off for each partition, can be added newly.
In [Edit Schedule] window, an existing schedule can be changed.

The window items of [Add Schedule] window and [Edit Schedule] window are common.

In this section, an explanation is given by using the [Add Schedule] window.

FIGURE 1.135 [Schedule List] Window

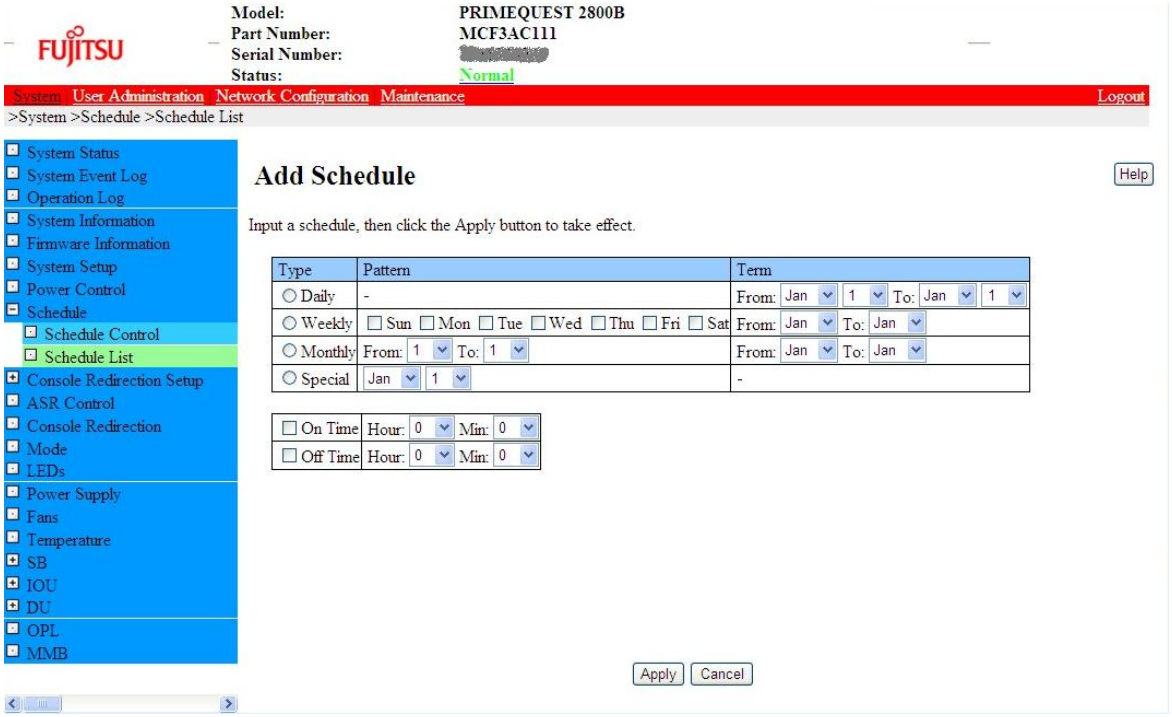


TABLE 1.162 Display Items and Set Items of [Add Schedule] Window

Items	Description
Type	Select the types of schedule to be set in the system. ・ Daily: Select when you want to execute every day ・ Weekly: Select when you want to execute every week ・ Monthly: Select when you want to execute every month ・ Special: Select when you want to execute on a particular day every year. (The useful range of Special becomes only a specified day.) If the schedule overlaps on the same day, it is processed according to the following priority order. Special > Monthly > Weekly > Daily By default, it is not selected.
Pattern	Specify the schedule pattern corresponding to the types of the schedule. ・ Weekly : Day in a week (Sun ~ Sat) ・ Monthly: Period in a month ・ Special: Specified month Default settings are as follows. ・ Day in a week: Not selected ・ Period: From : 1 To: 1 ・ Specified date: Jan/1
Term	Specify the period of the schedule according to the type and pattern of the schedule. ・ Daily: Starting month and date, and ending month and date ・ Weekly: Starting month and ending month ・ Monthly: Starting month and ending month Default settings are as follows. ・ Daily: From: Jan / 1 To: Jan / 1 ・ Weekly: From: Jan To: Jan ・ Monthly: From: Jan To: Jan
On Time	On the specified execution date, set whether the power-supply is to be turned ON. If the power-supply is to be ON, set the time. Time is specified in24 hours. Minute specifies the interval of 10 minutes as 00, 10, 20, 30, 40, and 50.
Off Time	Set whether the power-supply is OFF on the specified execution date. If the power-supply is OFF, set the time. Time is specified in 24 hours. Minute is specified in the interval of 10 minutes, as 00, 10, 20, 30, 40, and 50.

TABLE 1.163 [Add Schedule] Window Buttons

Buttons	Description
Apply	If the [Apply] button is clicked, the schedule information specified in each item is applied to the partition.
Cancel	If the [Cancel] button is clicked, returns to the original sate without applying the schedule information specified in each item.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
I_00013	Setting completed.
W_00414	Invalid Date Format
W_00415	The duplicate On/Off Time is found.
W_00416	Both On/ Off Time are disabled.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.7.9 [Console Redirection Setup] Menu

There are following windows in the [Console Redirection Setup] menu.
☐[IPv4 Console Redirection Setup] window
☐[IPv6 Console Redirection Setup] window

1.7.9.1 [IPv4 Console Redirection Setup] window

The IP address settings for accessing Console Redirection Setup of IPv4, subnet mask, video redirection and enable/disable settings of virtual media can be done in the [IPv4 Console Redirection Setup] window.

FIGURE 1.136 [IPv4 Console Redirection Setup] Window

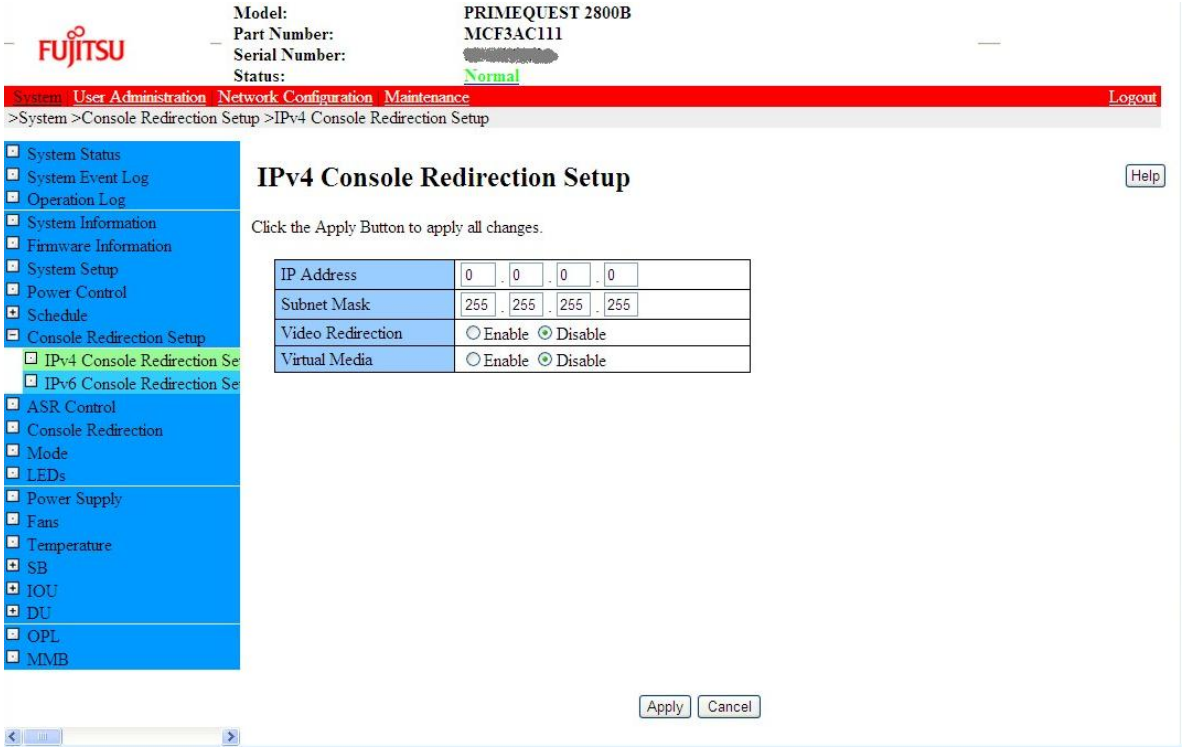


TABLE 1.164 Display Items and Set Items of [IPv4 Console redirection Setup] Window

Items	Description
IP Address	Enters the IP address for the Console Redirection of the partition. Specify an IP address of the same segment as the virtual IP address used to access the MMB Web-UI (see "1.5.2 [Network Interface] Menu"). Note that this IP address must be different from that virtual IP address. Default is 0.0.0.0.
Subnet Mask	Enters the subnet mask for the Console Redirection IP of the partition. Default is 255.255.255.255.
Video Redirection	Sets whether video redirection can be used. ・ Enable: Video redirection can be used. ・ Disable: Video redirection cannot be used. Default is Disable
Virtual Media	Sets whether virtual media can be used. ・ Enable: Virtual media can be used. ・ Disable: Virtual media cannot be used. Default is Disable.

TABLE 1.165 [IPv4 Console redirection Setup] Window Buttons

Buttons	Description
Apply	When [Apply] button is clicked, video redirection, virtual media settings of the system are applied.
Cancel	When [Cancel] button is clicked, video redirection, virtual media settings are not applied and it returns to the original state.

(1) Menu Operation

[System] - [Console Redirection Setup] - [IPv4 Console Redirection Setup]

(2) Window Operations

1. IP address and the subnet mask are entered and it is set whether video redirection, virtual media can be used.
2. [Apply] button is clicked.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00432	Invalid IP Address specified
W_00433	The duplicate IP address was found.
I_00417	Are you sure?

1.7.9.2 [IPv6 Console Redirection Setup] window

The IP address settings for accessing Console Redirection LAN of IPv6, prefix length settings, video redirection and enable/disable settings of virtual media can be done in the [IPv6 Console Redirection Setup] window.

In case of automatic settings, when [Auto] button is clicked, IP address, prefix length are automatically acquired.

FIGURE 1.137 [IPv6 Console Redirection Setup] Window

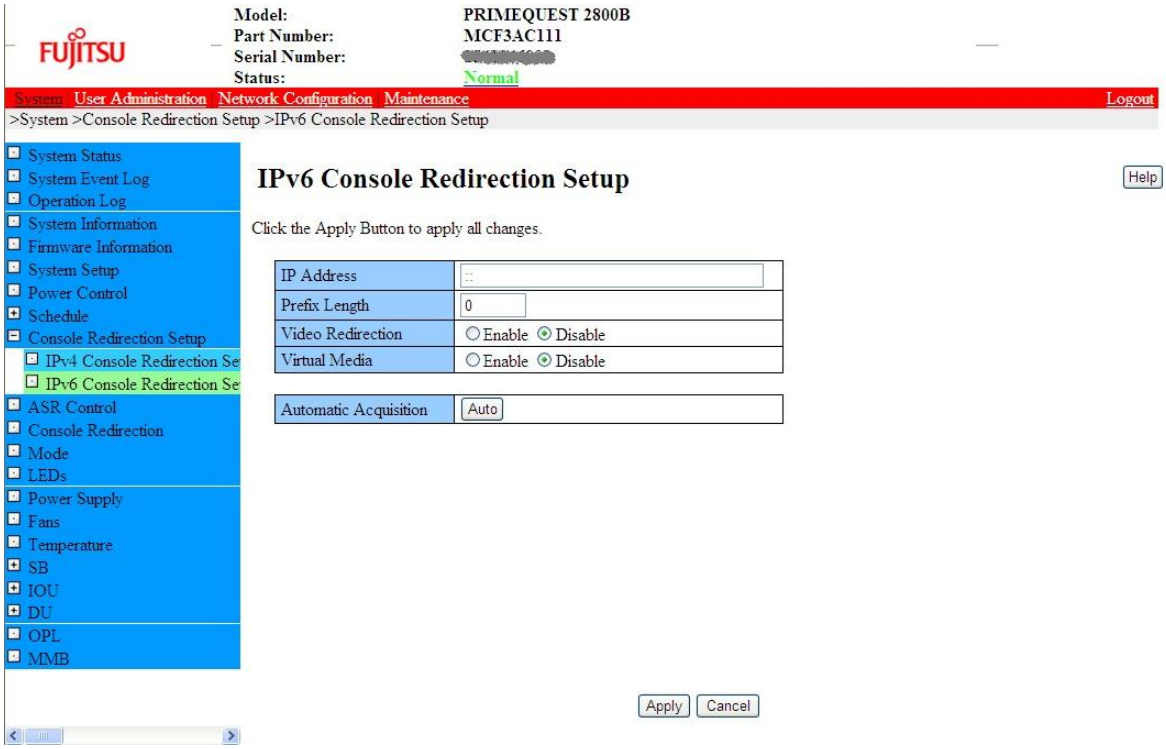


TABLE 1.166 Display Items and Set Items of [IPv6 Console redirection Setup] Window

Items	Description
IP Address	Enters the global address for IPv6 which can be connected. In case of automatic acquisition, the acquired IP Address is displayed.
Prefix Length	Enters the prefix length for IPv6. In case of automatic acquisition, the acquired prefix length is displayed.
Video Redirection	Sets whether video redirection can be used. ・ Enable: Video redirection can be used. ・ Disable: Video redirection cannot be used. Default is Disable.
Virtual Media	Sets whether the virtual media can be used or not. ・ Enable: Virtual media can be used. ・ Disable: Virtual media cannot be used. Default is Disable.
Automatic acquisition	When IPv6 address is automatically acquired, the "Auto" button is clicked. IP address and prefix length are automatically acquired and overwritten.

TABLE 1.167 [IPv6 Console redirection Setup] Window Buttons

Buttons	Description
Auto	When you Click [Auto] button IP address and prefix length is automatically displayed.
Apply	When you click the [Apply] button, video direction of the system, virtual media setting is applied.
Cancel	When you click the [Cancel] button, virtual media setting, video redirection is not applied and it returns to the original state.

(1) Menu Operation

[System] - [Console Redirection Setup] - [IPv6 Console Redirection Setup]

(2) Window Operations

1. Input the IP address, prefix length and sets whether video redirection and virtual media should be used.
2. Click the [Apply] button.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00432	Invalid IP Address specified
W_00433	The duplicate IP address was found.
I_00417	Are you sure?

1.7.10 [Power Management Setup] Window

In the [Power Management Setup] window, Power Saving can be set in the system.

Power Saving can be set only when the Power save Control as system is Enable.

When the System Power Save setting is Disable, then the display of this screen is shown as gray and cannot be set.

FIGURE 1.138 [Power management Setup] window

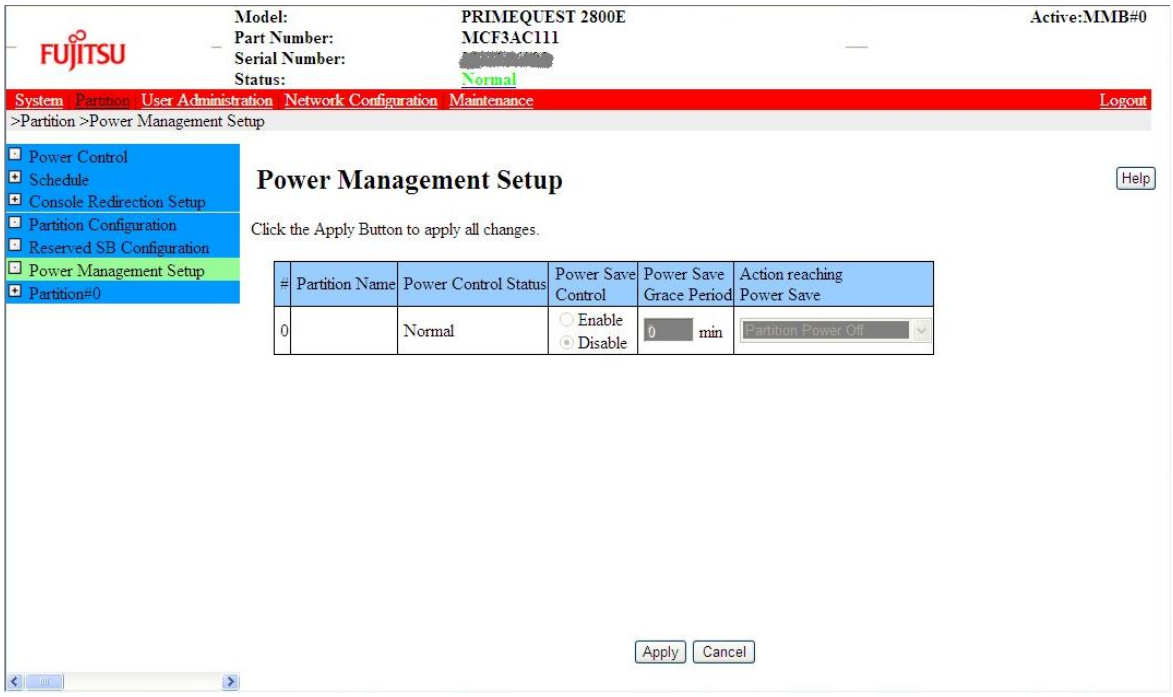


TABLE 1.168 Display Items and Set Items of [Power Management Setup] Window

Items	Description
Power Control Status	Displays the operating state of power control status of system. ・ Normal: Normal operating state. Shows that the operating rate suppression function for limitation of the electric power consumption is not working. ・ Power Saving: Shows that the operating rate is being suppressed
Power save Grace Period	Sets shutdown waiting time in Power Save Grace Period System when the Limit threshold is exceeded. Specified in the range of 0 ~ 99 minutes. Shows a valid item when Power Save Control of system is Enable and shows gray color when Disable. Default is 5 minutes.
Action reaching Power Save	Executes the operation setting in the system after the Limit threshold excess stand-by time. ・ Continue: Continues operation for the system under operation. ・ Power Off: Power Off is done for the system under operation. ・ Force Power Off: Force Power Off is done for the system under operation. Displays a valid item when Power Save Control of system is Enable and displays gray color in case of Disable. Default is Power Off

TABLE 1.169 [Power Management Setup] Window Buttons

Buttons	Description
Apply	The setting of the Power Management Setup is changed.
Cancel	Returns to the original state without changing the setting of the Power Management Setup.

(1) Menu Operation

[System] - [Power Management Setup]

(2) Window Operations

1. Set the items for changing the settings of the Power Management Setup and click the [Apply] button.
   Set the connection.

1.7.11 [ASR Control] Window

The conditions for executing automatic restart of the system on the [ASR (Automatic Server Restart) Control] can be set.

FIGURE 1.139 [ASR (Automatic Server Restart) Control] Window

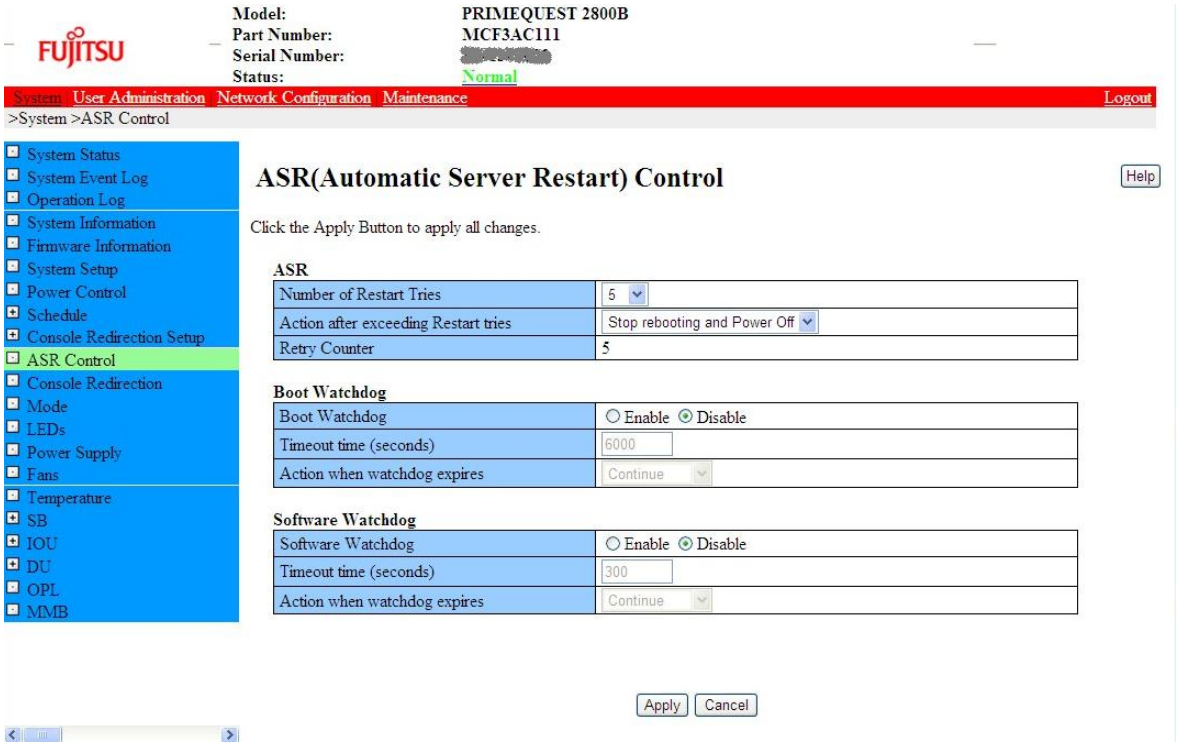


TABLE 1.170 Display Items and Set Items of [ASR (Automatic Server Restart) Control] Window

Items	Description
Number of Restart Tries	Set the number of retries for restarting the operating system when there is time out by Boot Watchdog, or Software Watchdog of SVAS, or the hardware error occurs and OS shuts down. The number of times can be set up to 0-10 times. When 0 is specified, it does not retry. Default is five times.
Action after exceeding Restart tries	Repeat the restart by Watchdog Timeout and sets the action when the above-mentioned retry number is exceeded. The actions are as below. ・ Stop rebooting and Power Off: Reboot process is stopped, power supply of partition is cut off. ・ Stop rebooting: Reboot process is stopped, and the system is stopped. ・ Diagnostic Interrupt assert: Reboot process is stopped, instructs the NMI interruption for system. Tries to collect the data for investigation (damp) for the investigating the cause of stoppage, of the system which has stopped. Default setting is 'Stop rebooting and Power Off'
Retry Counter	Displays the number of actual possible retries.

TABLE 1.171 [ASR (Automatic Server Restart) Control] Window Buttons

Buttons	Description
Apply	Sets the information if [Number of Restart Tries] [Action after exceeding Restart tries] are specified. If [Cancel Boot Watchdog] is selected as On, Boot Watchdog is cancelled.
Cancel	Does not set the information and returns to the original state.

(1) Menu Operation

[System] - [ASR Control]

(2) Window Operations

1. Every item is set.
2. [Apply] button is clicked.
   Specified information is set. Also, if the [Cancel Boot Watchdog] check box is selected as On, Boot Watchdog is cancelled.

1.7.12 [Console Redirection] Window

If the Console Redirection screen is selected when it enabled, the Video Redirection screen on the BMC is displayed in another window.
If the settings in [Console Redirection setup] Window are Disabled, check box cannot be Checked.
The check box can be selected by making the setting of Video Redirection Enable on either [Console Redirection Setup] screen of IPv4 or IPv6 when Console Redirection is used from CE Port.

FIGURE 1.140 [Console Redirection] Window

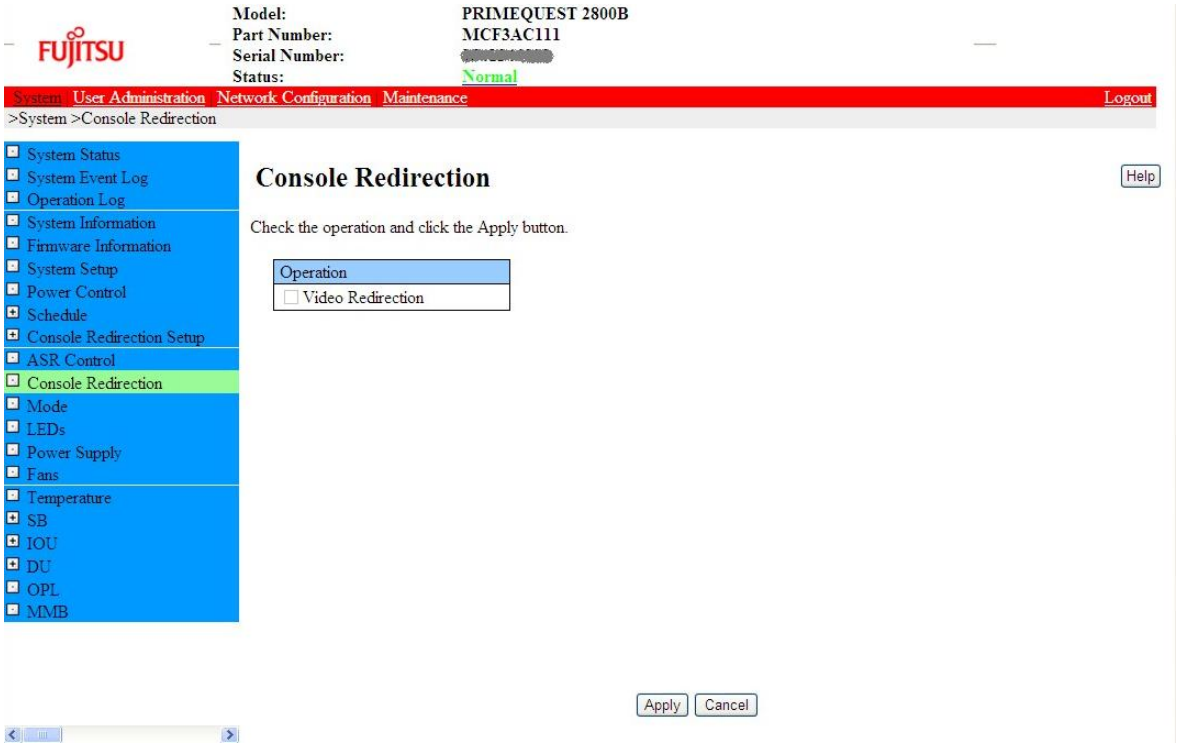


TABLE 1.172 Display Items of [Console Redirection] Window

Items	Description
Video Redirection	Displays the Video Redirection on the BMC side. On the Console Redirection Setup window, selection is possible only when Enabled; when Disabled, the check box cannot be checked.

(1) Menu Operation
[System] – [Console Redirection]

(2) Window Operations
None

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
W_00413	Nothing is selected.
W_00472	Unable to get the reserved WEB Session information due to WEB Session Max over.
W_00473	Unable to check the Video Redirection check box due to the Video Redirection option is disabled.
I_00151	Unable to control system power because maintenance is in progress. Release maintenance mode first.
I_00417	Are you sure?
W_00541	Nothing is checked.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.7.13 [Mode] Window

Various modes can be set for system in [Mode] window. In order to reflect the set value, turn Off the power of system and then it is necessary to turn On the Power of system once again.

FIGURE 1.141 [Mode] Window (PRIMEQUEST 2800B2/2800B)

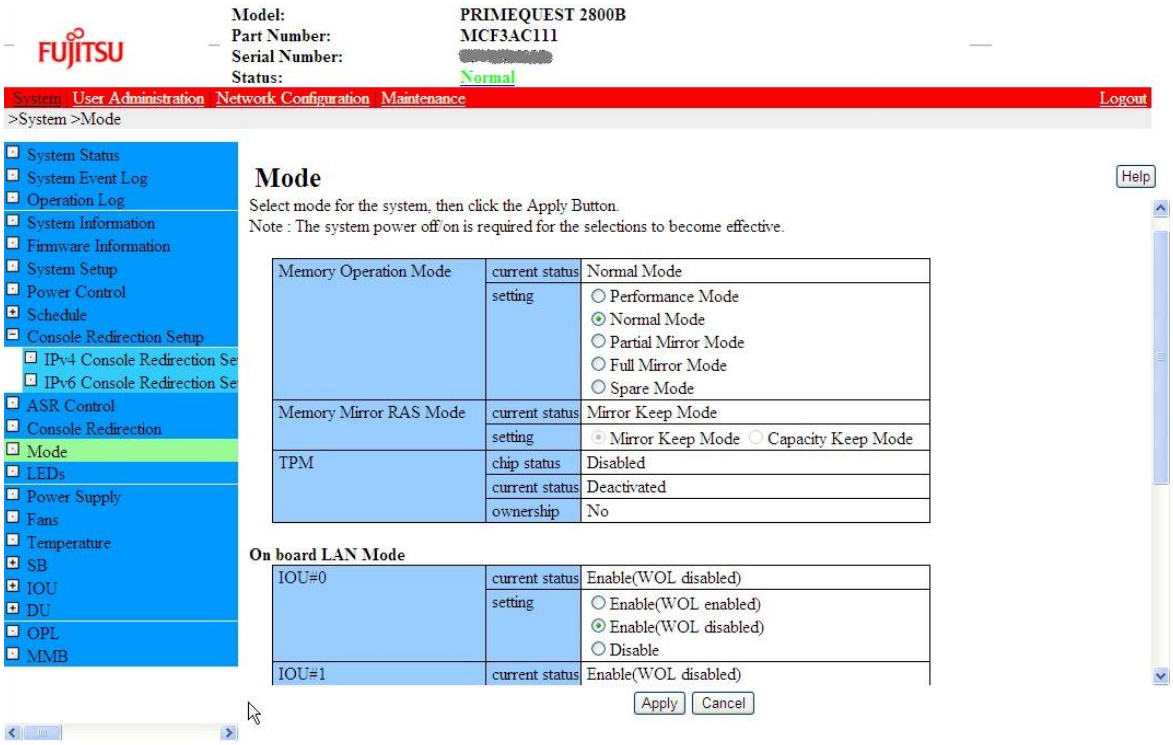
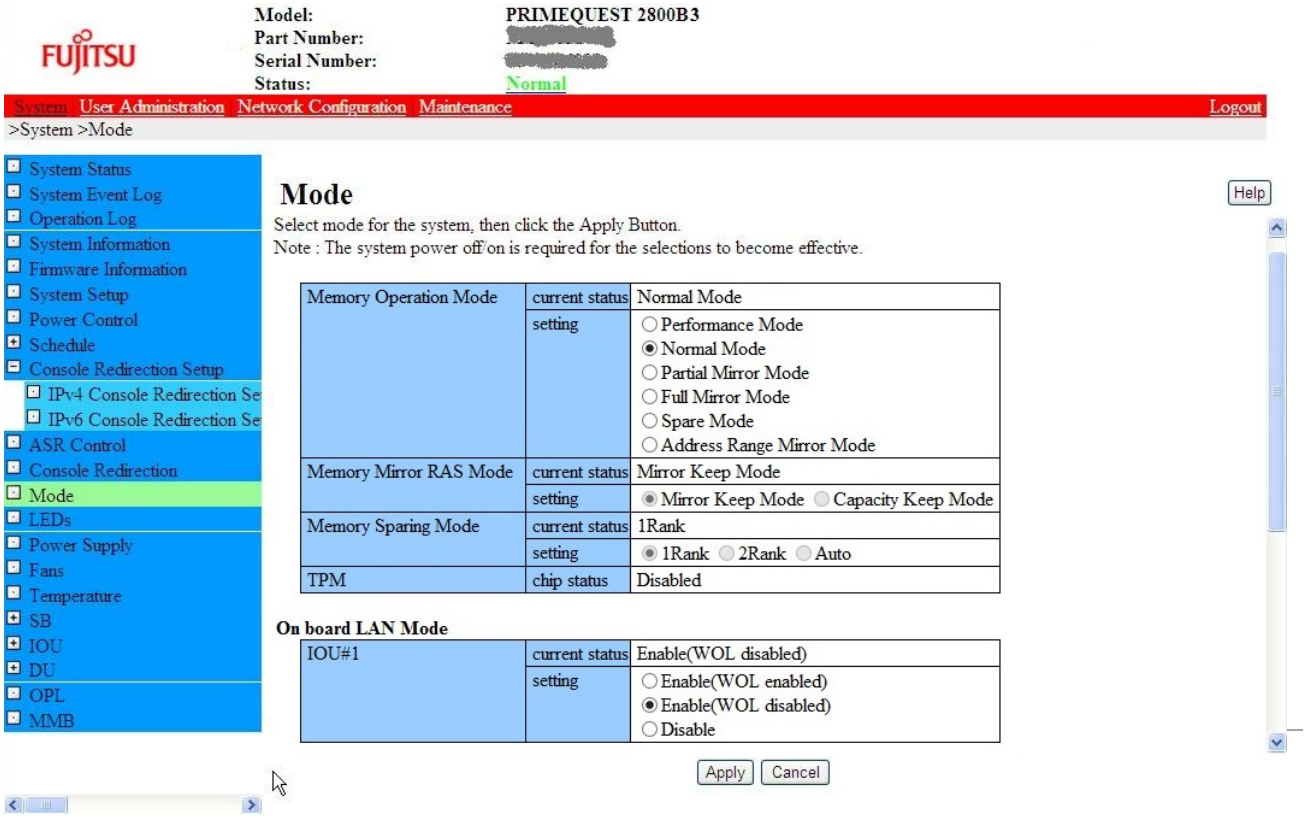


FIGURE 1.142 [Mode] Window (PRIMEQUEST 2800B3)



When the [Apply] button is clicked while the system is powered on, a warning dialog box “W_00487 Unable to change the mode, because this system is powered on” is displayed.

When the system is already powered off, the settings are reflected without displaying the dialog box.

The LAN Device Mode is displayed in IOU Unit comprised in the partition specified by the LAN Device Mode. For settings, select LAN Device Mode in the IOU Unit, with the radio button and click the [Apply] button.

TABLE 1.173 Display Items and Setting Items in [Mode] Window

Items	Description
Memory Operation Mode (Current)	Displays the currently enabled Memory Operation Mode. ・ Performance Mode: Displays the settings to the Performance Mode. ・ Normal Mode: Displays the settings to the Normal Mode. ・ Partial Mirror Mode: Displays the settings to the Partial Mirror Mode. ・ Full Mirror Mode: Displays the settings to the Full Mirror Mode. ・ Spare Mode: Displays the settings to the Spare Mode. ・ Address Range Mirror Mode : Displays the settings to the Address Range Mirror Mode(This item is displayed in PRIMEQUEST 2800B3.)
Memory Operation Mode (setting)	Sets the Memory Operation Mode for system. ・ Performance Mode ・ Normal Mode ・ Partial Mirror Mode ・ Full Mirror Mode ・ Spare Mode ・ Address Range Mirror Mode(This item is displayed in PRIMEQUEST 2800B3.) Enables the settings after rebooting the system. Default setting is Normal Mode.
Memory Mirror RAS Mode (current status)	Displays the Memory Mirror of currently enabled Mode. ・ Mirror Keep Mode: Shows the maintenance of Mode. ・ Capacity Keep Mode: Shows maintenance of memory capacity.
Memory Mirror RAS Mode (setting)	Sets the Memory Mirror Mode for system. ・ Mirror Keep Mode ・ Capacity Keep Mode Enables the settings after rebooting the system. As these items are enabled only when the Full Mirror Mode or Partial Mirror Mode is set, when the rest isset, they are disabled. Default setting is Mirror Keep Mode.
Memory Sparing Mode (current status) (This item can be available in the PRIMQUEST 2800B3/2800B2)	Displays the Memory Sparing currently enabled Mode. ・ 1 Rank: 1Rank or less is allocated in Spare Memory. ・ 2 Rank: 2Rank or less is allocated in Spare Memory. ・ Auto: Spare Memory is allocated by the automatic operation.
Memory Sparing Mode (setting) (This item can be available in the PRIMQUEST 2800B3/2800B2)	Sets the Memory Sparing Mode for partition. ・ 1 Rank ・ 2 Rank ・ Auto Enables the settings after rebooting the partition. As these items are enabled only when the Spare Mode is set, when Spare Mode is not set, they are disabled. Default setting is1 Rank.

Items	Description
TPM (chip status)	Displays whether TPM function is Enabled or Disabled. ・ Enabled (TPM is enabled) ・ Disabled (TPM is disabled) **Remarks** When Home SB is 'without TPM mode', this field is not displayed. (TPM1.2/2.0 is supported for PRIMEQUEST 2800B3.) (Only TPM1.2 is supported for PRIMEQUEST 2800B2/2800B.)
TPM (current status)	Displays the TPM status. ・ Activated ・ Deactivated **Remarks** When Home SB is 'without TPM mode', this field is not displayed. This item is displayed only at time equipped with TPM1.2.
TPM (ownership)	Displays ownership of TPM. ・ Yes (having Ownership) ・ No (not having Ownership) **Remarks** When Home SB is without TPM mode, this field is not displayed. This item is displayed only at time equipped with TPM1.2.
IOU	Displays the IOU that belongs to the system.
On board LAN Mode (current status)	Displays the On board LAN Mode in IOU Unit. ・ Enabled (WOL enabled): Onboard LAN can be used at AC On status. ・ Enabled (WOL disabled): Onboard LAN comprised in the system can be used at Power On status. ・ Disabled: Onboard LAN cannot be used every time.
On board LAN Mode (setting)	Sets On board LAN Device Mode in IOU Unit. Select the Mode to be set by using the radio button. ・ Enabled(WOL enabled) ・ Enabled(WOL disabled) ・ Disabled Default setting is Enabled (WOL disabled).

TABLE 1.174 Display/non-display of TPM item by status of the system

		Status of the System		
		Before first System Pon after AC on	System Running	System off
PRIMEQUEST 2800B3	SB without TPM	No	No	No
	SB with TPM	No	Yes	Yes
PRIMEQUEST 2800B2/2800B	SB without TPM	No	No	No
	SB with TPM	Yes	Yes	Yes

Yes : Display
No : Non-display

(1) Menu Operation

[System] - [Mode]

(2) Window Operations

1. Specify respective Mode and click the [Apply] button.
   Confirmation dialog box is displayed.
2. Click the [Ok] button.

[Message]

This section describes the messages to be displayed on this window.

Message Number	Message
E_00089	Mode setting failed.
E_00090	Power Control [Reset] setting failed.
E_00xxx	Unable to register the system as Mode enable because the DIMM does not satisfy requirements of Mode.
W_00xxx	Unable to change the mode, because the system is powered on.
E_00xxx	Unable to register the system as Mode enable because the CPU mismatch between SBs.
E_00xxx	Unable to register the system as Mode enable because the unsupported CPU configuration.
E_00xxx	Unable to register the system as Mode enable because of abnormal CPU composition.
E_00xxx	Unable to register the system as Mode enable because of abnormal DIMM composition.
E_00xxx	Unable to register the system as Mode enable because of abnormal SB composition.

For details on the messages displayed on the window, see *PRIMEQUEST 2000 Series Message Reference* (CA92344-0540).

1.7.14 [SSD Life Cycle Management] Window

PCIe-SSD is installed in IOU or one PCI_Box or more, and the partition including the card is displayed and when ServerView Agentless Service(SVAS) or classic Agent(SVAgent + SVRaid) is operating in the state of OS Running, the writing volume of data of SSD is displayed.

Refer to chapter "1.3.9.5" for the screen and the display.

1.7.15 [SB] Menu

[SB] Menu consists of the menus in each SB unit.
The menu of uninstalled SB is not displayed.
The format of window and operating method are same for each menu, therefore only one menu is explained here.

☐ [SB#x] Window

[SB#x] window displays the status of SB#x board and the settings of SB#x board can be carried out.

FIGURE 1.143 [SB#x] Window (1)

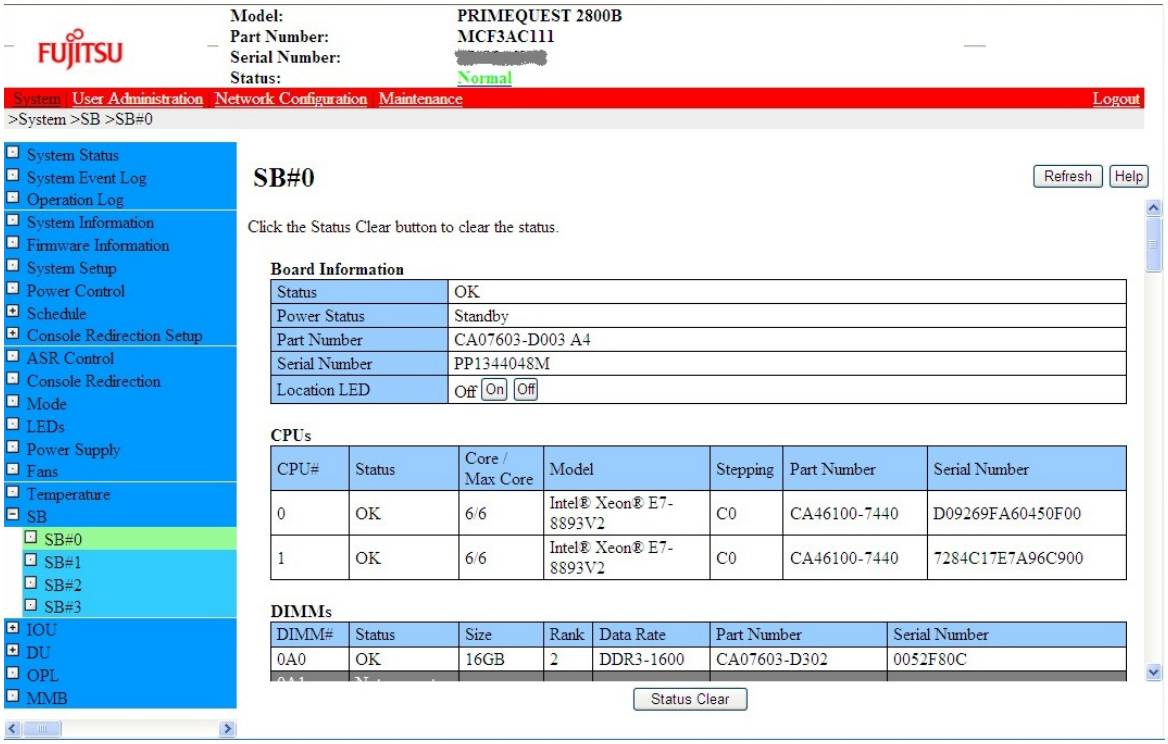


FIGURE 1.144 [SB#x] Window (2)

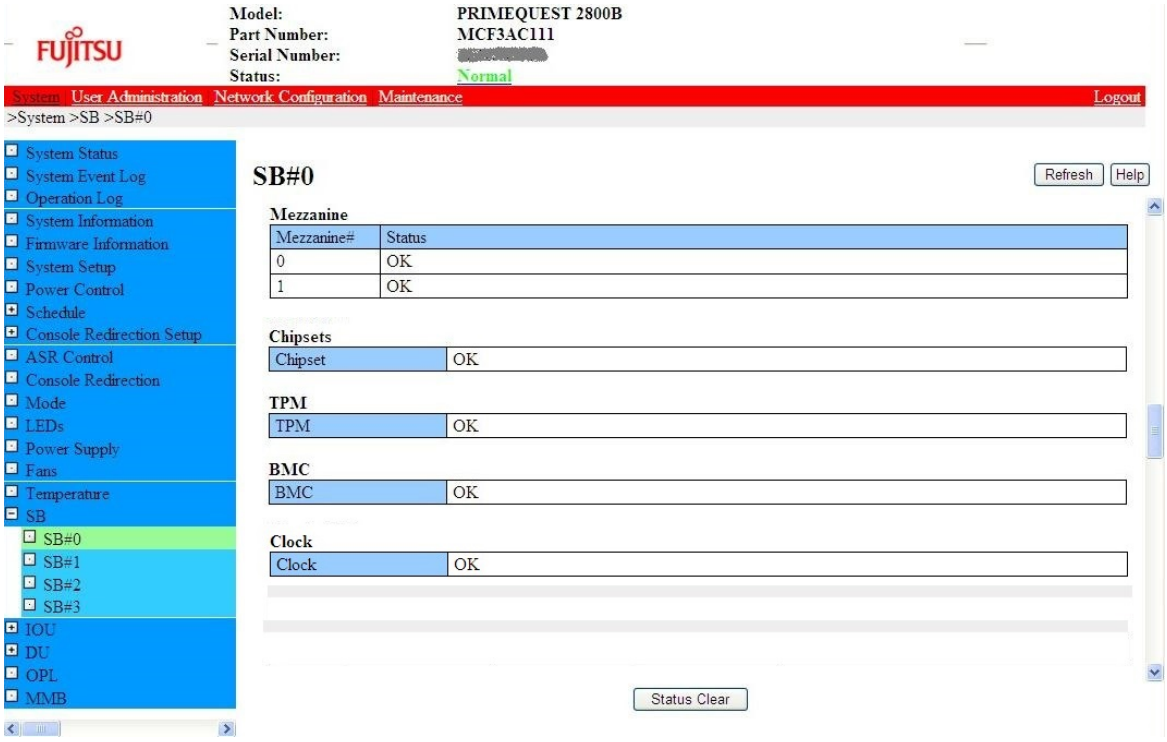


FIGURE 1.145 [SB#x] Window (3)

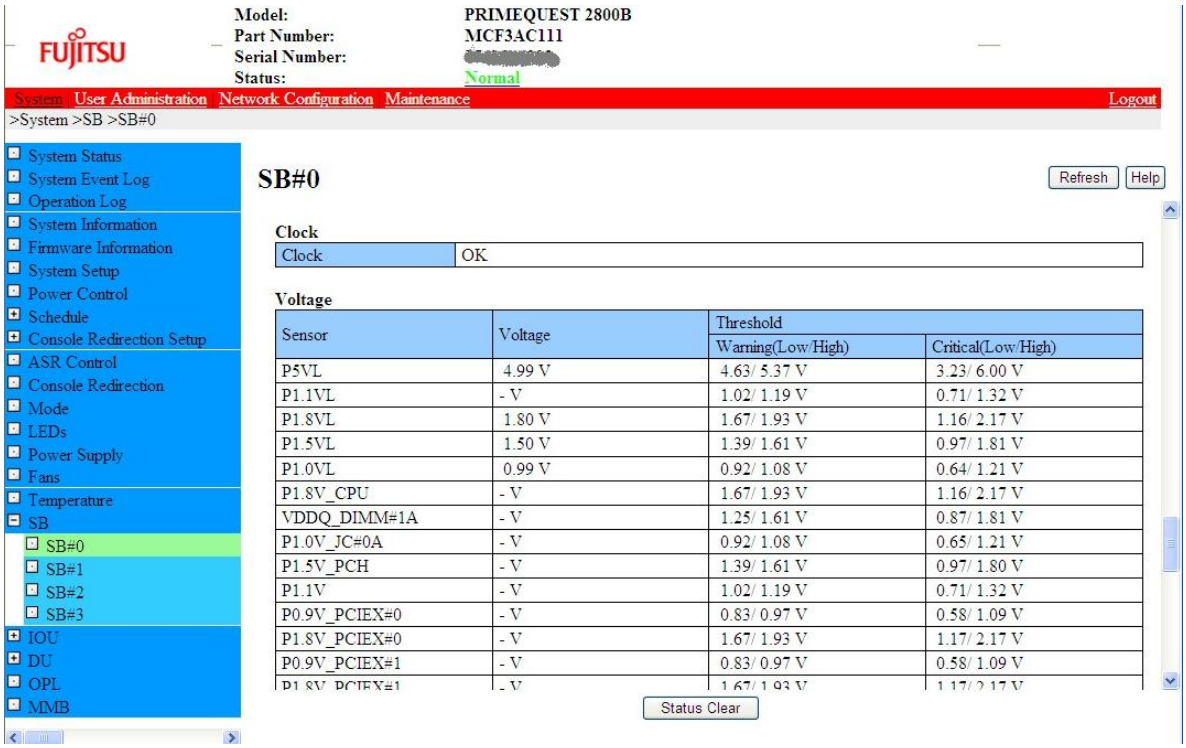


FIGURE 1.146 [SB#x] Window (4)

FIGURE 1.147 [SB#x] Window (5)

The CPU and DIMM row that is not mounted is displayed in gray background.
The [Status clear] button and a message [Click the Status Clear Button to clear the status.] are not displayed for a user who does not have setting privileges.

TABLE 1.175 Display and Setting items on [SB#x] Window

Items		Description
Board Information		
Status		Displays the status of SB. · OK: No fault on the SB. · Not-present: The SB is not mounted. · Warning: Warning is detected by the voltage sensor on the SB. · Degraded: Error has occurred in a component on the SB. However, the SB can be operated by disconnecting the faulty components. · Failed: A fault has occurred in the SB, and the SB must be disconnected, or the SB has been disconnected. · Unsupported: In case there is an SB which is not supported by the MMB.
Power Status		Displays the power status of the SB. · On: On status · Standby: Standby status
Part Number		Displays the part number of the SB
Serial Number		Displays the serial number of the SB
Location LED		Indicates the display status of the Location LED. The display status consists of the following conditions. · On: The light is on · Off: The light is off On, Off and blinking of the Location LED can be controlled by clicking the respective [On], [Off], [Blink] buttons.
CPUs		
CPU#0 CPU#1	Status	Displays the status of the CPU. · OK · Not-present · Disabled · Warning · Failed · Configuration error · Unknown
	Core/Max Core	Displays Normal number of cores number/ maximum number of cores number. · Indicates the degeneracy status of the core. Maximum number of cores also includes the number of Disable cores.
	Model	Displays the product name of the CPU.
	Stepping	Displays the version number of the CPU.
	Part Number	Displays the part number of the CPU.
	Serial Number	Displays the serial number of the CPU.
DIMMs		
DIMM#0A0 ~ DIMM#1D5	Status	Displays the status of the DIMM. · OK · Not-present · Warning · Uncorrectable error · Disabled · Configuration error · Degraded Configuration · Unknown
	Size	Displays the size of the DIMM. · 8GB · 16GB · 32GB · 64GB · 128GB (For PRIMQUEST PRIMQUEST 2800B3) There is no display when the DIMM status is Not-present, Not-supported, or Unknown.

Items	Description	
	Rank	Displays number of DIMM Ranks(1 or 2 or 4). There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Data Rate	Displays Data Rate of DIMM. ・ DDR3-1066, 1333, 1600 (For PRIMQUEST PRIMQUEST 2800B) ・ DDR4-1333, 1600, 1866 (For PRIMQUEST PRIMQUEST 2800B3/2800B2) There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Part Number	Displays the part number of DIMM. There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
	Serial Number	Displays the serial number of DIMM. There is no display when the DIMM status is Not-present, Not-supported, or Unknown.
Mezzanine		
Mezzanine#0 Mezzanine#1	Status	Displays the status of the Mezzanine board. ・ OK ・ Not-present ・ Failed
Chipsets		
Chipset	・ OK ・ Warning ・ Failed	
TPM		
TPM	Displays the status of the TPM. ・ OK ・ Warning ・ Failed Notes When the SB is ‘without TPM mode’, this field is not displayed.	
BMC		
BMC	Displays the status of the BMC. ・ OK ・ Warning ・ Failed	
Clock		
Clock	Displays the status of the System Clock. ・ OK ・ Failed	
Voltage		

Items	Description
Sensor (For PRIMEQUEST 2800B)	Displays the Voltage sensor type. P5VL P1.1VL P1.8VL P1.5VL P1.0VL P1.8V_CPU VDDQ_DIMM#1A P1.0V_JC#0A P1.5V_PCH P1.1V P0.9V_PCIEX#0 P1.8V_PCIEX#0 P0.9V_PCIEX#1 P1.8V_PCIEX#1 P12V#0 P5V P3.3V P1.35V_CPU#0 P1.35V_CPU#1 VCC_CPU#0 VSA_CPU#0 VTT_CPU#0 VDDQ_DIMM#0A VDDQ_DIMM#0B P1.0V_JC#0B P1.5V_JC#0AB P1.35V_JC#0AB VCC_CPU#1 VSA_CPU#1 VTT_CPU#1 VDDQ_DIMM#1B P1.0V_JC#1A P1.0V_JC#1B P1.5V_JC#1AB P1.35V_JC#1AB VDDQ_DIMM#0C VDDQ_DIMM#0D P1.0V_JC#0C P1.0V_JC#0D P1.5V_JC#0CD P1.35V_JC#0CD VDDQ_DIMM#1C VDDQ_DIMM#1D P1.0V_JC#1C P1.0V_JC#1D P1.5V_JC#1CD P1.35V_JC#1CD

Items		Description
Sensor (For PRIMEQUEST 2800B3/2800B2)		P5VL P1.1VL P1.8VL P1.5VL P1.0VL VDDQ_DIMM#1A P1.05V_JC#0AB P1.5V_PCH P1.1V P0.9V_PCIEX#0 P1.8V_PCIEX#0 P0.9V_PCIEX#1 P1.8V_PCIEX#1 P12V#0 P5V P3.3V P1.35V_CPU#0 P1.35V_CPU#1 VCC_CPU#0 VTT_CPU#0 VDDQ_DIMM#0A VDDQ_DIMM#0B P1.5V_JC#0AB P1.35V_JC#0AB VCC_CPU#1 VTT_CPU#1 VDDQ_DIMM#1B P1.05V_JC#1AB P1.5V_JC#1AB P1.35V_JC#1AB VDDQ_DIMM#0C VDDQ_DIMM#0D P1.05V_JC#0CD P1.5V_JC#0CD P1.35V_JC#0CD VDDQ_DIMM#1C VDDQ_DIMM#1D P1.05V_JC#1CD P1.5V_JC#1CD P1.35V_JC#1CD P2.5V_DIMM#0AB P2.5V_DIMM#1AB P2.5V_DIMM#0CD P2.5V_DIMM#1CD P12V#1 P12V#2 P12V#3 P12V#4 P12V#0F
Voltage		Displays the current power voltage.
Threshold	Warning(Low/High	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical(Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.176 [SB#x] Window Button

Buttons	Description
Status Clear	Clears the status of the SB.

1.7.16 [IOU] Menu

The IOU menu includes the following menus for each IOU.

- [IOU#0] ~ [IOU#3]

The menu is not displayed for the IOU which is not installed.
Since the window and the operating method are same for each menu, only one menu is described here.

☐ [IOU#x] Window

[IOU#x] window displays the status of the IOU installed in IOU#x slot. In addition, IOU can be set.

FIGURE 1.148 [IOU#x] Window (1)

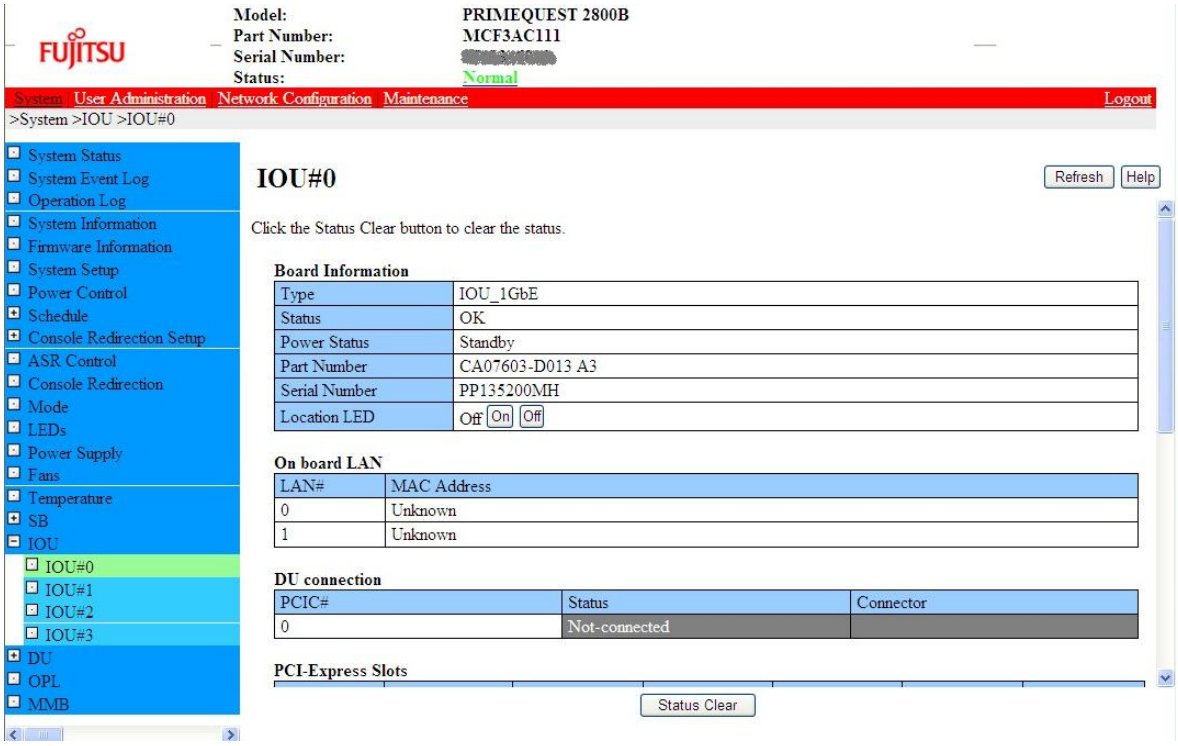


FIGURE 1.149 [IOU#x] Window (2)

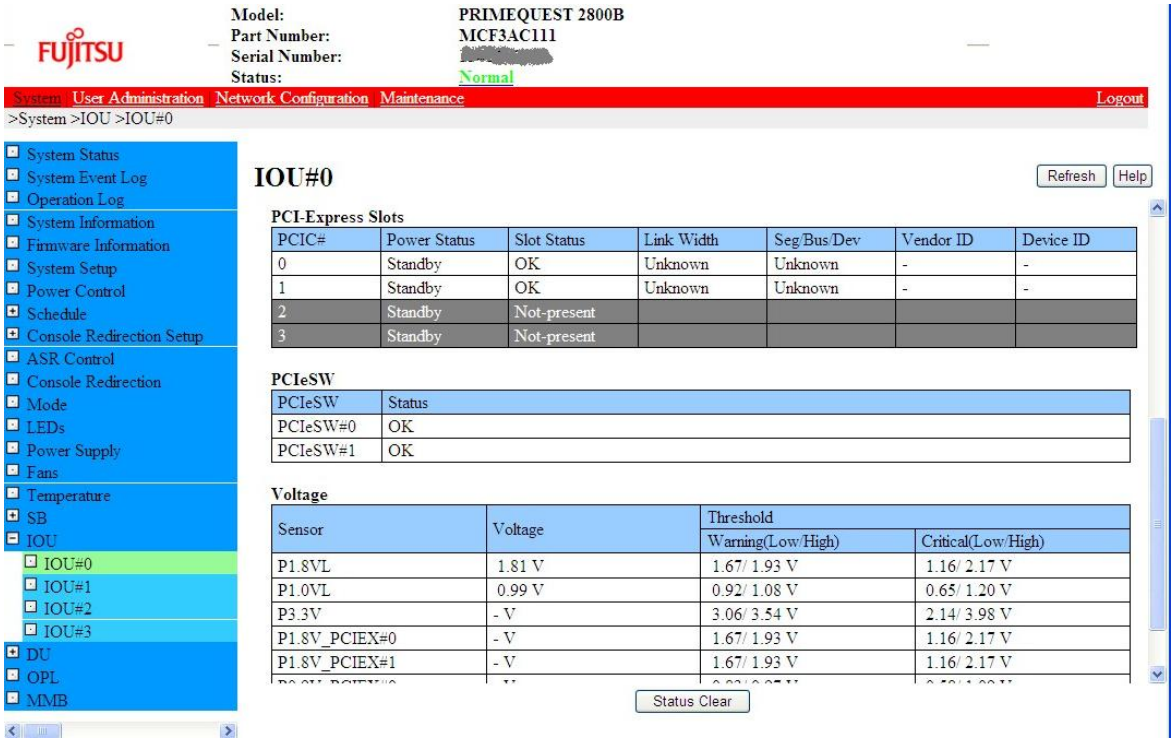


FIGURE 1.150 [IOU#x] Window (3)

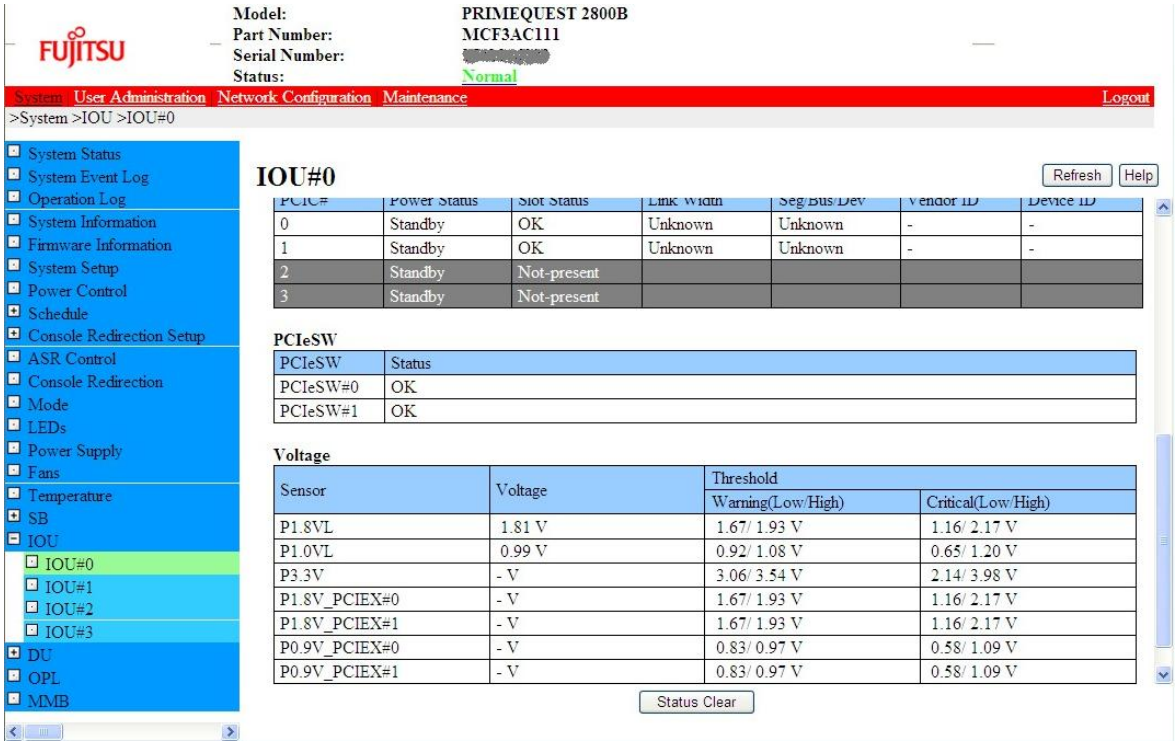


TABLE 1.177 Display Items and Setting Items in [IOU#x] Window

Items	Description
Board Information	
Type	Displays types of IOUs. ・ IOU_10GbE ・ IOU_1GbE
Status	Displays status of the IOU ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed
Power Status	Displays the power status of the IOU. ・ On ・ Standby
Part Number	Displays the part number of the IOU.
Serial Number	Displays the serial number of the IOU.
Location LED	Shows the display status of the Location LED. Following are the display status. ・ On: During ON ・ Off: During OFF On/Off of the Location LED can be controlled by clicking [On], [Off] button.
On board LAN	
LAN	Displays the LAN number.
MAC Address	Displays the MAC Address for GbE that is being installed on the IOU. Displays “Unknown” when MAC Address is not clear.
DU connection	
PCIC#	Displays PCIC# for DU connection on the IOU.
Status	Displays the status of connection with the DU. ・ OK ・ Not-connected ・ Incorrect connection
Connector	Displays the destination Connector number of the DU. When not connected, background color is displayed in gray.
PCI-Express Slots	
PCIC#	Displays the number of the PCI_Express slot.
Power Status	Displays the power status of the IOU. ・ On ・ Standby
Slot Status	Displays the status of the PCI_Express slot. ・ OK ・ Not-present ・ Failed ・ Disabled
Link Width	Displays Link Width of PCI_Express slot format. ・ x1 ・ x2 ・ x4 ・ x8
Seg/Bus/Dev	Displays Segment#, Bus#, Device# of PCI Device.
Vendor ID	Displays the Vendor ID of the PCI Card. Remarks: ID uniquely allocated in manufacturer of card. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)

Items	Description	
Device ID	Displays the Device ID of the PCI Card. Remarks: ID uniquely allocated in device of manufacturer. For details of the ID, see the PRIMEQUEST 2000 Series Administration Manual(CA92344-0537)	
PCIeSW		
PCIeSW	Displays the number of PCIeSW.	
Status	Displays the status of PCIeSW. ・ OK ・ Warning ・ Failed	
PCIeSW#1	Same as PCIeSW#0	
Voltage		
Voltage		
Sensor	Displays the Voltage sensor type. P1.8VL(*1) P1.0VL(*1) P2.5VL(*2) P1.2VL(*2) P0.8VL(*2) P0.67VL(*2) P3.3V(*3) P1.8V_PCIEX#0(*1) P1.8V_PCIEX#1(*1) P1.8V(*2) P0.9V_PCIEX#0(*3) P0.9V_PCIEX#1(*3) *1: IOU_1GbE,*2: IOU_10GbE,*3: IOU_1GbE/IOU_10GbE commonness	
Voltage	Displays the current power voltage.	
Threshold	Warning (Low/High)	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical (Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.178 Button of [IOU#x] Screen

Buttons	Description
Status Clear	Clears the error status of IOU#x

1.7.17 [DU] Menu

As for the display, the operation is the same as the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E model. Refer to chapter 1.2.15.

1.7.18 [OPL] Window

As for the display, the operation is the same as the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2/2400E/2800E model. Refer to chapter 1.2.16.

1.7.19 [MMB] Window

In [MMB] Window, information related to MMB can be displayed and the Location LEDs can be set.

FIGURE 1.151 [MMB#x] Window(1)

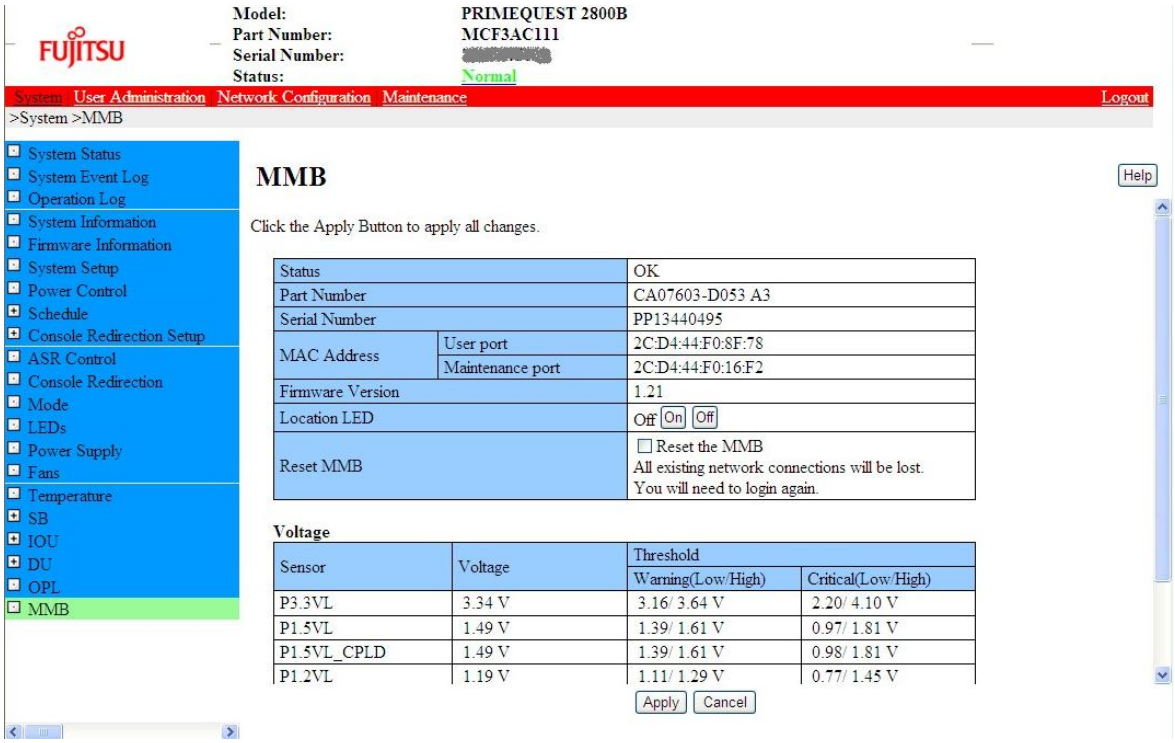


FIGURE 1.152 [MMB#x] Window(2)

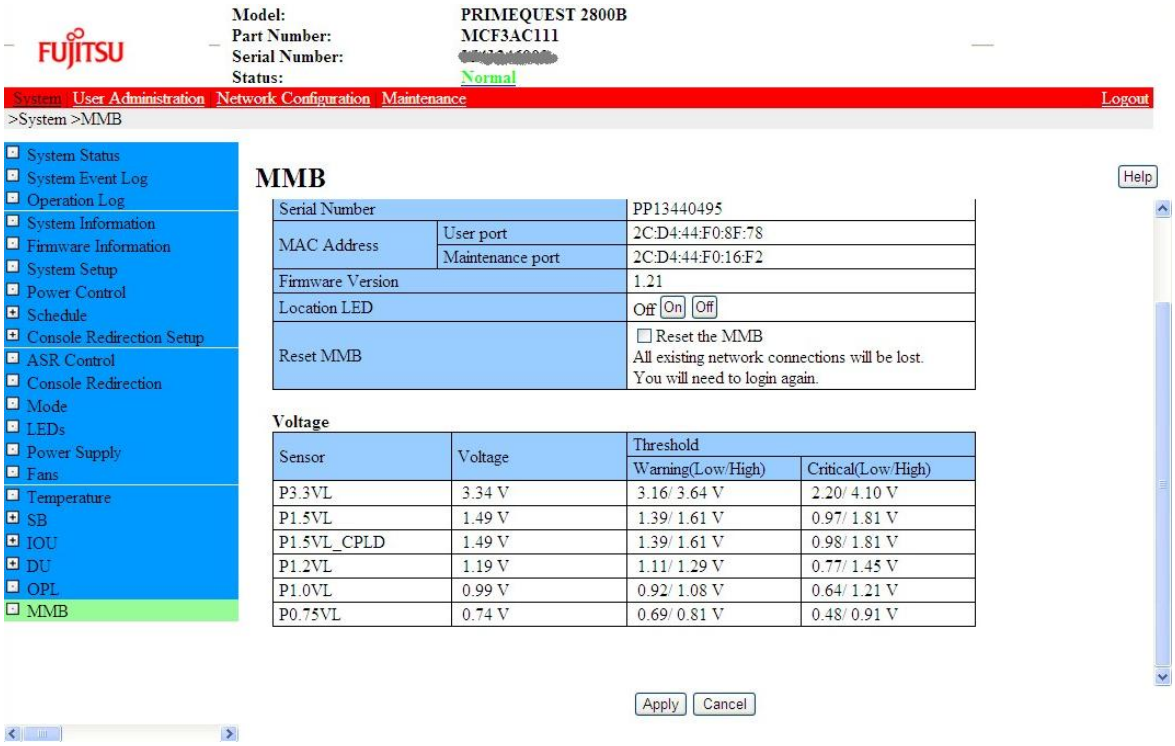


TABLE 1.179 Display of [MMB] Window / setting items

Items		Description
Board Information		
Status		Displays the status of the MMB. ・ OK ・ Not-present ・ Warning ・ Degraded ・ Failed
Part Number		Displays part number of the MMB.
Serial Number		Displays the serial number of the MMB.
MAC address	User port	Displays MAC address of the MMB management port. 00:00:00:00:00:00
	Maintenance Port	Displays MAC address of the MMB port. 00:00:00:00:00:00
Firmware Version		Firmware Version
Location LED		Displays the status of the Location LED. The following are the various display status. ・ On: During power on. ・ Off: During power off On/ Off of the Location LED can be controlled by clicking [On], [Off] buttons.
Reset MMB		Resets the MMB if this check box is checked.
Voltage		Displays the current power voltage.
Threshold	Warning (Low/High)	Lower and upper limits of the warning-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.
	Critical (Low/High)	Lower and upper limits of the critical-level voltage. Displays " – ", when the threshold is not set. Displays the power voltage in the last two decimal places.

TABLE 1.180 [MMB#x] Window button

Buttons	Description
Apply	Click the [Apply] button to set the specified control information.
Cancel	Click the [Cancel] button to restore the original information and not set the specified information.

CHAPTER 2 MMB CLI (Command Line Interface) Operations

This chapter describes the CLI (command line interface) provided by the MMB.

2.1 Basic Operations with the CLI

You can access the CLI in the following two ways:

-
- Access via the serial port on the MMB
- Access via the management LAN of the MMB from a remote PC

Remarks
Similar to the GUI, the CLI also enables up to 16 users to log in to the CLI concurrently.

2.1.1 Access to the CLI via the serial interface

You can access the CLI of the MMB via the serial interface by using the following procedure.

1. Connect your terminal (e.g., laptop PC) to the MMB with an RS-232C crossover cable.
2. Start the terminal software (e.g., Windows HyperTerminal) on the terminal. Then, configure the terminal software as follows.

TABLE 2.1 Terminal software setting values

Parameter	Value
Bits/second	19200
Data bits	8
Parity	None
Stop bits	1
Flow control	None
Emulation	VT100

3. The login prompt appears. Enter your user name and password to log in.

2.1.2 Access via the management LAN interface

You can access the CLI of the MMB via the management LAN interface by using the following procedure.

1. Connect a remote PC to the MMB with a straight LAN cable.
2. Start the telnet or SSH client on the remote PC. Establish a connection between the remote PC and the MMB by specifying the IP address (IPv4 or IPv6) of the MMB and the telnet port number or SSH port number.
3. Log in.

Remarks
The MMB provides connection features that work only with the SSH V2 protocol.
This means you need to be running SSH V2-compatible terminal software to connect the MMB.
When you access to MMB with SSH, Challenge response authentication is needed.

2.1.3 CLI command list

This section describes the functions of the CLI commands.

- Setting commands
- Display commands
- Update commands
- Other commands

The following tables list the account privileges required for individual commands.
"Permitted" in an account privilege column indicates the command can be used with those account privileges.

- TABLE 2.2 MMB CLI commands (Administrator)
- TABLE 2.3 MMB CLI commands (Operator)
- TABLE 2.4 MMB CLI commands (Partition Operator)
- TABLE 2.5 MMB CLI commands (User)
- TABLE 2.6 MMB CLI commands (CE)

TABLE 2.2 MMB CLI commands (Administrator)

Command	Administrator	Outline
Power control		
power off	Permitted	Turns the power off.
power on	Permitted	Turns the power on.
Partition control		
sadump	Permitted	sadump instruction
reset	Permitted	Hard Reset instruction
nmi	Permitted	NMI interrupt instruction
Partition connection		
console	Permitted	Text Console connection to partition
Partition creation		
add partition	Permitted	Adds a partition component.
remove partition	Permitted	Removes a partition component.
show partition configuration	Permitted	Displays the partition configuration.
show partition status	Permitted	Displays the partition status.
set partition home	Permitted	Sets the Home SB.
show partition home	Permitted	Displays the Home SB.
set partition memory_operation_mode	Permitted	Sets Memory operation mode.
show partition memory_operation_mode	Permitted	Displays Memory operation mode.
set partition memory_mirror_ras_mode	Permitted	Sets Memory operation at Mode.
show partition memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set partition pci_address_mode	Permitted	Sets PCI bus number allocation mod.
show partition pci_address_mode	Permitted	Displays PCI bus number allocation mod.
set partition lan_device_mode	Permitted	Sets LAN device mode.
show partition lan_device_mode	Permitted	Displays LAN device mode.
show partition mirror_mode	Permitted	Displays the Mode setting.
set partition name	Permitted	Sets the partition name.
show partition name	Permitted	Displays the partition name.
set partition memory_sparing_mode	Permitted	Sets the memory operation at spare mode.
show partition memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set partition pci_ecrc_mode	Permitted	Sets the ECRC.
show partition pci_ecrc_mode	Permitted	Displays the ECRC.

Command	Administrator	Outline
Time-related		
set date	Permitted	Sets the date and time.
show date	Permitted	Displays the date and time.
set timezone	Permitted	Sets the time zone.
show timezone	Permitted	Displays the time zone.
Network-related		
set ip	Permitted	Sets the management LAN address.
set ipv6	Permitted	Sets the IPv6 management LAN address.
show ip	Permitted	Displays the management LAN address.
show ipv6	Permitted	Displays the IPv6 management LAN address.
set hostname	Permitted	Sets the MMB host name.
show hostname	Permitted	Displays the MMB host name.
set gateway	Permitted	Sets the gateway address.
set gateway_ipv6	Permitted	Sets the IPv6 gateway address.
show gateway	Permitted	Displays the gateway address.
show network	Permitted	Displays the management LAN interface.
show gateway_ipv6	Permitted	Displays the IPv6 gateway address.
set http	Permitted	Sets whether to enable http service.
set https	Permitted	Sets whether to enable https service.
set legacy_tls	Permitted	Sets whether to enable TLS1.0/1.1
set ssh	Permitted	Sets whether to enable ssh service.
set telnet	Permitted	Sets whether to enable telnet service.
show http	Permitted	Displays the http service enabling setting.
show https	Permitted	Displays the https service enabling setting.
show legacy_tls	Permitted	Displays the TLS1.0/1.1 enabling setting
show ssh	Permitted	Displays the ssh service enabling setting.
show telnet	Permitted	Displays the telnet service enabling setting.
set http_port	Permitted	Sets the http port number.
set https_port	Permitted	Sets the https port number.
set ssh_port	Permitted	Sets the ssh port number.
set telnet_port	Permitted	Sets the telnet port number.
show http_port	Permitted	Displays the http port number.
show https_port	Permitted	Displays the https port number.
show ssh_port	Permitted	Displays the ssh port number.
show telnet_port	Permitted	Displays the telnet port number.
clear access_control	Permitted	Clears the access control setting.
show access_control	Permitted	Displays the access control setting.
clear ssh_key		Clears the SSH public key.
download ssh_key		Downloads the SSH public key.
ping	Permitted	Pings the target.
show ntpq	Permitted	NTP inquiry (ntpq – p executed)
Account management		
passwd	Permitted	Changes a password.
who	Permitted	Displays the login user.
Firmware update		

Command	Administrator	Outline
update ALL	Permitted	Batch-updates the firmware (new).
MMB configuration and other		
set active_mmb	Permitted	Sets the active MMB.(Active MMB cannot be executed)
show active_mmb	Permitted	Displays the active MMB.
set mmbcontrol reset	Permitted	Resets the MMB
set mmbcontrol switch_over	Permitted	Switchover the MMB
exit	Permitted	Logs out from the MMB.
help	Permitted	Help information
Command termination code display		
show exit_code	Permitted	Displays the termination code for the last command executed.
Firmware revision status/version check		
show update_status	Permitted	Displays the batch firmware update progress.
Network survey commands		
netck traceroute	Permitted	Displays a list of network routes.
netck arptbl	Permitted	Displays the physical Ethernet address.
netck arping	Permitted	Displays the physical Ethernet address.
netck ifconfig	Permitted	Displays the network environment setup status.
netck stat	Permitted	Displays a list of port numbers being used.
REMCS-related commands		
set maintenance_ip	Permitted	Sets the REMCS network.
show maintenance_ip	Permitted	Displays the REMCS network setting.
DR-related		
hotadd partition	Permitted	Dynamic Reconfiguration HotAdd.
hotremove partition	Permitted	Dynamic Reconfiguration HotRemove.
pciinfo partition	Permitted	Dynamic Reconfiguration PciInfo
set partition dynamic_reconfiguration	Permitted	Sets DR state of partition.
show partition dynamic_reconfiguration	Permitted	Displays DR state of partition.
show dynamic_reconfiguration status	Permitted	Displays DR progress state.
Extended Partitioning-related		
set partition extended_partitioning_mode	Permitted	Sets Extended Partitioning mode.
show partition extended_partitioning _mode	Permitted	Displays Extended Partitioning mode.
set partition dimm_excl_mode	Permitted	Sets DIMM exclusion allocation mode.
show partition dimm_excl_mode	Permitted	Displays DIMM exclusion allocation mode.
set partition skt_binding_mode	Permitted	Sets CPU Socket fixation allocation mode.
show partition skt_binding_mode	Permitted	Displays CPU Socket fixation allocation mode.
add extended_partition sb	Permitted	Adds SB resource to Extended Partitioning.
add extended_partition iou	Permitted	Adds IOU resource to Extended Partitioning.
add extended_partition pcibox	Permitted	Adds PCI_Box resource to Extended Partitioning.
remove extended_partition sb	Permitted	Removes SB resource to Extended Partitioning.
remove extended_partition iou	Permitted	Removes IOU resource to Extended Partitioning.
remove extended_partition pcibox	Permitted	Removes PCI_Box resource to Extended Partitioning.
set partition extended_socket_mode	Permitted	Sets Extended Socket mode.
show partition extended_socket_mode	Permitted	Displays Extended Socket mode.
set partition extended_socket_zone	Permitted	Sets Extended Socket zone.

Command	Administrator	Outline
show partition extended_socket_zon	Permitted	Displays Extended Socket zone.
show extended partition configuration	Permitted	Displays resource of SB included in Extended Partitioning, IOU, and PCI Box.
create raid logical_drive	Permitted	Create RAID logical drive
delete raid logical_drive	Permitted	Delete RAID logical drive
modify raid logical_drive_policy	Permitted	Modify RAID logical drive policy
modify raid logical_drive	Permitted	Modify RAID logical drive
create raid global_hotspare	Permitted	Create RAID global hotspare disk
create raid dedicated_hotspare	Permitted	Create RAID dedicated hospare disk
delete raid hotspare	Permitted	Delete RAID hotspare disk
start raid locate_pd	Permitted	Start locate disk LED
stop raid locate_pd	Permitted	Stop locate disk LED
start raid locate_ld	Permitted	Start locate disk LEDs for logical drive
stop raid locate_ld	Permitted	Stop locate disk LEDs for logical drive
start raid locate_encl	Permitted	Start locate disk enclosure LED
stop raid locate_encl	Permitted	Stop locate disk enclosure LED
start raid rebuild	Permitted	Start disk rebuilding
cancel raid rebuild	Permitted	Cancel disk rebuilding
start raid copyback	Permitted	Start disk copyback
cancel raid copyback	Permitted	Stop disk copyback
start raid mdc	Permitted	Start make data consistency (MDC)
cancel raid mdc	Permitted	Cancel MDC
start raid patrol	Permitted	Start RAID patrol
cancel raid patrol	Permitted	Cancel RAID patrol
make raid online	Permitted	Make disk online
make raid offline	Permitted	Make disk offline
replace raid missing_drive	Permitted	Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information
LDAP-related		
set special_account	Permitted	Register special account
show special_account	Permitted	Display special account

TABLE 2.3 MMB CLI commands (Operator)

Command	Operator	Outline
Power control		
power off	Permitted	Turns the power off.
power on	Permitted	Turns the power on.
Partition control		
sadump	Permitted	sadump instruction
reset	Permitted	Hard Reset instruction
nmi	Permitted	NMI interrupt instruction
Partition connection		
console	Permitted	Text Console connection to partition
Partition creation		
add partition		Adds a partition component.
remove partition		Removes a partition component.
show partition configuration	Permitted	Displays the partition configuration.
show partition status	Permitted	Displays the partition status.
set partition home		Sets the Home SB.
show partition home	Permitted	Displays the Home SB.
set partition memory_operation_mode	Permitted	Sets Memory operation mode.
show partition memory_operation_mode	Permitted	Displays Memory operation mode.
set partition memory_mirror_ras_mode	Permitted	Sets Memory operation at Mode.
show partition memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set partition pci_address_mode	Permitted	Sets PCI bus number allocation mod.
show partition pci_address_mode	Permitted	Displays PCI bus number allocation mod.
set partition lan_device_mode	Permitted	Sets LAN device mode.
show partition lan_device_mode	Permitted	Displays LAN device mode.
show partition mirror_mode	Permitted	Displays the Mode setting.
set partition name		Sets the partition name.
show partition name	Permitted	Displays the partition name.
set partition memory_sparing_mode	Permitted	Sets the memory operation at spare mode.
show partition memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set partition pci_ecrc_mode	Permitted	Sets the ECRC.
show partition pci_ecrc_mode	Permitted	Displays the ECRC.
Time-related		
set date		Sets the date and time.
show date	Permitted	Displays the date and time.
set timezone		Sets the time zone.
show timezone	Permitted	Displays the time zone.
Network-related		
set ip		Sets the management LAN address.
set ipv6		Sets the IPv6 management LAN address.
show ip	Permitted	Displays the management LAN address.
show ipv6	Permitted	Displays the IPv6 management LAN address.
set hostname		Sets the MMB host name.
show hostname	Permitted	Displays the MMB host name.
set gateway		Sets the gateway address.

Command	Operator	Outline
set gateway_ipv6		Sets the IPv6 gateway address.
show gateway	Permitted	Displays the gateway address.
show network	Permitted	Displays the management LAN interface.
show gateway_ipv6	Permitted	Displays the IPv6 gateway address.
set http		Sets whether to enable http service.
set https		Sets whether to enable https service.
set ssh		Sets whether to enable ssh service.
set telnet		Sets whether to enable telnet service.
show http	Permitted	Displays the http service enabling setting.
show https	Permitted	Displays the https service enabling setting.
show legacy_tls	Permitted	Displays the TLS1.0/1.1 enabling setting
show ssh	Permitted	Displays the ssh service enabling setting.
show telnet	Permitted	Displays the telnet service enabling setting.
set http_port		Sets the http port number.
set https_port		Sets the https port number.
set ssh_port		Sets the ssh port number.
set telnet_port		Sets the telnet port number.
show http_port	Permitted	Displays the http port number.
show https_port	Permitted	Displays the https port number.
show ssh_port	Permitted	Displays the ssh port number.
show telnet_port	Permitted	Displays the telnet port number.
clear access_control		Clears the access control setting.
show access_control		Displays the access control setting.
clear ssh_key		Clears the SSH public key.
download ssh_key		Downloads the SSH public key.
ping	Permitted	Pings the target.
show ntpq	Permitted	NTP inquiry (ntpq – p executed)
Account management		
passwd	Permitted	Changes a password.
who	Permitted	Displays the login user.
Firmware update		
update ALL		Batch-updates the firmware (new).
MMB configuration and other		
set active_mmb		Sets the active MMB.(Active MMB cannot be executed)
show active_mmb	Permitted	Displays the active MMB.
set mmbcontrol reset		Resets the MMB
set mmbcontrol switch_over		Switchover the MMB
exit	Permitted	Logs out from the MMB.
help	Permitted	Help information
Command termination code display		
show exit_code	Permitted	Displays the termination code for the last command executed.
Firmware revision status/version check		
show update_status		Displays the batch firmware update progress.
Network survey commands		
netck traceroute	Permitted	Displays a list of network routes.

Command	Operator	Outline
netck arptbl	Permitted	Displays the physical Ethernet address.
netck arping	Permitted	Displays the physical Ethernet address.
netck ifconfig	Permitted	Displays the network environment setup status.
netck stat	Permitted	Displays a list of port numbers being used.
REMCS-related commands		
set maintenance_ip		Sets the REMCS network.
show maintenance_ip	Permitted	Displays the REMCS network setting.
Dynamic Reconfiguration-related		
hotadd partition		Dynamic Reconfiguration HotAdd.
hotremove partition		Dynamic Reconfiguration HotRemove.
pciinfo partition		Dynamic Reconfiguration PciInfo
set partition dynamic_reconfiguration	Permitted	Sets DR state of partition.
show partition dynamic_reconfiguration	Permitted	Displays DR state of partition.
show dynamic_reconfiguration status	Permitted	Displays DR progress state.
Extended Partitioning-related		
set partition extended_partitioning _mode	Permitted	Sets Extended Partitioning mode.
show partition extended_partitioning _mode	Permitted	Displays Extended Partitioning mode.
set partition dimm_excl_mode	Permitted	Sets DIMM exclusion allocation mode.
show partition dimm_excl_mode	Permitted	Displays DIMM exclusion allocation mode.
set partition skt_binding_mode	Permitted	Sets CPU Socket fixation allocation mode.
show partition skt_binding_mode	Permitted	Displays CPU Socket fixation allocation mode.
add extended_partition sb		Adds SB resource to Extended Partitioning.
add extended_partition iou		Adds IOU resource to Extended Partitioning.
add extended_partition pcibox		Adds PCI_Box resource to Extended Partitioning.
remove extended_partition sb		Removes SB resource to Extended Partitioning.
remove extended_partition iou		Removes IOU resource to Extended Partitioning.
remove extended_partition pcibox		Removes PCI_Box resource to Extended Partitioning.
set partition extended_socket_mode	Permitted	Sets Extended Socket mode.
show partition extended_socket_mode	Permitted	Displays Extended Socket mode.
set partition extended_socket_zone		Sets Extended Socket zone.
show partition extended_socket_zon	Permitted	Displays Extended Socket zone.
show extended partition configuration	Permitted	Displays resource of SB included in Extended Partitioning, IOU, and PCI Box.
create raid logical_drive	Permitted	Create RAID logical drive
delete raid logical_drive	Permitted	Delete RAID logical drive
modify raid logical_drive_policy	Permitted	Modify RAID logical drive policy
modify raid logical_drive	Permitted	Modify RAID logical drive
create raid global_hotspare	Permitted	Create RAID global hotspare disk
create raid dedicated_hotspare	Permitted	Create RAID dedicated hospare disk
delete raid hotspare	Permitted	Delete RAID hotspare disk
start raid locate_pd	Permitted	Start locate disk LED
stop raid locate_pd	Permitted	Stop locate disk LED
start raid locate_ld	Permitted	Start locate disk LEDs for logical drive
stop raid locate_ld	Permitted	Stop locate disk LEDs for logical drive
start raid locate_encl	Permitted	Start locate disk enclosure LED
stop raid locate_encl	Permitted	Stop locate disk enclosure LED

Command	Operator	Outline
start raid rebuild	Permitted	Start disk rebuilding
cancel raid rebuild	Permitted	Cancel disk rebuilding
start raid copyback	Permitted	Start disk copyback
cancel raid copyback	Permitted	Stop disk copyback
start raid mdc	Permitted	Start make data consistency (MDC)
cancel raid mdc	Permitted	Cancel MDC
start raid patrol	Permitted	Start RAID patrol
cancel raid patrol	Permitted	Cancel RAID patrol
make raid online	Permitted	Make disk online
make raid offline	Permitted	Make disk offline
replace raid missing_drive	Permitted	Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information
LDAP-related		
set special_account		Register special account
show special_account		Display special account

TABLE 2.4 MMB CLI commands (Partition Operator)

Command	Partition Operator (*) (Same partition)	Partition Operator (*) (Other partition)	Outline
Power control			
power off	Permitted		Turns the power off.
power on	Permitted		Turns the power on.
Partition control			
sadump	Permitted		sadump instruction
reset	Permitted		Hard Reset instruction
nmi	Permitted		NMI interrupt instruction
Partition connection			
console	Permitted		Text Console connection to partition
Partition creation			
add partition			Adds a partition component.
remove partition			Removes a partition component.
show partition configuration	Permitted	Permitted	Displays the partition configuration.
show partition status	Permitted	Permitted	Displays the partition status.
set partition home			Sets the Home SB.
show partition home	Permitted	Permitted	Displays the Home SB.
set partition memory_operation_mode	Permitted		Sets Memory operation mode.
show partition memory_operation_mode	Permitted	Permitted	Displays Memory operation mode.
set partition memory_mirror_ras_mode	Permitted		Sets Memory operation at Mode.
show partition memory_mirror_ras_mode	Permitted	Permitted	Displays Memory operation at Mode.
set partition pci_address_mode	Permitted		Sets PCI bus number allocation mod.
show partition pci_address_mode	Permitted	Permitted	Displays PCI bus number allocation m od.
set partition lan_device_mode	Permitted		Sets LAN device mode.
show partition lan_device_mode	Permitted	Permitted	Displays LAN device mode.
show partition mirror_mode	Permitted	Permitted	Displays the Mode setting.
set partition name			Sets the partition name.
show partition name	Permitted	Permitted	Displays the partition name.
set partition memory_sparing_mode	Permitted		Sets the memory operation at spare mode.
show partition memory_sparing_mode	Permitted	Permitted	Displays the memory operation at spare mode.
set partition pci_ecrc_mode	Permitted		Sets the ECRC.
show partition pci_ecrc_mode	Permitted	Permitted	Displays the ECRC.
Time-related			
set date			Sets the date and time.
show date	Permitted	Permitted	Displays the date and time.
set timezone			Sets the time zone.
show timezone	Permitted	Permitted	Displays the time zone.
Network-related			
set ip			Sets the management LAN address.
set ipv6			Sets the IPv6 management LAN address.
show ip	Permitted	Permitted	Displays the management LAN address.

Command	Partition Operator (*) (Same partition)	Partition Operator (*) (Other partition)	Outline
show ipv6	Permitted	Permitted	Displays the IPv6 management LAN address.
set hostname			Sets the MMB host name.
show hostname	Permitted	Permitted	Displays the MMB host name.
set gateway			Sets the gateway address.
set gateway_ipv6			Sets the IPv6 gateway address.
show gateway	Permitted	Permitted	Displays the gateway address.
show network	Permitted	Permitted	Displays the management LAN interface.
show gateway_ipv6	Permitted	Permitted	Displays the IPv6 gateway address.
set http			Sets whether to enable http service.
set https			Sets whether to enable https service.
set ssh			Sets whether to enable ssh service.
set telnet			Sets whether to enable telnet service.
show http	Permitted	Permitted	Displays the http service enabling setting.
show https	Permitted	Permitted	Displays the https service enabling setting.
show legacy_tls	Permitted	Permitted	Displays the TLS1.0/1.1 enabling setting
show ssh	Permitted	Permitted	Displays the ssh service enabling setting.
show telnet	Permitted	Permitted	Displays the telnet service enabling setting.
set http_port			Sets the http port number.
set https_port			Sets the https port number.
set ssh_port			Sets the ssh port number.
set telnet_port			Sets the telnet port number.
show http_port	Permitted	Permitted	Displays the http port number.
show https_port	Permitted	Permitted	Displays the https port number.
show ssh_port	Permitted	Permitted	Displays the ssh port number.
show telnet_port	Permitted	Permitted	Displays the telnet port number.
clear access_control			Clears the access control setting.
show access_control			Displays the access control setting.
clear ssh_key			Clears the SSH public key.
download ssh_key			Downloads the SSH public key.
ping	Permitted	Permitted	Pings the target.
show ntpq	Permitted	Permitted	NTP inquiry (ntpq – p executed)
Account management			
passwd	Permitted	Permitted	Changes a password.
who	Permitted	Permitted	Displays the login user.
Firmware update			
update ALL			Batch-updates the firmware (new).
MMB configuration and other			
set active_mmb			Sets the active MMB.(Active MMB cannot be executed)
show active_mmb	Permitted	Permitted	Displays the active MMB.
set mmbcontrol reset			Resets the MMB

Command	Partition Operator (*) (Same partition)	Partition Operator (*) (Other partition)	Outline
set mmbcontrol switch_over			Switchover the MMB
exit	Permitted	Permitted	Logs out from the MMB.
help	Permitted	Permitted	Help information
Command termination code display			
show exit_code	Permitted	Permitted	Displays the termination code for the last command executed.
Firmware revision status/version check			
show update_status			Displays the batch firmware update progress.
Network survey commands			
netck traceroute	Permitted	Permitted	Displays a list of network routes.
netck arptbl	Permitted	Permitted	Displays the physical Ethernet address.
netck arping	Permitted	Permitted	Displays the physical Ethernet address.
netck ifconfig	Permitted	Permitted	Displays the network environment setup status.
netck stat	Permitted	Permitted	Displays a list of port numbers being used.
REMCS-related commands			
set maintenance_ip			Sets the REMCS network.
show maintenance_ip	Permitted	Permitted	Displays the REMCS network setting.
DR-related			
hotadd partition			Dynamic Reconfiguration HotAdd.
hotremove partition			Dynamic Reconfiguration HotRemove.
pciinfo partition			Dynamic Reconfiguration PciInfo
set partition dynamic_reconfiguration	Permitted		Sets DR state of partition.
show partition dynamic_reconfiguration	Permitted	Permitted	Displays DR state of partition.
show dynamic_reconfiguration status	Permitted	Permitted	Displays DR progress state.
Extended Partitioning-related			
set partition extended_partitioning _mode	Permitted		Sets Extended Partitioning mode.
show partition extended_partitioning _mode	Permitted	Permitted	Displays Extended Partitioning mode.
set partition dimm_excl_mode	Permitted		Sets DIMM exclusion allocation mode.
show partition dimm_excl_mode	Permitted	Permitted	Displays DIMM exclusion allocation mode.
set partition skt_binding_mode	Permitted		Sets CPU Socket fixation allocation mode.
show partition skt_binding_mode	Permitted	Permitted	Displays CPU Socket fixation allocation mode.
add extended_partition sb			Adds SB resource to Extended Partitioning.
add extended_partition iou			Adds IOU resource to Extended Partitioning.
add extended_partition pcibox			Adds PCI_Box resource to Extended Partitioning.
remove extended_partition sb			Removes SB resource to Extended Partitioning.
remove extended_partition iou			Removes IOU resource to Extended Partitioning.
remove extended_partition pcibox			Removes PCI_Box resource to Extended Partitioning.

Command	Partition Operator (*) (Same partition)	Partition Operator (*) (Other partition)	Outline
set partition extended_socket_mode	Permitted		Sets Extended Socket mode.
show partition extended_socket_mode	Permitted	Permitted	Displays Extended Socket mode.
set partition extended_socket_zone			Sets Extended Socket zone.
show partition extended_socket_zon	Permitted	Permitted	Displays Extended Socket zone.
show extended partition configuration	Permitted	Permitted	Displays resource of SB included in Extended Partitioning, IOU, and PCI Box.
create raid logical_drive	Permitted		Create RAID logical drive
delete raid logical_drive	Permitted		Delete RAID logical drive
modify raid logical_drive_policy	Permitted		Modify RAID logical drive policy
modify raid logical_drive	Permitted		Modify RAID logical drive
create raid global_hotspare	Permitted		Create RAID global hotspare disk
create raid dedicated_hotspare	Permitted		Create RAID dedicated hospare disk
delete raid hotspare	Permitted		Delete RAID hotspare disk
start raid locate_pd	Permitted		Start locate disk LED
stop raid locate_pd	Permitted		Stop locate disk LED
start raid locate_ld	Permitted		Start locate disk LEDs for logical drive
stop raid locate_ld	Permitted		Stop locate disk LEDs for logical drive
start raid locate_encl	Permitted		Start locate disk enclosure LED
stop raid locate_encl	Permitted		Stop locate disk enclosure LED
start raid rebuild	Permitted		Start disk rebuilding
cancel raid rebuild	Permitted		Cancel disk rebuilding
start raid copyback	Permitted		Start disk copyback
cancel raid copyback	Permitted		Stop disk copyback
start raid mdc	Permitted		Start make data consistency (MDC)
cancel raid mdc	Permitted		Cancel MDC
start raid patrol	Permitted		Start RAID patrol
cancel raid patrol	Permitted		Cancel RAID patrol
make raid online	Permitted		Make disk online
make raid offline	Permitted		Make disk offline
replace raid missing_drive	Permitted		Replace missing drive
show raid adapter	Permitted	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Permitted	Display disk information
show raid physical_drive_count	Permitted	Permitted	Display disk counts
show raid logical_drive	Permitted	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Permitted	Display logical drive counts
show raid bbu	Permitted	Permitted	Display FBU information
LDAP-related			
set special_account			Register special account
show special_account			Display special account

TABLE 2.5 MMB CLI commands (User)

Command	User	Outline
Power control		
power off		Turns the power off.
power on		Turns the power on.
Partition control		
sadump		sadump instruction
reset		Hard Reset instruction
nmi		NMI interrupt instruction
Partition connection		
console		Text Console connection to partition
Partition creation		
add partition		Adds a partition component.
remove partition		Removes a partition component.
show partition configuration	Permitted	Displays the partition configuration.
show partition status	Permitted	Displays the partition status.
set partition home		Sets the Home SB.
show partition home	Permitted	Displays the Home SB.
set partition memory_operation_mode		Sets Memory operation mode.
show partition memory_operation_mode	Permitted	Displays Memory operation mode.
set partition memory_mirror_ras_mode		Sets Memory operation at Mode.
show partition memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set partition pci_address_mode		Sets PCI bus number allocation mod.
show partition pci_address_mode	Permitted	Displays PCI bus number allocation mod.
set partition lan_device_mode		Sets LAN device mode.
show partition lan_device_mode	Permitted	Displays LAN device mode.
show partition mirror_mode	Permitted	Displays the Mode setting.
set partition name		Sets the partition name.
show partition name	Permitted	Displays the partition name.
set partition memory_sparing_mode		Sets the memory operation at spare mode.
show partition memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set partition pci_ecrc_mode		Sets the ECRC.
show partition pci_ecrc_mode	Permitted	Displays the ECRC.
Time-related		
set date		Sets the date and time.
show date	Permitted	Displays the date and time.
set timezone		Sets the time zone.
show timezone	Permitted	Displays the time zone.
Network-related		
set ip		Sets the management LAN address.
set ipv6		Sets the IPv6 management LAN address.
show ip	Permitted	Displays the management LAN address.
show ipv6	Permitted	Displays the IPv6 management LAN address.
set hostname		Sets the MMB host name.
show hostname	Permitted	Displays the MMB host name.
set gateway		Sets the gateway address.

Command	User	Outline
set gateway_ipv6		Sets the IPv6 gateway address.
show gateway	Permitted	Displays the gateway address.
show network	Permitted	Displays the management LAN interface.
show gateway_ipv6	Permitted	Displays the IPv6 gateway address.
set http		Sets whether to enable http service.
set https		Sets whether to enable https service.
set ssh		Sets whether to enable ssh service.
set telnet		Sets whether to enable telnet service.
show http	Permitted	Displays the http service enabling setting.
show https	Permitted	Displays the https service enabling setting.
show legacy_tls	Permitted	Displays the TLS1.0/1.1 enabling setting
show ssh	Permitted	Displays the ssh service enabling setting.
show telnet	Permitted	Displays the telnet service enabling setting.
set http_port		Sets the http port number.
set https_port		Sets the https port number.
set ssh_port		Sets the ssh port number.
set telnet_port		Sets the telnet port number.
show http_port	Permitted	Displays the http port number.
show https_port	Permitted	Displays the https port number.
show ssh_port	Permitted	Displays the ssh port number.
show telnet_port	Permitted	Displays the telnet port number.
clear access_control		Clears the access control setting.
show access_control		Displays the access control setting.
clear ssh_key	Permitted	Clears the SSH public key.
download ssh_key	Permitted	Downloads the SSH public key.
ping	Permitted	Pings the target.
show ntpq	Permitted	NTP inquiry (ntpq – p executed)
Account management		
passwd	Permitted	Changes a password.
who	Permitted	Displays the login user.
Firmware update		
update ALL		Batch-updates the firmware (new).
MMB configuration and other		
set active_mmb		Sets the active MMB.(Active MMB cannot be executed)
show active_mmb	Permitted	Displays the active MMB.
set mmbcontrol reset		Resets the MMB
set mmbcontrol switch_over		Switchover the MMB
exit	Permitted	Logs out from the MMB.
help	Permitted	Help information
Command termination code display		
show exit_code	Permitted	Displays the termination code for the last command executed.
Firmware revision status/version check		
show update_status		Displays the batch firmware update progress.
Network survey commands		
netck traceroute	Permitted	Displays a list of network routes.

Command	User	Outline
netck arptbl	Permitted	Displays the physical Ethernet address.
netck arping	Permitted	Displays the physical Ethernet address.
netck ifconfig	Permitted	Displays the network environment setup status.
netck stat	Permitted	Displays a list of port numbers being used.
REMCS-related commands		
set maintenance_ip		Sets the REMCS network.
show maintenance_ip	Permitted	Displays the REMCS network setting.
DR-related		
hotadd partition		Dynamic Reconfiguration HotAdd.
hotremove partition		Dynamic Reconfiguration HotRemove.
pciinfo partition		Dynamic Reconfiguration PciInfo
set partition dynamic_reconfiguration		Sets DR state of partition.
show partition dynamic_reconfiguration	Permitted	Displays DR state of partition.
show dynamic_reconfiguration status	Permitted	Displays DR progress state.
Extended Partitioning-related		
set partition extended_partitioning _mode		Sets Extended Partitioning mode.
show partition extended_partitioning _mode	Permitted	Displays Extended Partitioning mode.
set partition dimm_excl_mode		Sets DIMM exclusion allocation mode.
show partition dimm_excl_mode	Permitted	Displays DIMM exclusion allocation mode.
set partition skt_binding_mode		Sets CPU Socket fixation allocation mode.
show partition skt_binding_mode	Permitted	Displays CPU Socket fixation allocation mode.
add extended_partition sb		Adds SB resource to Extended Partitioning.
add extended_partition iou		Adds IOU resource to Extended Partitioning.
add extended_partition pcibox		Adds PCI_Box resource to Extended Partitioning.
remove extended_partition sb		Removes SB resource to Extended Partitioning.
remove extended_partition iou		Removes IOU resource to Extended Partitioning.
remove extended_partition pcibox		Removes PCI_Box resource to Extended Partitioning.
set partition extended_socket_mode		Sets Extended Socket mode.
show partition extended_socket_mode	Permitted	Displays Extended Socket mode.
set partition extended_socket_zone		Sets Extended Socket zone.
show partition extended_socket_zon	Permitted	Displays Extended Socket zone.
show extended partition configuration	Permitted	Displays resource of SB included in Extended Partitioning, IOU, and PCI Box.
create raid logical_drive		Create RAID logical drive
delete raid logical_drive		Delete RAID logical drive
modify raid logical_drive_policy		Modify RAID logical drive policy
modify raid logical_drive		Modify RAID logical drive
create raid global_hotspare		Create RAID global hotspare disk
create raid dedicated_hotspare		Create RAID dedicated hospare disk
delete raid hotspare		Delete RAID hotspare disk
start raid locate_pd		Start locate disk LED
stop raid locate_pd		Stop locate disk LED
start raid locate_ld		Start locate disk LEDs for logical drive
stop raid locate_ld		Stop locate disk LEDs for logical drive
start raid locate_encl		Start locate disk enclosure LED
stop raid locate_encl		Stop locate disk enclosure LED

Command	User	Outline
start raid rebuild		Start disk rebuilding
cancel raid rebuild		Cancel disk rebuilding
start raid copyback		Start disk copyback
cancel raid copyback		Stop disk copyback
start raid mdc		Start make data consistency (MDC)
cancel raid mdc		Cancel MDC
start raid patrol		Start RAID patrol
cancel raid patrol		Cancel RAID patrol
make raid online		Make disk online
make raid offline		Make disk offline
replace raid missing_drive		Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information
LDAP-related		
set special_account		Register special account
show special_account		Display special account

TABLE 2.6 MMB CLI commands (CE)

Command	CE	Outline
Power control		
power off		Turns the power off.
power on		Turns the power on.
Partition control		
sadump		sadump instruction
reset		Hard Reset instruction
nmi		NMI interrupt instruction
Partition connection		
console		Text Console connection to partition
Partition creation		
add partition		Adds a partition component.
remove partition		Removes a partition component.
show partition configuration	Permitted	Displays the partition configuration.
show partition status	Permitted	Displays the partition status.
set partition home		Sets the Home SB.
show partition home	Permitted	Displays the Home SB.
set partition memory_operation_mode		Sets Memory operation mode.
show partition memory_operation_mode	Permitted	Displays Memory operation mode.
set partition memory_mirror_ras_mode		Sets Memory operation at Mode.
show partition memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set partition pci_address_mode		Sets PCI bus number allocation mod.
show partition pci_address_mode	Permitted	Displays PCI bus number allocation mod.
set partition lan_device_mode		Sets LAN device mode.
show partition lan_device_mode	Permitted	Displays LAN device mode.
show partition mirror_mode	Permitted	Displays the Mode setting.
set partition name		Sets the partition name.
show partition name	Permitted	Displays the partition name.
set partition memory_sparing_mode		Sets the memory operation at spare mode.
show partition memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set partition pci_ecrc_mode		Sets the ECRC.
show partition pci_ecrc_mode	Permitted	Displays the ECRC.
Time-related		
set date		Sets the date and time.
show date	Permitted	Displays the date and time.
set timezone		Sets the time zone.
show timezone	Permitted	Displays the time zone.
Network-related		
set ip		Sets the management LAN address.
set ipv6		Sets the IPv6 management LAN address.
show ip	Permitted	Displays the management LAN address.
show ipv6	Permitted	Displays the IPv6 management LAN address.
set hostname		Sets the MMB host name.
show hostname	Permitted	Displays the MMB host name.
set gateway		Sets the gateway address.

Command	CE	Outline
set gateway_ipv6		Sets the IPv6 gateway address.
show gateway	Permitted	Displays the gateway address.
show network	Permitted	Displays the management LAN interface.
show gateway_ipv6	Permitted	Displays the IPv6 gateway address.
set http		Sets whether to enable http service.
set https		Sets whether to enable https service.
set ssh		Sets whether to enable ssh service.
set telnet		Sets whether to enable telnet service.
show http	Permitted	Displays the http service enabling setting.
show https	Permitted	Displays the https service enabling setting.
show ssh	Permitted	Displays the ssh service enabling setting.
show telnet	Permitted	Displays the telnet service enabling setting.
set http_port		Sets the http port number.
set https_port		Sets the https port number.
set ssh_port		Sets the ssh port number.
set telnet_port		Sets the telnet port number.
show http_port	Permitted	Displays the http port number.
show https_port	Permitted	Displays the https port number.
show ssh_port	Permitted	Displays the ssh port number.
show telnet_port	Permitted	Displays the telnet port number.
clear access_control		Clears the access control setting.
show access_control		Displays the access control setting.
clear ssh_key	Permitted	Clears the SSH public key.
download ssh_key	Permitted	Downloads the SSH public key.
ping	Permitted	Pings the target.
show ntpq	Permitted	NTP inquiry (ntpq – p executed)
Account management		
passwd	Permitted	Changes a password.
who	Permitted	Displays the login user.
Firmware update		
update ALL		Batch-updates the firmware (new).
MMB configuration and other		
set active_mmb		Sets the active MMB.(Active MMB cannot be executed)
show active_mmb	Permitted	Displays the active MMB.
set mmbcontrol reset		Resets the MMB
set mmbcontrol switch_over		Switchover the MMB
exit	Permitted	Logs out from the MMB.
help	Permitted	Help information
Command termination code display		
show exit_code	Permitted	Displays the termination code for the last command executed.
Firmware revision status/version check		
show update_status		Displays the batch firmware update progress.
Network survey commands		
netck traceroute	Permitted	Displays a list of network routes.
netck arptbl	Permitted	Displays the physical Ethernet address.

Command	CE	Outline
netck arping	Permitted	Displays the physical Ethernet address.
netck ifconfig	Permitted	Displays the network environment setup status.
netck stat	Permitted	Displays a list of port numbers being used.
REMCS-related commands		
set maintenance_ip		Sets the REMCS network.
show maintenance_ip	Permitted	Displays the REMCS network setting.
DR-related		
hotadd partition		Dynamic Reconfiguration HotAdd.
hotremove partition		Dynamic Reconfiguration HotRemove.
pciinfo partition		Dynamic Reconfiguration PciInfo
set partition dynamic_reconfiguration		Sets DR state of partition.
show partition dynamic_reconfiguration	Permitted	Displays DR state of partition.
show dynamic_reconfiguration status	Permitted	Displays DR progress state.
Extended Partitioning-related		
set partition extended_partitioning _mode		Sets Extended Partitioning mode.
show partition extended_partitioning _mode	Permitted	Displays Extended Partitioning mode.
set partition dimm_excl_mode		Sets DIMM exclusion allocation mode.
show partition dimm_excl_mode	Permitted	Displays DIMM exclusion allocation mode.
set partition skt_binding_mode		Sets CPU Socket fixation allocation mode.
show partition skt_binding_mode	Permitted	Displays CPU Socket fixation allocation mode.
add extended_partition sb		Adds SB resource to Extended Partitioning.
add extended_partition iou		Adds IOU resource to Extended Partitioning.
add extended_partition pcibox		Adds PCI_Box resource to Extended Partitioning.
remove extended_partition sb		Removes SB resource to Extended Partitioning.
remove extended_partition iou		Removes IOU resource to Extended Partitioning.
remove extended_partition pcibox		Removes PCI_Box resource to Extended Partitioning.
set partition extended_socket_mode		Sets Extended Socket mode.
show partition extended_socket_mode	Permitted	Displays Extended Socket mode.
set partition extended_socket_zone		Sets Extended Socket zone.
show partition extended_socket_zon	Permitted	Displays Extended Socket zone.
show extended partition configuration	Permitted	Displays resource of SB included in Extended Partitioning, IOU, and PCI Box.
create raid logical_drive		Create RAID logical drive
delete raid logical_drive		Delete RAID logical drive
modify raid logical_drive_policy		Modify RAID logical drive policy
modify raid logical_drive		Modify RAID logical drive
create raid global_hotspare		Create RAID global hotspare disk
create raid dedicated_hotspare		Create RAID dedicated hospare disk
delete raid hotspare		Delete RAID hotspare disk
start raid locate_pd		Start locate disk LED
stop raid locate_pd		Stop locate disk LED
start raid locate_ld		Start locate disk LEDs for logical drive
stop raid locate_ld		Stop locate disk LEDs for logical drive
start raid locate_encl		Start locate disk enclosure LED
stop raid locate_encl		Stop locate disk enclosure LED
start raid rebuild		Start disk rebuilding

Command	CE	Outline
cancel raid rebuild		Cancel disk rebuilding
start raid copyback		Start disk copyback
cancel raid copyback		Stop disk copyback
start raid mdc		Start make data consistency (MDC)
cancel raid mdc		Cancel MDC
start raid patrol		Start RAID patrol
cancel raid patrol		Cancel RAID patrol
make raid online		Make disk online
make raid offline		Make disk offline
replace raid missing_drive		Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information
LDAP-related		
set special_account		Register special account
show special_account		Display special account

Notation of parameters in the command syntax

- Multiple parameters are enclosed in brackets [ ] to indicate that one of them is to be selected.
  For example, [A|B|C] means that either A, B, or C is to be selected as specified.
- A parameter is enclosed in braces { } to indicate that it can be omitted.
  For example, {quiet} means that the quiet parameter can be omitted.

Parameter specification range

The parameters <partition#>, <SB#> and <IOU#> may appear in the command syntax. You can specify values in the following ranges for these parameters.

TABLE 2.7 Parameter specification range

Parameter	PRIMEQUEST 2400E3/2400E2/ 2400E	PRIMEQUEST 2800B3/2800B2/ 2800B	PRIMEQUEST 2800E3/2800E2/ 2800E
<partition#>	0-5	Unsupported	0 - 11
<SB#>	0-1 *1	0 - 3	0 - 3
<IOU#>	0-3	0 - 3	0 - 3
<Extended Partitioning#>	2 -5	Unsupported	4 -11

*1: The state of 0 - 3 can be specified for PRIMEQUEST 2400E3/2400E2 Model in the case that Memory Scale-up Board is used.

If the specified value falls outside the valid range, the system displays an error message and does not process the command.

Messages

The following messages are common to all the commands.

- If the specified CLI parameter character string is an incorrect parameter, the following message appears.
  Also, the CLI parameters are classified into command groups: "show," "set," "add," "remove," "clear," "power," "download," and "update." If the specified parameter does not belong to any of these command groups, this message appears.

```
The specified parameter is invalid.
```

The following message appears only if the specified command name is "show," "set," "add," "remove," "clear," "power," "download," or "update."

```
Parameter missing
```

If the entered command is not "passwd," "ping," "who," or "help" and does not belong to any of the "show," "set," "add," "remove," "clear," "power," "download," and "update" command groups, the following message appears.

```
No such file or directory
```

2.2 Setting Commands

The information setting commands are as follows:

2.2.1 add partition
2.2.2 clear access_control
2.2.3 clear ssh_key
2.2.4 console
2.2.5 download ssh_key
2.2.6 power off
2.2.7 power on
2.2.8 sadump
2.2.9 reset
2.2.10 nmi
2.2.11 remove partition
2.2.12 set active_mmb
2.2.13 set date
2.2.14 set partition dynamic_reconfiguration
2.2.15 set gateway
2.2.16 set gateway_ipv6
2.2.17 set hostname
2.2.18 set http
2.2.19 set http_port
2.2.20 set https
2.2.21 set https_port
2.2.22 set ip
2.2.23 set ipv6
2.2.24 set maintenance_ip
2.2.25 set partition home
2.2.26 set partition lan_device_mode
2.2.27 set partition memory_mirror_ras_mode
2.2.28 set partition memory_operation_mode
2.2.29 set partition name
2.2.30 set partition pci_address_mode
2.2.31 set partition pci_express_mode
2.2.32 set ssh
2.2.33 set ssh_port
2.2.34 set telnet
2.2.35 set telnet_port
2.2.36 set timezone
2.2.37 set partition extended_partitioning_mode
2.2.38 set partition dimm_excl_mode
2.2.39 set partition skt_binding_mode
2.2.40 add extended_partition sb
2.2.41 add extended_partition iou
2.2.42 add extended_partition pcibox
2.2.43 remove extended_partition sb
2.2.44 remove extended_partition iou
2.2.45 remove extended_partition pcibox
2.2.46 hotadd partition
2.2.47 hotremove partition
2.2.48 pciinfo partition
2.2.49 set partition extended_socket_mode
2.2.50 set partition extended_socket_zone
2.2.51 set partition memory_sparing_mode
2.2.52 create raid logical_drive
2.2.53 delete raid logical_drive
2.2.54 modify raid logical_drive_policy
2.2.55 modify raid logical_drive
2.2.56 create raid global_hotspare
2.2.57 create raid dedicated_hotspare
2.2.58 delete raid hotspare
2.2.59 start raid locate_pd
2.2.60 stop raid locate_pd

2.2.61 start raid locate_ld
2.2.62 stop raid locate_ld
2.2.63 start raid locate_encl
2.2.64 stop raid locate_encl
2.2.65 start raid rebuild
2.2.66 cancel raid rebuild
2.2.67 start raid copyback
2.2.68 cancel raid copyback
2.2.69 start raid mdc
2.2.70 cancel raid mdc
2.2.71 start raid patrol
2.2.72 cancel raid patrol
2.2.73 make raid online
2.2.74 make raid offline
2.2.75 replace raid missing_drive
2.2.76 set mmbcontrol reset
2.2.77 set mmbcontrol switch_over
2.2.78 set special_account
2.2.79 set partition pci_ecrc_mode

This section describes how to use these commands.

2.2.1 add partition

Adds specified SB, IOU or Extended Partitioning in specified partition.

If specified SB, IOU or Extended Partitioning are not in free status, they cannot be executed.

- **Privilege: Administrator**

(1) Input format

```
add partition < partition#> SB <SB#x> {quiet}
add partition < partition#> IOU <IOU#x> {quiet}
add partition <partition#> EXT_PART <Extended Partitioning#x> {quiet}
```

(2) Option

quiet: Executes the command without interacting with user.

(3) Usage example

・ Example: In PRIMEQUEST 2800E, when SB#3 is to be added in Partition #2

```
#add partition 2 SB 3
Are you sure you want to add  SB#3 to Partition#2? [Y/N] Y
Adding SB#3 to Partition#2 has been completed successfully.
#
```

・ Example: In PRIMEQUEST 2800E, when IOU#1 is to be added in Partition #2

```
#add partition 2 IOU 1
Are you sure you want to add  IOU#1 to Partition#2? [Y/N] Y
Adding IOU#1 to Partition#2 has been completed successfully.
#
```

・ Example: In PRIMEQUEST 2800E, when Extended Partitioning#4 is to be added in Partition #2

```
#add partition 2 EXT_PART 4
Are you sure you want to add  Extended Partitioning#4  to Partition#2? [Y/N] Y
Adding Extended Partitioning#4  to Partition#2 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to add %s to partition #%d? [Y/N]:
Adding %s to Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified [SB|IOU|Extended Partitioning] number is invalid.
Parameter missing
The specified parameter is invalid.
The parameter [IOU] is not supported.
Unable to add the specified SB#x to the partition due to CPU mismatch between SBs.
Unable to add the specified [SB#x | IOU#x | Extended Partitioning#x] to the partition because the specified [SB#x | IOU#x | Extended Partitioning#x] status is failed.
Unable to execute this command on a standby MMB.
Failed to execute add partition command.
Failed to execute %s command.
Unable to add the specified SB to the partition due to CPU composition abnormal.
Unable to add the specified SB to the partition due to DIMM composition abnormal.
Unable to add the specified SB to the partition due to SB composition abnormal.
Unable to add the specified SB to the partition due to DIMM does not satisfy requirements of Mode.
Unable to change partition configuration because this partition is powered on.
Unable to add the specified SB to the partition due to Dynamic Reconfiguration Mode.
The specified command is not supported.(error=[%s])
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because the power on/off is processing. Please execute it after a while again.
The specified [SB#x|IOU#x | Extended Partitioning#x] is Not-present.
The specified [SB#x | IOU#x | Extended Partitioning#x] is not free.
Unable to add SB to the partition because Extended Partitioning doesn't support multiple SB configuration except SB#0-1 or SB#2-3.
Unable to add SB to the partition because Extended Partitioning doesn't support Reserved SB in multiple SB confguration.

2.2.2 clear access_control

It clears the setting of Access Control.

- **Privilege: Administrator**

(1) Input format

```
clear access_control
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.
The specified parameter is invalid.

2.2.3 clear ssh_key

Clears the public key used for the SSH Public Key Authentication which is registered for the logged in user.

- **Privilege: User**

(1) Input format

```
clear ssh_key
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.
The specified parameter is invalid.

2.2.4 console

Login to the specified partition by telnet. Execute the Text Console connection of BMC.

The Text Console connection to BMC can be connected only by one command per BMC. However, the following messages are displayed when the following console command is executed when other users have already executed the console command, and the Text Console connection to BMC can be done compulsorily by inputting as 'Y'. In that case, the compulsion cutting is done as for the console command under the connection.

```
Console redirection already in use
If needed, the current user can be disconnected

Do you really want to force disconnect current user? [Y|N]:
```

- **Privilege: Administrator, Operator, Partition Operator (Partitions targeted for management only), CE**

(1) Input format

```
console <partition#> {timeout xxxx} {quiet}
```

(2) Option

timeout: Sets timeout value.
Set by 0 or within the range of 1-120 minutes.
0 consists of the special meaning, it indicates no Timeout.
Default setting is 10 minutes.
Perform the operation by default value when this option is not specified.

quiet: Executes the command without interactive operation with User.

(3) Usage example

Example: In case of Login to BMC of Partition#0
console 0
#

Example: When logged in to BMC of Partition#1 by timeout value of 20 minutes.
console 1 20
#

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
The specified partition number is invalid.
Unable to execute this command on a standby MMB.
Failed to execute 'console' command.
Unable to execute this command because you have not authority to operate this partition.

2.2.5 download ssh_key

Downloads the public key which is used in SSH Public Key Authentication of logged in users from the specified server and then registers the key.

Input method of URL is as follows.
http://host/path/file
ftp://host/path/file

- **Privilege: User**

(1) Input format

```
download ssh_key <URL>
```

(2) Option

None

(3) Usage example

When server is not specified: As shown below, the message urging for the URL input displays. Waiting for URL input.
Example:

```
# download ssh_key
URL:
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Specified host does NOT respond.

2.2.6 power off

Turn off the power of entire system or specified partition.

When the partition which is specified by parameter is not configured, ignore such partition.

When the specified partition is already in power off state, any process will not be executed for that partition.

Only the partitions which are targeted for management can be operated for Partition Operator.

Error message displays when the parameter having partitions which are not targeted for management is specified. Specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Partitions targeted for management only)**

(1) Input format

```
power off {partition} [all/ <partition#> [ , / -] <partition#>] {force}
```

(2) Option

Partition: Shutdown the operating system of partition by which partition number is specified and turns off the power of partition. This parameter is optional.
The default parameter is processed as the specified partition parameter. Therefore, it is necessary to specify the partition.
Partitions are specified as follows.
- all (All defined partitions) specified
- Specifies Partition numbers by delimiting with comma
- Specifies with the range of partition number

force: Shows that the power of the partition turns off forcefully without shutting down the operating system of partition.

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
The specified partition number is invalid.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to power off the partition#%d.
Unable to force power off on the partition#%d.
Command Failed. Code=0x%04X, 0x%02X
Unable to power off the Partition#n because you have not authority to operate this partition.
Unable to execute this command on a standby MMB.
Unable to power off the partition(s) because the partition which does not have authority to you is included in the specified parameter.
Unable to execute power control because the firmware is updating.

2.2.7 power on

Turn on the power supply of the entire system or the specified partition.

When the partition specified by the parameter is not configured, the partition which is not configured is ignored.

When the power supply for the specified partition is already turned on, processing for such partitions is not done.

Partition Operator can operate only the partition to be managed.

When the parameter which contains the partitions other than those to be managed is specified, an error message is displayed and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only the partition to be managed)**

(1) Input format

```
power on {partition} [ all | <partition#> [, | -] <partition#>]
```

(2) Option

Partition: Turn on the power of the partition which specifies the partition number.
When there is no power supply to the chassis, before turning on the power of the partition, turn on the power supply of the chassis and then turn on the power supply of the specified partition.
This parameter is optional. The default parameter is processed as the specified partition parameter. Therefore, it is necessary to specify the partition.
Partitions are specified as follows.

- all (All defined partitions) specified
- Specifies Partition numbers by delimiting with comma
- Specifies with the range of partition number

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
The specified partition number is invalid.
Unable to power on the partition#%d due to CPU mismatch between SBs.
Unable to power on the partition#%d due to DIMM does not satisfy requirements of Mode.
Unable to power on due to mismatch between supply voltage and input voltage.
Unable to power on the partition#%d due to abnormal DIMM composition.
Unable to power on the partition#%d due to abnormal SB composition.
Unable to power on the partition#%d.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command on a standby MMB
Unable to power on the partition#%d due to no Home SB.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
The Power On failed, because of switching the Home SB. Please execute it after a while again.
Unable to power on the Partition#n because you have not authority to operate this partition.
Unable to power on the partition(s) because the partition which does not have authority to you is included in the specified parameter.
Unable to execute this command because Extended Partitioning mode of the Partition#x is Enabled.
Unable to execute power control because the firmware is updating.
Unable to execute command because the power control operating.

2.2.8 sadump

Specify sadump to specified partition.

When the partition which is specified by the parameter is not configured, the partition is ignored.

When the specified partition is not in Power On state, any kind of processing for such partition is not done.

Partition Operator can operate only the partition to be managed.

When the parameter which contains the partitions other than those to be managed is specified, an error message is displayed and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only the partition to be managed)**

(1) Input format

```
sadump {partition} [<partition#> [, | -] <partition#>] {quiet}
```

(2) Option

partition: This option specifies a sadump of the partition identified by the specified partition number. This partition can be omitted.

partition#: Partition number. Even if the partition parameter is omitted, processing assumes that the partition parameter is specified. Therefore, a partition number must be specified.
Partition is number specified as follows.
- Partition numbers are separated by comma
- Specifies with the range of partition number

quiet: The command is executed without interactive operation with the user.

(3) Usage example

Example: When sadump is specified to Partition#1 by Administrator Authority

```
Administrator> sadump partition 1
Are you sure you want to sadump to Partition#1? [Y/N]: Y
Administrator>
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to sadump to Partition#%d? [Y/N]:
The specified parameter is invalid.
The specified partition number is invalid.
Unable to sadump the partition#%d.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command on a standby MMB.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to sadump the Partition#n because you have not authority to operate this partition.
Unable to sadump the partition(s) because the partition which does not have authority to you is included in the specified parameter.
Unable to execute power control because the firmware is updating.

2.2.9 reset

Specify the Hard Reset to the specified partition.

When the partition specified by the parameter is not configured, the partition which is not configured is ignored.

When the specified partition is not in Power On state, any kind of processing for such partition is not done.

Partition Operator can operate only the partition to be managed.

When the parameter which contains the partitions other than those to be managed, is specified then error message is displayed and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only the partition to be managed)**

(1) Input format

```
reset {partition} [<partition#> [, | -] <partition#>] {quiet}
```

(2) Option

partition: This option specifies a Hard Reset of the partition identified by the specified partition number. This partition can be omitted.

partition#: Partition number. Even if the partition parameter is omitted, processing assumes that the partition parameter is specified. Therefore, a partition number must be specified.
Partition is number specified as follows.

- Partition numbers are separated by comma
- Specifies with the range of partition number

quiet: The command is executed without interactive operation with the user.

(3) Usage example

Example: When reset is specified to Partition#1 by Administrator Authority

```
Administrator> reset partition 1
Are you sure you want to Reset to Partition#1? [Y/N]: Y
Administrator>
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to Reset to Partition#%d? [Y/N]:
The specified parameter is invalid.
The specified partition number is invalid.
Unable to Reset the partition#%d.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command on a standby MMB.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to Reset the Partition#n because you have not authority to operate this partition.
Unable to Reset the partition(s) because the partition which does not have authority to you is included in the specified parameter.
Unable to execute power control because the firmware is updating.

2.2.10 nmi

Specify NMI interruption to specified partition.

The default parameter is processed as the specified partition parameter. Therefore, it is necessary to specify the partition.

When the specified partition is not in Power On state, any kind of processing for such partition is not done.

Partition Operator can operate only the partition to be managed.

When the parameter which contains the partitions other than those to be managed, is specified then error message is displayed and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only the partition to be managed)**

(1) Input format

```
nmi{partition} [<partition#. [, | -] <partition#>] {quiet}
```

(2) Option

partition: This option specifies a NMI of the partition identified by the specified partition number. This partition can be omitted.

partition#: Partition number. Even if the partition parameter is omitted, processing assumes that the partition parameter is specified. Therefore, a partition number must be specified.
Partition is number specified as follows.
- Partition numbers are separated by comma
- Specifies with the range of partition number

quiet: The command is executed without interactive operation with the user.

(3) Usage example

Example: When NMI is specified in Partition #1 by Administrator privilege.

```
Administrator > nmi partition 1
Are you sure you want to NMI to Partition#1? [Y/N]: Y
Administrator >
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to NMI to Partition#%d? [Y/N]:
The specified parameter is invalid.
The specified partition number is invalid
Unable to NMI the partition#%d.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command on a standby MMB.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to NMI the Partition#n because you have not authority to operate this partition
Unable to NMI the partition(s) because the partition which does not have authority to you is included in the specified parameter.
Unable to execute power control because the firmware is updating.

2.2.11 remove partition

Remove the specified SB, IOU or Extended Partitioning from the specified partition.

When the specified SB, IOU or Extended Partitioning is not included in specified partition, then execution cannot be done.

■ Privilege: Administrator

(1) Input format

```
remove partition <partition#> SB <SB#x> {quiet}
remove partition <partition#> IOU <IOU#x> {quiet}
remove partition <partition#> EXT_PART <Extended Partitioning#x> {quiet}
```

(2) Option
quiet: Command is executed without interacting with the user.

(3) Usage example

・ Example: When removing SB#3 from Partition #2 in PRIMEQUEST 2800E

```
# r remove partition 2 SB 3.
Are you sure you want to remove SB#3 from Partition#2? [Y/N] Y
Removing SB#3 from Partition#2 has been completed successfully.
#
```

・ Example: When removing IOU#1 from Partition #2 in PRIMEQUEST 2800E

```
# remove partition 2 IOU1.
Are you sure you want to remove IOU#1 from Partition#2? [Y/N] Y
Removing IOU#1 from Partition#2 has been completed successfully.
#
```

・ Example: When removing Extended Partitioning#4 from Partition #2 in PRIMEQUEST 2800E

```
# remove partition 2 EXT_PART 4.
Are you sure you want to remove Extended Partitioning#4 from Partition#2? [Y/N] Y
Removing Extended Partitioning#4 from Partition#2 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to remove %s from Partition#%d? [Y/N]:
Removing %s from Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified [SB|IOU|Extended Partitioning] number is invalid.
The specified parameter is invalid.
Parameter missing
Partition#x does not include the [SB#x | IOU#x | Extended Partitioning#x].
Unable to execute this command on a standby MMB.
Failed to execute remove partition command.
Failed to execute %s command.
Unable to change partition configuration because this partition is powered on.
The specified command is not supported.(error=[%s])
The parameter [IOU] is not supported.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to remove the specified [SB#x | IOU#x | Extended Partitioning#x] from the partition while the partition is running.

2.2.12 set active_mmb

By resetting Active MMB, switch over to Active MMB.

This command is a command that assumes the case where it does not connect with Active MMB (Even CLI is not good at login either), and executes it from Standby MMB.

Do not execute this command with Active MMB because it does not support execution with Active MMB.
This command is a compulsion switch command of MMB used when the trouble occurs. Execute the set mmbcontrol switch_over command or execute Switch over of MMB Web-UI about a usual switch. Do not execute this command when it is normal. MMB might not operate normally.
Open the issue interval of the command for about 15 minutes when you issue this command continuously two times or more.

Remarks

- This command can be executed by connecting to Standby MMB.
- It is different from Switch Over function of MMB Web-UI.

■ Privilege: Administrator, CE

(1) Input format

```
set active_mmb {quiet}
```

(2) Option
quiet: Command is executed without interacting with the user.

(3) Usage example
None

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure to continue set active mmb? [y/n]:
The specified parameter is invalid.
set active_mmb failed.
Unable to execute this command on a Active MMB.
The specified MMB#x is NOT present.
The specified MMB#x is disabled.

2.2.13 set date

Set the date and time.
The set format is as following.

- MM : Month (01~12)
- DD : Date (1~28|29|30|31)
- hh : Time(00~23)
- mm : Minutes(00~59)
- CC : First two digits of the year (option)
- YY : Last two digits of the year (option)
- SS: Seconds (option)

■ Privilege: Administrator

(1) Input format

```
set date MMDDhhmm{{CC}YY}{, SS}
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified date is invalid.
Unable to set date because NTP is enabled.
Time synchronization was requested to Standby MMB.
Unable to execute this command on a standby MMB.

2.2.14 set partition dynamic_reconfiguration

Sets the enable/disable of Dynamic Reconfiguration of the specified partition.

When executing the settings by this command for the partition whose power is already on, message shown below is displayed, and settings cannot be done.

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

When settings of the partition for which power supply is already switched off are to be changed, it is not necessary to turn On / Off the power supply. The value set at that instant is reflected without displaying the above-mentioned message.

When Memory Scale-up Board is built into specified Partition, the specified partition cannot be operated

■ Privilege: Administrator

(1) Input format

```
set partition dynamic_reconfiguration <partition#>[disable|enable]{quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

・ Example : When Dynamic Reconfiguration of partition #3 is enabled

```
# set partition dynamic_reconfiguration 3 enable
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB
Failed to execute set partition dynamic_reconfiguration command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
DR can't be enabled, because of no DR license.
Unable to execute this command because [Extended Partitioning mode| PCI Bus mode| TPM | Fixed mode] of the Partition#%d is Enabled

2.2.15 set gateway

Default gateway is set

Set value is 0.0.0.0 by default.

- **Privilege: Administrator**

(1) Input format

```
set gateway<ip address>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified gateway address is invalid.
The specified parameter is invalid.
The specified IP address is duplicated.
The specified IP address is loopback address.
Unable to execute this command on a standby MMB.

2.2.16 set gateway_ipv6

Default gateway of IPv6 is set

If automatic setting is executed, only “auto” is specified in option.

■ Privilege: Administrator

(1) Input format

・ In case of manual setting

```
Set gateway_ipv6 <ip address>
```

・ In case of automatic setting

```
Set gateway_ipv6 auto
```

(2) Option

auto: IP address is set automatically.

(3) Usage example

・ In case of manual setting

```
# set gateway_ipv6 fe80::1
```

・ In case of automatic setting

```
#set gateway_ipv6 auto
fe80::beef
Are you sure to continue?[Y/N]
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to execute this command on a standby MMB.
The specified gateway address is invalid
The specified IP address is duplicated.
The specified IP address is loopback address.

2.2.17 set hostname

Specifies the host name of MMB in FQDN format

Characters which can be entered, are as follows.

[a-z],[A-Z],[0-9],[-] (Hyphen),[.] (Dot)

However, following conditions must be observed

- The first character must be alphanumeric character.
- [-] (Hyphen),[.] (Dot) cannot be used as first character

Default value is “PRIMEQUEST” + Product Serial Number.

Example:
When serial number is 1020516004,
“PRIMEQUEST1020516004”

■ Privilege: Administrator

(1) Input format

```
set hostname <hostname>.<domain name>
```

(2) Option

None

(3) Usage example

```
# set hostname hogehoge.fujitsu.com
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified hostname is invalid.
Unable to execute this command on a standby MMB.

2.2.18 set http

Enable/disable of HTTP server is set

Default value is disable (http is invalid)

- **Privilege: Administrator**

(1) Input format

```
set http [enable|disable]
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.

2.2.19 set http_port

Sets a port accepting HTTP session.8081 is the default.

The specifiable port numbers in <port> are in the range of 1024~65535, 80 is the standard port.

- **Privilege: Administrator**

(1) Input format

```
Set http_port <port>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified port number is invalid.
The specified port number is duplicated.
Unable to execute this command on a standby MMB.

2.2.20 set https

Sets enable/disable the HTTP server.

Default value set is disable (http disabled).

- **Privilege: Administrator**

(1) Input format

```
Set https [enable | disable]
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.

2.2.21 set https_port

Sets a port accepting HTTPS messages.432 is the default.

432, 1024~65535 are specifiable port numbers by <port>, 443 is the standard port.

- **Privilege: Administrator**

(1) Input format

```
Set https_port <port>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified port number is invalid.
The specified port number is duplicated.
Unable to execute this command on a standby MMB.

2.2.22 set ip

Sets <IP address>, <netmask>,for management LAN interface.

Sets virtual IP address of MMB connected in Serial.

Sets point of default is 0.0.0.0.

- **Privilege: Administrator**

(1) Input format

```
set ip <ip address> <netmask>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified IP address is invalid.
The specified netmask is invalid.
The specified IP address is duplicated.
The specified IP address is loopback address.
Unable to execute this command on standby MMB.
The specified MMB IP address is duplicated.(Console IP Address)

2.2.23 set ipv6

Sets the global address for IPv6 and prefix length for management LAN interface.

Sets virtual IP address of MMB.

When automatic setting is done, only “auto” is specified in the option.

■ Privilege: Administrator

(1) Input format

・ In case of manual setting

```
set ipv6 <ip address/prefix>
```

・ In case of automatic setting

```
set ipv6 auto
```

(2) Option

auto: IP address is set automatically.

(3) Usage example

・ In case of manual setting

```
#set ipv6 2001:db8:caaf:beef:206:29ff:fele:482e/48
#
```

・ In case of automatic setting

```
If GUID (Device serial number): “123456789abcdef0”
#set ipv6 auto
 2001:xxxx:xxxx:xxxx:xxxx:1234.5678.9abc.def0/64
 Are you sure to continue? [Y/N]
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.
The specified IP address is invalid.
The specified netmask is invalid.
The specified IP address is duplicate.
The specified IP address is loopback address.
The specified MMB IP address is duplicated.(Console IP Address)

2.2.24 set maintenance_ip

Remarks
Only IPv4 is supported.

Set IP address in Maintenance port.

Set point of default is 0.0.0.0, common in ip address, netmask, gateway address, smtp address.
Sets virtual IP address of MMB connected in Serial.

Sets point of default is 0.0.0.0.

- <ip address>: IP address set in Maintenance port (when 0.0.0.0 is specified, settings are cleared)
- <subnet mask>: Subnet mask of IP address
- <gateway address>: Gateway
- <smtp address>: Mail server for REMCS notification

Remarks

- When you change SMTP Address by this command, it is necessary to change the settings of SMTP server in REMCS environment setting window. Moreover, before initializing REMCS, Routing should be set by this command.

- When REMCS is to be connected in P-P, <gateway address> and <SMTP address> are not required. In such case, <gateway address> and <SMTP address> are set to 0.0.0.0.

- When settings in this command are invalid, <ip address> is set to 0.0.0.0. Though the parameters other than <ip address> parameters are optional, they are recommended to be 0.0.0.0.

■ Privilege: Administrator, CE

(1) Input format

```
set maintenance_ip <ip address> <netmask> <gateway address> ¥
<smtp address>
```

¥: Indicates that there is no new line.

(2) Option

None

(3) Usage example

Examples: Setting the IP address of the Maintenance port by the following contents

- IP address: 192.168.1.10
- Subnetmask: 255.255.255.0
- Gateway: 192.168.1.1
- Mail server for REMCS acknowledgement: 172.128.1.2

```
# set maintenance_ip 192.168.1.10 255.255.255.0 192.168.1.1 172.128.1.2
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified IP address is invalid.
The specified netmask is invalid.
The specified gateway address is invalid.
The specified smtp address is invalid.
Unable to execute this command on a standby MMB.

2.2.25 set partition home

It sets the Home SB of the specified partition.

It specifies the number of SB to be set in Home. If the specified SB does not exist, the process is not executed. When specified SB is Memory Scale-up Board, processing is not executed. When the specified partition is an Extended Partition, the error message is displayed, and the operation to the specified partition cannot be operated.
Resource (USB1, VGA/USB2) of Home SB allocated in Extended Partition automatically changes into the resource of specified SB when the Extended Partitioning mode of the specified partition is Enable setting.

- **Privilege: Administrator**

(1) Input format

```
set partition home <partition#> SB <SB#>
```

(2) Option

None

(3) Usage example

Example: When setting SB#2 as Home in Partition3

```
# set partition home 3 SB 2
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified SB number is invalid.
The specified SB#x is Not - present.
Unable to change the home SB while the partition is running. Please try to change the home SB after the partition is shutdown.
Unable to execute this command on a standby MMB.
The specified parameter is invalid.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Succeed to set partition home command.
Failed to execute set partition home command.
Failed to execute %s command.
The specified command is not supported.(error=[%s])

2.2.26 set partition lan_device_mode

LAN Device Mode is set by the IOU unit in the specified partition.
Default value set is wol_disable.

wol_enable: Onboard LAN enabled with AC On.
wol_disable: Onboard LAN enabled with Partition On.
device_disable: Onboard LAN device disabled always.

For the partition which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

For the partition which is already powered OFF, when the settings are changed by this command, power OFF/ON is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when values which are the same as the current values are set, power off/on is not required and the above-mentioned message is not displayed.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition lan_device_mode <partition#> <IOU#> [wol_enable|
```

(2) Option
quiet: The command is executed without interactive operation to User.

(3) Usage example
Example: When setting IOU#2 to Enable (WOL enabled) in the Partition3

```
# set partition lan_device_mode 3 2 enable_wol_enable
#
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the partition power off/on is performed.
The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute set partition command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.

2.2.27 set partition memory_mirror_ras_mode

It sets the Memory Mirror RAS mode of the specified partition.

Memory Operation Mode can be set only at the time of Mode settings. Default value is set to mirror_keep (RAS emphasized mode).

mirror_keep: Mode is maintained
capacity_keep: Capacity of the memory is maintained.

For the partition which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

For the partition which is already powered OFF, when the settings are changed by this command, power OFF/ON is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when values which are the same as the current values are set, power ff/on is not required and the above-mentioned message is not displayed.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition memory_mirror_ras_mode <partition#> [mirror_keep |capacity_keep ]
{quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

Example: When setting Memory Mirror RAS Mode of the Partition3 to Mirror Keep Mode

```
# set partition memory_mirror_ras_mode 3 mirror_keep
The setting will become effective the next time the partition power off/on is performed
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the partition power off/on is performed.
The specified partition number is invalid.
The specified parameter is invalid.
Unable to register the specified Partition#%d as Mode enable because the CPU mismatch between SBs.
Unable to register the specified Partition#%d as Mode enable because the DIMM does not satisfy requirements of Mode.
Unable to register the specified Partition#%d as Mode enable because the unsupported CPU configuration.
Unable to register the specified Partition#%d as Mode enable because of abnormal CPU composition.
Unable to register the specified Partition#%d as Mode enable because of abnormal DIMM composition.
Unable to register the specified Partition#%s as Mode enable because of abnormal SB composition.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute set partition command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.

2.2.28 set partition memory_operation_mode

It sets the Memory Operation Mode of the specified partition.

By default normal (Mode invalid) is set.

performance : sets the Performance Mode
normal : sets the Normal Mode
partial_mirror : sets the Partial Mode
full_mirror : sets the Full Mode
spare : sets the Spare Mode
address_range_mirror : sets the Address Range Mirror Mode (This function can be available in the PRIMEQUEST 2400E3/2800E3)

For the partition which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

"Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown."

When the partition is configured of or above, and when Reserved SB is set, also, when the settings other than the Memory Operation Mode satisfying the DIMM configuration requirement of SB is set as Reserved SB, following message is displayed and setting cannot be possible.

"The SB with DIMM that does not satisfy requirements of Mode is
registered as a Reserved SB.
If you register this partition as a Mode,
Mode will be disabled when switching to Reserved SB.
Are you sure to continue?[Y/N]"

For the partition which is already powered OFF, when the settings are changed by this command, power OFF/ON is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when the values which are the same as the current values are set, power off/on is not required and the above-mentioned message is not displayed.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition memory_operation_mode <partition#> [performance |normal |
partial_mirror | full_mirror | spare | address_range_mirror] {quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

Example: When setting Memory Operation Mode of the Partition3 to performance

```
# set partition memory_operation_mode 3 performance
The setting will become effective the next time the partition power off/on is performed
#
```

here are cases when the partition is configured to 1SB, and, when Reserved SB is set, also when the settings other than the Memory Operation Mode of DIMM configuration satisfying SB requirement is registered as Reserved SB, a dialog box for conformation is displayed.
When the Memory Operation Mode is switched to the Reserved SB, a warning message indicating a change in Memory Operation Mode is displayed in the dialog box and whether this setting is to be continued is confirmed in the dialog box.

If this message is not displayed, the Memory Operation Mode is not changed even if it is switched to Reserved SB.

Example: When setting the Mode of the Partition 1 to enable
(The SB with DIMM that does not satisfy the Mode requirements is registered as the Reserved SB in Partition 1)

```
# set partition memory_operation_mode 1 pertial_mirror
The SB with DIMM that does not satisfy requirements of Mode is registered as the Reserved SB.
If you register this partition as a Mode,
Mode will be disabled when switching to a Reserved SB.
Are you sure to continue? [Y/N] y
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the partition power off/on is performed. Are you sure to continue? [Y/N]
The SB with DIMM that does not satisfy requirements of Mode is registered as a Reserved SB. If you register this partition as a Mode, Mode will be disabled when switching to Reserved SB. Are you sure to continue? [Y/N]
The specified partition number is invalid.
The specified parameter is invalid.
Unable to register the specified Partition#%d as Mode enable because the CPU mismatch between SBs.
Unable to register the specified Partition#%d as Mode enable because the DIMM does not satisfy requirements of Mode.
Unable to register the specified Partition#%d as Mode enable because the unsupported CPU configuration.
Unable to register the specified Partition#%d as Mode enable because of abnormal CPU composition.
Unable to register the specified Partition#%d as Mode enable because of abnormal DIMM composition.
Unable to register the specified Partition#%s as Mode enable because of abnormal SB composition.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute set partition command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.

2.2.29 set partition name

I It sets the name of the specified partition.

The name of the partition is up to 16 characters. The name that contains the characters exceeding the 16 characters cannot be set.

If the name contains space, it is enclosed within “”.

The characters that can be used are as follows.

[a-z], [A-Z], [0-9], “-“, (Under bar), “_” (hyphen), “#” (Sharp), “” (Blank)

No default value is set.

- **Privilege: Administrator**

(1) Input format

```
set partition name <partition#> <partition name>
```

(2) Option

None

(3) Usage example

Example: When setting the name “hogehoge” to the Partition3

```
# set partition name 3 hogehoge
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified partition name is invalid.
Partition#x is not defined.
Unable to execute this command on a standby MMB.
The specified parameter is invalid.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Succeed to set partition name command.
Failed to execute set partition name command.
Failed to execute %s command.
The specified command is not supported.(error=[%s])

2.2.30 set partition pci_address_mode

It sets the PCI Address Mode of the specified partition.

PCI Segment Mode is set as default.

bus: sets PCI Bus Mode
segment: sets PCI Segment Mode

For the partition which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

For the partition which is already powered off, when the settings are changed by this command, power off/on is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when the values which are the same as the current values are set, power off/on is not required and the above-mentioned message is not displayed.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition pci_address_mode <partition#> [bus | segment ]{quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

Example: When setting PCI Address Mode of the Partition3 to Segment Mode

```
# set partition pci_address_mode 3 segment
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the partition power off/on is performed.
The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute set partition command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.

2.2.31 set partition pci_express_mode

It sets the PCI Express Mode of the specified partition.
This command cannot be operated for Partition that has already done power On.

Flexible I/O Mode is set as default.

flexible: sets Flexible I/O Mode
fixed: sets Fixed I/O Mode

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

When the Fixed I/O mode is set to Partition to which Reserved SB is set, the error message is displayed, and the operation is restrained.

The setting of Device Manager -> LAN Remote Boot Configuration of the UEFI menu might return to the Default setting when the setting of PCI Express Mode is changed. Please set LAN Remote Boot Configuration again after the setting change of PCI Express Mode.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition pci_ express_mode <partition#> [ flexible | fixed ]
```

(2) Option

None

(3) Usage example

Example: When setting I/O Mode of the Partition3 to fixed Mode

```
# set partition pci express mode 3 fixed
pci_express_mode: fixed
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Failed to execute set partition pci_express_mode command.
Unable to execute this command on a standby MMB.
Unable to set the fixed mode in this model.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.
Unable to change the mode because of the Reserved SB setting.

2.2.32 set ssh

Sets enable/disable of SSH.

Default setting is disable (SSH Disable).

- **Privilege: Administrator**

(1) Input format

```
set ssh [enable | disable]
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.

2.2.33 set ssh_port

Set the port which receives the SSH session. Default setting is 22.

The port number which indicates the <port> are 22, 1024~65535.

- **Privilege: Administrator**

(1) Input format

```
set ssh_port <port>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified port number is invalid.
The specified port number is duplicated.
Unable to execute this command on a standby MMB.

2.2.34 set telnet

Sets enable/disable of Telnet.
Default setting is disable (Telnet Disable).

- **Privilege: Administrator**

(1) Input format

```
set telnet [enable | disable]
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unable to execute this command on a standby MMB.

2.2.35 set telnet_port

Sets the port which receives the telnet connection. Default setting is 23.

Port numbers which can be set are 23, 1024~65535.

- **Privilege: Administrator**

(1) Input format

```
set telnet_port <port>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified port number is invalid.
The specified port number is duplicated.
Unable to execute this command on a standby MMB.

2.2.36 set timezone

Set the Timezone.

Remarks

It is necessary to reset the time by using set date command after the time zone is set.

- **Privilege: Administrator**

(1) Input format

```
set timezone <timezone>
```

(2) Option

None

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified port number is invalid.
Time synchronization was requested to Standby MMB.
Unable to execute this command on a standby MMB.

2.2.37 set partition extended_partitioning_mode

Sets the Extended Partitioning mode for the specified partition.

Default setting is disable.

enable: enables Extended Partitioning mode.
disable: disables Extended Partitioning mode.

When the settings are executed for the partition which is already in powered on by using this command, the following messages are displayed and settings cannot be done. :

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

When the settings are changed by using this command for the partition which is already powered off, power on/off is not required. The values are reflected immediately, without displaying above message.

Moreover, power on/off is not required even if the present value is not changed. In this case also, the above message is not displayed.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: Administrator, Operator, Partition Operator (Management target partition only)**

(1) Input format

```
Set partition extended_partitioning _mode <partition#> [enable | disable] {quiet}
```

(2) Option
quiet: Message is not displayed

(3) Usage example
Example: when setting the Extended Partitioning mode of Partition#1 Enable

```
# set partition extended_partitioning _mode 1 enable
#
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘set partition extended_partitioning_mode’ command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.
Partition#x is not defined.
The Extended Partitioning mode cannot be changed while the PPAR Partition is Dynamic Reconfiguration mode.
Unable to set Extended Partitioning Mode because Partition Power Save Control is enabled.
Unable to set Extended Partitioning Mode because Extended Partitioning doesn't support multiple SB configuration except SB#0-1 or SB#2-3.
Unable to set Extended Partitioning Mode because Extended Partitioning doesn't support Reserved SB in multiple SB configuration.

2.2.38 set partition dimm_excl_mode

It sets the DIMM exclusive allocation mode of the specified Extended Partitioning.

Default value set is disable.

enable: DIMM exclusive allocation mode is valid
disable: DIMM exclusive allocation mode is invalid

For the partition which is already powered on, when the settings are performed by this command, following message is displayed and settings cannot be performed.

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

For the partition which is already powered off, when the settings are changed by this command, power off/on is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also if a values which are the same as the current values are set, power off/on is not required, and the above-mentioned message is not displayed.

When the specified partition is not in an Extended Partitioning, an error message is displayed and the operation cannot be performed for the specified partition.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition dimm_excl_mode <partition#> [enable| disable ]{quiet}
```

(2) Option
quiet: Message is not displayed

(3) Usage example
Example: When setting DIMM exclusive allocation mode of the Partition#4 to Enable.

```
# set partition dimm_excl_mode 4 enable
#
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘set partition dimm_excl_mode’ command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.
Partition#x is not defined.

2.2.39 set partition skt_binding_mode

It sets the CPU socket binding mode of the specified Extended Partitioning.

Default value set is disable.

enable: CPU socket binding mode is enabled.
disable: CPU socket binding mode is disabled

For the partition which is already powered on, when the settings are performed by this command, the following message is displayed and settings cannot be performed.

“Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.”

For the partition which is already powered off, when the settings are changed by this command, power off/on is not required. The value which is set, is reflected instantly instead of displaying the above-mentioned message

Moreover, also when value which are the same as the current values are set, power off/on is not required and the above-mentioned message is not displayed.

When the mode setting is changed from disable to enable for the Extended Partition where the number of CPU cores more than two sockets is allocated, the number of CPU cores is changed to two sockets.

When the specified partition is not in an Extended Partitioning, an error message is displayed and the operation cannot be performed for the specified partition.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition skt_binding_mode <partition#> [enable| disable ] {quiet}
```

(2) Option
quiet: Message is not displayed

(3) Usage example
Example: When setting CPU socket binding mode of the Partition#4 to Enable.

```
# set partition skt_binding_mode 4 enable
#
```

Example: When setting the mode of the Partition#4 that allocates 37 cores to Enable.

```
# set partition skt_binding_mode 4 enable
The setting number of CPU cores will be modified.(current:37 to setting:36)
SKT Binding Mode of Partition#4 is enable.
Are you sure to continue?[Y/N]: y
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘set partition skt_binding_mode’ command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.
Partition#x is not defined.

2.2.40 add extended_partition sb

It adds the specified SB resources to the specified Extended Partitioning.

It is set to the specified value for CPU Core and Memory.

When the specified Extended Partitioning is powered ON, this command cannot be executed.

When CPU core number, memory size, USB1 of HOME SB, VGA/USB2/rKVMS, PCI Express slot of SB, is not free, this command cannot be executed.

When the specified partition number is not in an Extended Partitioning, none of the commands are executed.

When VGAUSB2 is executed, the message to recommend the user operation that does not allocate VGA/USB2/rKVMS is output.

When numbers of CPU cores that are more than that of two sockets are specified by this command for the Extended Partition that CPU socket binding mode is set to enable, the number of CPU cores is changed to two sockets.

■ Privilege: Administrator

(1) Input format

```
add extended_partition sb <partition#> CPU <CPU core number> {quiet}
add extended_partition sb <partition#> MEMORY <Memory size> {quiet}
add extended_partition sb <partition#> USB1 {quiet}
add extended_partition sb <partition#> VGAUSB2 {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When three CPU cores are to be set to Partition#4 in PRIMEQUEST 2800E

```
# add extended_partition sb 4 CPU 3
Are you sure to continue adding three CPU Cores to Partition#4? [Y/N] Y
Adding three CPU Cores to Partition#4 has been completed successfully.
#
```

・ Example: When 24G Memory is to be se to Partition#4 in PRIMEQUEST 2800E

```
# add extended_partition sb 4 MEMORY 24
Are you sure to continue adding 24G Memory to Partition#4? [Y/N] Y
Adding 24G Memory to Partition#4 has been completed successfully.
#
```

・ Example: When USB1 of HOME SB is to be added to Partition#4 in PRIMEQUEST 2800E

```
# add extended_partition sb 4 USB1
Are you sure to continue adding USB1 to Partition#4? [Y/N] Y
Adding USB1 to Partition#4 has been completed successfully.
#
```

・ Example: When VGA/USB2 of HOME SB is to be added to Partition#4 in PRIMEQUEST 2800E

```
# add extended_partition sb 4 VGAUSB2
Are you sure to continue adding VGA/USB2 to Partition#4? [Y/N] Y
!!! CAUTION!!!
Assignment of "VGA/USB2/rKVMS" cannot be changed if the Extended Partition is powered on.
Please release "VGA/USB2/rKVMS" after the operation.
Note:
"IP Address", "Video Redirection" and "Virtual Media" for all Extended Partitions must be enabled in
"Partition -> Console Redirection Setup" menu.
Adding VGA/USB2 to Partition#4 has been completed successfully.
#
```

・ Example: When PCI Express slot of SB#2 is to be added to Partition#4 in PRIMEQUEST 2800E

```
# add extended_partition sb 4 PCISLOT 2
Are you sure to continue adding PCI Slot of SB#2 to Partition#4? [Y/N] Y
Adding PCI Slot of SB#2 to Partition#4 has been completed successfully.
#
```

・ Example: When adding 37 CPU cores to Partition#4 whose CPU socket binding mode is enable. (CPU is 18 cores/socket)

```
# add extended_partition sb 4 CPU 37
The specified number of cores will be modified (37 to 36), because SKT Binding
Mode is enable.
Are you sure you want to add 36 CPU Cores to Partition#4? [Y/N]: Y
Adding 36 CPU Cores to Partition#4 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Are you sure you want to add %s to Partition#%d? [Y/N]:
Adding %s to Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified SB number for PCI Slot is invalid.
The specified partition doesn't have [SB#%d | SB].
Parameter missing
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'add extended_partition sb' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because this Extended Partitioning is powered on.
Partition#x is not defined.
The specified [USB1 | VGA/USB2 | PCI Slot] is not free.
The specified [CPU cores | Memory size] is too large.

2.2.41 add extended_partition iou

Resources of the specified IOU are added to specified Extended Partitioning.

This command is not executed when the specified Extended Partitioning is powered on.

This command is not executed when the specified on-board GbE, PCI Express slot and DU are not free.

Nothing is executed, when the specified partition number is not Extended Partitioning.

■ Privilege: Administrator

(1) Input format

```
add extended_partition iou <IOU#x> <partition#> GBE {quiet}
add extended_partition iou <IOU#x> <partition#> PCISLOT <PCI Slot#> {quiet}
add extended_partition iou <IOU#x> <partition#> DU {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When on-board GbE of IOU#1 is to be added to Partition#4 in PRIMEQUEST2800E

```
# add extended_partition iou 1 4 GBE
Are you sure to continue adding GbE of IOU#1 to Partition#4? [Y/N] Y
Adding GbE of IOU#1 to Partition#4 has been completed successfully.
#
```

・ Example: When PCI Express slot#1 of IOU#1 is to be added to Partition # 4 in PRIMEQUEST2800E

```
# add extended_partition iou 1 4 PCISLOT 1
Are you sure to continue adding PCI Slot#1 of IOU#1 to Partition#4? [Y/N] Y
Adding PCI Slot#1 of IOU#1 to Partition#4 has been completed successfully.
#
```

・ Example: When DU of IOU#1 is to be added to Partition#4 in PRIMEQUEST2800E

```
# add extended_partition iou 1 4 DU
Are you sure to continue adding Disk Unit of IOU#1 to Partition#4? [Y/N] Y
Adding Disk Unit of IOU#1 to Partition#4 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Are you sure you want to add %s to Partition#%d? [Y/N]:
Adding %s to Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified [IOU# | PCI Slot#] is invalid.
The specified partition doesn't have IOU#%d.
The specified DU is not connected.
Parameter missing
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'add extended_partition iou' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because this Extended Partitioning is powered on.
Partition#x is not defined.
The specified [GbE | PCI Slot#x | DU] is not free.

2.2.42 add extended_partition pcibox

PCI Express slot of the specified PCI_Box is added to specified Extended Partitioning.

This command is not executed when the specified Extended Partitioning is powered on.

This command is not executed when PCI Express slot of the specified PCI_Box is not free.

Nothing is executed, when the specified partition number is not Extended Partitioning.

■ Privilege: Administrator

(1) Input format

```
add extended_partition pcibox <PCIBOX#> <partition#> PCISLOT<PCI Slot#> {quiet}
```

(2) Option

quiet: This command is executed without interactive operations for user.

(3) Usage example

・ Example: When PCI Express slot of PCI_Box#1 is to be added to Partition#4 in PRIMEQUEST2800E

```
# add extended_partition pcibox 1 4 PCISLOT 2
Are you sure to continue adding PCISLOT#2 of PCIBOX#1 to Partition#4? [Y/N] Y
Adding PCISLOT#2 of PCIBOX#1 to Partition#4 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Are you sure you want to add %s to Partition#%d? [Y/N]:
Adding %s to Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified [PCI_Box# | PCI Slot#] is invalid.
The specified partition doesn't have PCI Box#%d.
Parameter missing
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'add extended partition pcibox' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because this Extended Partitioning is powered on.
Partition#x is not defined.
The specified PCI Slot#x is not free.

2.2.43 remove extended_partition sb

Resources of the specified SB are removed from the specified Extended Partitioning.

This command is not executed when the specified Extended Partitioning is powered on.

This command is not executed when USB1 of the specified HOME SB, VGA/USB2/rKVMS, PCI Express slot of SB is not included in the partition.

Nothing is executed when the specified partition number is not an Extended Partitioning.

■ Privilege: Administrator

(1) Input format

```
remove extended_partition sb <partition#> USB1 {quiet}
remove extended_partition sb <partition#> VGAUSB2 {quiet}
remove extended_partition sb <partition#> PCISLOT <SB#> {quiet}
```

(2) Option

quiet: This command is executed without interactive operations for user.

(3) Usage example

・ Example: When USB1 of HOME SB is removed from Partition#4 in PRIMEQUEST 2800E

```
# remove extended_partition sb 4 USB1
Are you sure to continue removing USB1 from Partition#4? [Y/N] Y
Removing USB1 from Partition#4 has been completed successfully.
#
```

・ Example: When VGA/USB2 of HOME SB is removed from Partition #4 in PRIMEQUEST 2800E

```
# remove extended_partition sb 4 VGAUSB2
Are you sure to continue removing VGA/USB2 from Partition#4? [Y/N] Y
Removing VGA/USB2 from Partition#4 has been completed successfully.
#
```

・ Example: When PCI Express slot of SB#2 is removed from Partition #4 in PRIMEQUEST 2800E

```
# remove extended_partition sb 4 PCISLOT 2
Are you sure to continue removing PCI Slot of SB#2 from Partition#4? [Y/N] Y
Removing PCI Slot of SB#2 from Partition#4 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Are you sure you want to remove %s from Partition#%d? [Y/N]:
Removing %s from Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified SB number for PCI Slot is invalid.
The specified partition doesn't have [SB#%d | SB].
Parameter missing
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'remove extended_partition sb' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because this Extended Partitioning is powered on.
Partition#x is not defined.
Partition#x does not include the specified [USB1 | VGA/USB2 | PCI Slot#x].

2.2.44 remove extended_partition iou

Removed IOU from the Extended Partitioning, in which the specified IOU resource was specified.

When the specified Extended Partitioning is powered on, processing of this command is not executed.

When the specified on-board GbE, PCI Express slot, DU are not included in the partition, the processing of this command is not executed.

When the specified partition number is not an Extended Partitioning, nothing is processed.

■ Privilege: Administrator

(1) Input format

```
remove extended_partition iou <partition#> GBE {quiet}
remove extended_partition iou <partition#> PCISLOT <PCI Slot#> {quiet}
remove extended_partition iou <partition#> DU {quiet}
```

(2) Option

quiet: This command is executed without interactive operations for user.

(3) Usage example

・ Example: When onboard GbE of IOU#1 with PRIMEQUEST 2800E is removed from Partition#4,

```
#remove extended_partition iou 14GBE
Are you sure to continue removing GbE of IOU#1 from Partition#4? [Y/N] Y
Removing GbE of IOU#1 from Partition#4 has been completed successfully.
#
```

・ Example: When PCI Express slot of IOU#1 with PRIMEQUEST 2800E is removed from Partition#4

```
# remove extended_partition iou 14PCISLOT 1
Are you sure to continue removing PCI Slot#1 of IOU#1 from Partition#4? [Y/N] Y
Removing PCI Slot#1 of IOU#1 from Partition#4 has been completed successfully.
#
```

・ Example: When DU of IOU#1 with PRIMEQUEST 2800E is removed from Partition #4

```
#remove extended_partition iou 1 4 DU
Are you sure to continue removing Disk Unit of IOU#1 from Partition#4?[Y/N] Y
Removing Disk Unit of IOU#1 from Partition#4 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Are you sure you want to remove %s from Partition#%d? [Y/N]:
Removing %s from Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified [IOU# | PCI Slot#] is invalid.
The specified partition doesn't have IOU#%d.
The specified DU is not connected.
Parameter missing
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'remove extended_partition iou' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because this Extended Partitioning is powered on.
Partition#x is not defined.
Partition#x does not include the specified [GbE | PCI Slot#x | DU].

2.2.45 remove extended_partition pcibox

Resource of the specified PCI_Box is removed from the specified Extended Partitioning.

When the specified Extended Partitioning is powered on, the processing of this command is not executed.

When the PCI Express slot of the specified PCI_Box is not included in the partition, the processing of this command is not executed.

When the specified partition number is not an Extended Partitioning, nothing is processed.

■ Privilege: Administrator

(1) Input format

```
remove extended_partition pcibox <PCIBOX#> <partition#> PCISLOT <SLOT#> {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When PCI Express slot#2 of PCI_Box with PRIMEQUEST 2800E is removed from Partition#4

```
#remove extended_partition pcibox 1 4 PCISLOT 2
Are you sure to continue removing PCISLOT#2 of PCIBOX#1 from Partition#4? [Y/N] Y
Removing PCISLOT#2 of PCIBOX#1 from Partition#4 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Are you sure you want to remove %s from Partition#%d? [Y/N]:
Removing %s from Partition#%d has been completed successfully.
The specified partition number is invalid.
The specified [PCI_Box# | PCI Slot#] is invalid.
The specified partition doesn't have PCI Box#%d.
Parameter missing
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'remove extended_partition pcibox' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to set configuration because this Extended Partitioning is powered on.
Partition#x is not defined.
Partition#x does not include the PCI Slot#x.

2.2.46 hotadd partition

The specified SB or IOU is dynamically added for the specified partition.

- A few minutes are required for the execution of this command.
- The SB parameter specifies physical SB number (It is not logical SB number).
- The execution of this command cannot be interrupted.
- When the partition will be started next time, the configuration change is reflected even if the command fails.

■ Privilege: Administrator

(1) Input format

```
hotadd partition <partition#> SB <SB#x> {quiet}
hotadd partition <partition#> IOU <IOU#x> {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

- Example: When SB#3 is to be added to Partition#2

```
# hotadd partition 2 SB 3
  Are you sure to continue adding SB#3 to partition#2? [Y/N] Y
  DR operation start (1/5)
  Assigning SB#3 to partition#2 (2/5)
  Testing SB#3 (3/5)
  Reconfiguring partition#2 (4/5)
  Onlining added Memory/CPU (5/5)
  Adding SB#3 to Partition#2 has been completed successfully.
#
```

- Example: When IOU#3 is to be added to Partition#2

```
# hotadd partition 2 IOU 3
  Are you sure to continue adding IOU#3 to Partition#2? [Y/N] Y
  DR operation start (1/3)
  Assigning IOU#$ to partition#$ (2/3)
  Power on IOU#$(3/3)
  Adding IOU#3 to Partition#2 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure to continue adding [SB#%d|IOU#%d] to partition#%d? [Y/N]:
DR operation start (1/5)
Assigning SB#%d to partition#%d (2/5)
Testing SB#%d (3/5)
Reconfiguring partition#%d (4/5)
Onlining added Memory/CPU (5/5)
DR operation start (1/3)
Assigning IOU#%d to partition#%d (2/3)
Power on IOU#%d(3/3)
Adding [SB#%d|IOU#%d] to partition#%d has been completed successfully.
The specified [SB#%d|IOU#%d] is not present.
The specified [SB#%d|IOU#%d] is power-on.
The specified Partition#%d is no Home.
Hot-add [SB#%d|IOU#%d] failure.
Unable to hot-add SB due to firmware mismatch.
Unable to hot-add SB due to SB revision mismatch.
Unable to hot-add SB due to CPU mismatch.
Unable to hot-add SB due to DIMM mismatch.
Unable to power on the DR test partition.
Unable to power off the DR test partition.
Check DR Unit Error
Unable to onlining the DR target bmc.
Unknown Error Code =0xXX
The specified SB#%d is not supported.
Failed to execute hotadd partition command.
Unable to execute this command on a standby MMB.
Hot-add [SB#%d|IOU#%d] failed.
Failed to execute DR operation. Fatal error occurred.
Unable to power on the IOU.
Unable to power on the PCIBox.
Failed to create DR test partition.
Failed to execute DR operation. Partition is stopped.
DR sequence timeout: added SB power on failure
DR sequence timeout: SB hot-add OS failure
DR sequence timeout: SB hot-add request failure
DR sequence timeout: QPI connection failure
BIOS Error Code =0xXX
The specified [SB#%d|IOU#%d] is not free or reserved.
DR can't be enabled, because of no DR license
DR feature is disabled.
Unable to execute DR command while other DR command is running
Unable to execute DR command due to previous failure.
Unable to hot-add SB while firmware updating.
Unable to execute DR command because OS is not ready for DR operation

2.2.47 hotremove partition

The specified SB or IOU is removed dynamically from the specified partition.

■ Privilege: Administrator

(1) Input format

```
hotremove partition <partition#> SB <SB#x> {quiet}
hotremove partition <partition#> IOU <IOU#x> {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When SB#3 is removed from Partition#2

```
# hotremove partition 2 SB 3
   Are you sure to continue removing SB#3 from partition#2? [Y/N] Y
   DR operation start (1/4)
   Offlining removed Memory/CPU (2/4)
   Reconfiguring partition#2 (3/4)
   Releasing SB#3 (4/4)
   Removing SB#3 from partition#2 has been completed successfully.
#
```

・ Example: When IOU#3 is removed from Partition#2

```
# hotremove partition 2 IOU 3
   Are you sure to continue removing IOU#3 from Partition#2? [Y/N]: Y
   DR operation start (1/3)
   Remove IOU#3 (2/3)
   IOU#3 power-off (3/3)
   Removing IOU#3 from Partition#2 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure to continue removing [SB#%d|IOU#%d] from Partition#%d? [Y/N]:
DR operation start (1/4)
Offlining removed Memory/CPU (2/4)
Reconfiguring partition#%d (3/4)
Releasing SB#%d (4/4)
DR operation start (1/3)
Remove IOU#%d (2/3)
IOU#%d power-off (3/3)
Removing [SB#%d|IOU#%d] from partition#%d has been completed successfully.
The specified [SB#%d|IOU#%d] is not present.
The specified [SB#%d|IOU#%d] is power-off.
The specified [SB#%d|IOU#%d] is not in specified Partition.
The specified SB#%d is home SB.
Unknown Error Code =0xXX
Failed to execute hotremove partition command.
Unable to execute this command on a standby MMB.
Hot-remove [SB#%d|IOU#%d] failed.
Failed to execute DR operation. Fatal error occurred.
Failed to execute DR operation. Configuration is unrecovered.
Failed to execute DR operation. Partition is stopped.
The specified IOU#%d has not stopped.
DR sequence timeout: QPI disconnection failure
DR sequence timeout: SB hot-remove OS failure
BIOS Error Code =0xXX
The specified [SB#%d|IOU#%d] is free
DR can't be enabled, because of no DR license
DR feature is disabled.
Unable to execute DR command due to previous failure.
Unable to execute DR command while other DR command is running
Unable to hot-remove SB while firmware updating.
Unable to execute DR command because OS is not ready for DR operation

2.2.48 pciinfo partition

PCI information on specified IOU is requested to be notified the specified partition.

- A few minutes are required for the execution of this command.
- The execution of this command cannot be interrupted.

■ Privilege: Administrator

(1) Input format

```
pciinfo partition <partition#> IOU <IOU#> {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

- Example: When you specify IOU#3 for Partition#2

```
# pciinfo partition 2 IOU 3
  Are you sure to continue updating IOU#3 in Partition#2? [Y/N]: Y
  ...
  Update IOU#3 PCI information in Partition#2 has been completed successfully.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure to continue updating IOU#%d to Partition#%d? [Y/N]:
The specified IOU#%d is not present.
The specified IOU#%d is power-off.
The specified IOU#%d is not in specified Partition.
Unknown Error Code =0xXX
Unable to execute this command on a standby MMB.
Failed to execute DR operation. Fatal error occurred.
Failed to execute DR operation. Configuration is unrecovered.
Failed to execute DR operation. Partition is stopped.
BIOS Error Code =0xXX
The specified %s is not added
PCI information update timeout
Update PCI information failure
DR can't be enabled, because of no DR license
DR feature is disabled.
Unable to execute DR command due to previous failure.
Unable to execute DR command while other DR command is running
Unable to execute DR command because OS is not ready for DR operation.

2.2.49 set partition extended_socket_mode

Extended Socket mode of specified Extended Partitioning is set.
The default value is disable.

enable: Extended Socket mode is effective.
disable: Extended Socket mode invalidity.

Because the setting is restrained when this command is executed for Extended Partitioning that has already done power supply On, the following messages are displayed.

"Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown."

When the setting is changed to Extended Partitioning that has already done power supply Off by this command, there is no necessity of off/on of the power supply, and the value set at once without displaying the above-mentioned message is reflected. Moreover, when the value is set to the same value now, the above-mentioned message is not displayed about power supply off/on because it is unnecessary.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition extended_socket_mode < Extended Partitioning#> [enable| disable ]
{quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When you set Extended Socket mode of Extended Partitioning 4 to Enable.

```
# set partition extended_socket_mode 4 enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'set partition extended_soket_mode' command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.
Extended Partitioning#x is not defined.
The Extended Partitioning mode cannot be changed while the partition is Dynamic Reconfiguration mode.

2.2.50 set partition extended_socket_zone

Extended Partitioning is set to specified Zone.
When none is set to Zone, the Zone setting becomes none.

- **Privilege: Administrator**

(1) Input format

```
set partition extended_socket_zone [ <Zone#> | none ] [<Extended Partitioning#>
[,| -] <Extended Partitioning#> ] {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example:When you set 4 and 5 of Extended Paritioning to Zone 1.

```
# set partition extended_socket_zone 1 4,5
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘set partition extended_soket_zone’ command.
Unable to execute this command because the system is under maintenance.
Unable to execute this command because the Partition#x is under maintenance.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.
Partition#x is not defined.
The Extended Partitioning mode cannot be changed while the partition is Dynamic Reconfiguration mode.

2.2.51 set partition memory_sparing_mode

This command can be set only in case of the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2 models.
Rank of Memory Sparing Mode of specified Partition is set.
When this command is used, it is necessary to set Memory Operation Mode to Spare Mode beforehand.
The default value is 1Rank.

1 : 1 Rank is set.
2 : 2 Rank is set.
auto : Automatic setting.

Because the setting is restrained when this command is executed for partition that has already done power supply On, the following messages are displayed.

"Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown."

When the setting is changed to partition that has already done power supply Off by this command, there is no necessity of off/on of the power supply, and the value set at once without displaying the above-mentioned message is reflected. Moreover, when the value is set to the same value now, the above-mentioned message is not displayed about power supply off/on because it is unnecessary.

When the specified partition is an Extended Partition, the error message is displayed, and the operation to the specified partition is restrained.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
set partition memory_sparing_mode <Partition#> [1 | 2 | auto] {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When you set Rank of Memory Sparing Mode of Partition 3 to 1.

```
# set partition memory_sparing_mode 3 1
The setting will become effective the next time the partition power off/on is performed
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.The setting will become effective the next time the partition power off/on is performed.
The specified partition number is invalid.
The specified parameter is invalid.
Unable to register the specified Partition#%d as Mode enable because the CPU mismatch between SBs.
Unable to register the specified Partition#%s as Mode enable because of abnormal SB composition.
Unable to execute this command on a standby MMB.
Unable to change the mode because Memory Operation Mode is not spare mode.
Failed to execute %s command.
Failed to execute set partition command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.

2.2.52 create raid logical_drive

Creates a logical drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
create raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#>{,<DISKSLOT#>…} | <PORT#>-<CASCADE#>-o<DISKSLOT#>{,<PORT#>-
<CASCADE#>-<DISKSLOT#>…}] level=<RAIDlevel> {spansize=<Span>} {size=<Size>[MB |
GB | TB]} {name="<Name>"}  {stripe=<StripeSize>} {init=[no | fast | slow]}
{force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0,1,2,3) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0,0-0-1,1-0-0,1-0-1).

level: This option specifies RAID level from 0, 1, 5, 6 1E, 10, 50 or 60. (ex. level=5).

spansize: This option specifies number of drives per span. If the specified RAIDlevel is neither RAID-50 nor RAID-60, the parameter is meaningless. (ex. spansize=5).

size: This option specifies size of the creation of logical drive. If this parameter is omitted, maximum size will be assigned. (ex. size=512GB).

name: This option specifies name strings of the logical drive. If this parameter is omitted, ""(null) will be set for the name. (ex. name="Logical_Drive_0").

stripe: This option specifies stripe size for the creation of logical drive from 8, 16, 32, 64, 128, 256, 512 or 1024. If this parameter is omitted, 64 will be set. (ex. stripe=1024).

init: This option specifies how you want to initialize the logical drive after the creation. If this parameter is omitted, no initialization will be done. (ex. init=fast).

force: The command is executed without interactive operation with the user.

The mandatory options are "disk" and "level", and the other options are omitted. The following table shows the default values.

Options	Default values
spansize	If RAID-50 or RAID-60, Span=num of specified drives / 2. Else if RAID-10, Span=2 Else, Span=num of specified drives.
size	maximum possible size
name	"LogicalDrive_0" (0 is changed corresponding to target ID)
stripe	64
init	Fast

(3) Usage example

・ Example:When you create a logical drive as RAID level 5 with using disk slot#0,1,2,3 on SB#0.
  # create raid logical_drive SB 0-0 disk=0,1,2,3 level=5 size=512GB name="Logical_Drive_0" stripe=1024 init=fast force

・ Example:When you create a logical drive as RAID level 6 with using disk slot#0,1 on disk enclosure 1(port 0 cascade 0) and disk slot#22,23 on disk enclosure 2(port1 cascade0). And these enclosures are attached to RAID card on IOU0-PCI Slot#0
  # create raid logical_drive IOU 0-0 disk=0-0-0,0-0-1,1-0-0,1-0-1 level=5 size=512GB name="Logical_Drive_0" stripe=1024 init=fast force

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
Missing mandatory options.
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

(5) Technical notes

・ Some policies of logical drive cannot be changed from default value when the logical drive is created. If you want to change these parameter, you should use “modify raid policy” command after created the logical drive. These policies are set default values in the table below

Parameter	Default value	Selectable values
Read Policy	No Read Ahead	No Read Ahead, Read Ahead
Write Policy	Write Back	Write Back, Write Through, Force Write Back
I/O Policy	Direct	Direct, Cached
Access Policy	Read/Write	Read/Write, Read Only, Blocked
Drive Cache	Enable	Unchanged, Enable, Disable

・ When requesting create raid logical_drive command, the “Internal error [12:0x8017]” or “Internal error [12:0x802f]” might be returned.
In this case, please verify if the expected logical drive is created by issuing “show raid logical_drive” command.
If the expected logical drive is created, ignore the “Internal error”.
If the expected logical drive is NOT created, please try “create raid logical_drive” command again.

2.2.53 delete raid logical_drive

Deletes a logical drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
delete raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID> {force}
```

(2) Option
target: This option specifies targetID of the logical drive which you want to delete. (ex. target=0).
force: The command is executed without interactive operation with the user.

(3) Usage example
・ Example:When you delete a logical drive 0 assigned to a RAID controller on SB#0.
delete raid logical_drive SB 0-0 target=0

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
Unable to execute the command because the system is under maintenance.
Unable to execute the command because the Partition#%d is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.54 modify raid logical_drive_policy

Modifies policies of the target logica drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
modify raid logical_drive_policy [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID> {read=<ReadPolicy>} {write=<WritePolicy>} {io=<IOPoclicy>}
{access=<AccessPolicy>} {cache=<DriveCachePolicy>} {force}
```

(2) Option

target: targetID of the logical drive which has missing drives. (ex. target=0).
read: This option specifies number of read policy from 0=No read ahead, 1=Read ahead.
No read Ahead - To specify that the controller does not use read ahead for the current logical drive.
Read Ahead - To allow the controller to read sequentially ahead of requested data and store the additional data in cache memory, anticipating that the data is required soon.
write: This option specifies number of write policy from 0=Write Back, 1=Write Through, 2=Force Write Back.
Write Back - To provide optimal performance, but data loss will occur if there is a power failure and there is no cache battery installed or the battery is failed or discharged.
Write Through - To eliminate risk of losing cached data in case of power failure. However, it may result in slower performance.
Force Write Back - The logical drive is in Write Back mode even if the battery is not present; data loss may occur in the event of a power failure.
io: This option number of IO policy from 0=Direct, 1=Cached.
cache: This option specifies number of drive cache policy from 0=Unchanged, 1=Enable, 2=Disable.
force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you modify a logical drive policy for RAID controller on SB#0.
modify raid logical_drive_policy SB 0-0 target=0 read=0 write=0 io=0 access=0 cache=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.55 modify raid logical_drive

Modifies a logical drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
modify raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID> {[disk=<DISKSLOT#>{,<DISKSLOT#>…} | disk=<PORT#>-<CASCADE#>-
<DISKSLOT#>{,<PORT#>-<CASCADE#>-<DISKSLOT#>…}]} {level=<RAIDlevel>} {force}
```

(2) Option

target: This option specifies targetID of the target logical drive which you want to modify. (ex. target=0)
disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0,1,2,3) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0,0-0-1,1-0-0,1-0-1).
level: This option specifies RAID level from 0, 1, 5, 6 1E, 10, 50 or 60. (ex. level=5).
force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you modify RAID level of a logical drive to RAID 6 as RAID level migration (RLM) with additional disk attached to slot#3.

```
# modify raid logical_drive SB 0-0 target=0 disk=3 level=6
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.56 create raid global_hotspare

Creates global hotspare drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
create raid global_hotspare [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you assign a global hotspare to a disk attached to slot#0.

```
# create raid global_hotspare SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.57 create raid dedicated_hotspare

Creates dedicated hotspare drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
create raid dedicated_hotspare [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]
target=<TargetID#>{,<TargetID#>…} {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

target: This options specifies targetID array of the logical drive which is target of the dedicated hot-spare. 16 targets are able to be specified in maximum.(ex. target=0)

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you assign a dedicated hotspare for the logical drive 0 to a disk attached to slot#0.
create raid dedicated_hotspare SB 0-0 disk=0 target=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.58 delete raid hotspare

Deletes global or dedicated hotspare drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
delete raid hotspare [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you delete a hotspare to a disk attached to slot#0.

```
# delete raid hotspare SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.59 start raid locate_pd

Turns on a location LED of the specified disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid locate_pd [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

(3) Usage example

・ Example:When you turn on a location LED of a disk attached to slot#0.

```
# start raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.60 stop raid locate_pd

Turns off a location LED of the specified disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
stop raid locate_pd [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

(3) Usage example

・ Example:When you turn off a location LED of a disk attached to slot#0.

```
# stop raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.61 start raid locate_ld

Turns on a location LED of disks assigned to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid locate_ld [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID>
```

(2) Option

target: This option specifies targetID of the logical drive where you want to operate LEDs of physical drives assigned. (ex. target=0).

(3) Usage example

・ Example:When you turn on a location LED of a disk assigned to the logical drive#1.
start raid locate_ld SB 0-0 target=1

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.62 stop raid locate_ld

Turns off a location LED of disks assigned to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
stop raid locate_ld [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID>
```

(2) Option

target: This option specifies targetID of the logical drive where you want to operate LEDs of physical drives assigned. (ex. target=0).

(3) Usage example

・ Example:When you turn off a location LED of a disk assigned to the logical drive#1.
stop raid locate_ld SB 0-0 target=1

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.63 start raid locate_encl

Turns on a location LED of the specified disk enclosure.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid locate_encl [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> encl=<PORT#>-
<CASCADE#>
```

(2) Option

encl: This option specifies port number of the RAID card where the disk enclosure connected. And specify cascade number of the disk enclosure. (ex. encl=0-0).

(3) Usage example

・ Example:When you turn on a location LED of a disk attached to slot#0.

```
# start raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.64 stop raid locate_encl

Turns off a location LED of the specified disk enclosure.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
stop raid locate_encl [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> encl=<PORT#>-
<CASCADE#>
```

(2) Option

encl: This option specifies port number of the RAID card where the disk enclosure connected. And specify cascade number of the disk enclosure. (ex. encl=0-0).

(3) Usage example

・ Example:When you turn off a location LED of a disk attached to slot#0.

```
# stop raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.65 start raid rebuild

Starts rebuilding the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid rebuild [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> disk=[<DISKSLOT#>
| <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you start rebuilding a disk attached to slot#0.

```
# start raid rebuild SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.66 cancel raid rebuild

Cancels rebuilding the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid rebuild [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you cancel rebuilding a disk attached to slot#0.

```
# cancel raid rebuild SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.67 start raid copyback

Starts copyback to the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid copyback [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> src=[<DISKSLOT#>
| < PORT#>-<CASCADE#>-<DISKSLOT#>] dist=[<DISKSLOT#> | < PORT#>-<CASCADE#>-
<DISKSLOT#>] {force}
```

(2) Option

src: This option specifies disk slot number which is a source of the copy. (ex. src=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures which is a source of the copy. (e.g. src=0-0-0).

dist: This option specifies disk slot number which is a destination of the copy. (ex. dist=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures which is a destination of the copy. (e.g. dist=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you start coyback from a disk attached to slot#0 to a disk attached to slot#1.

```
# start raid copyback SB 0-0 src=0 dist=1
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.68 cancel raid copyback

Cancels copyback to the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid copyback [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you cancel copyback to a disk attached to slot#0.

```
# cancel raid copyback SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.69 start raid mdc

Starts make data consistency (MDC) to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid mdc [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> target=<TargetID>
{force}
```

(2) Option
target: This option specifies targetID of the logical drive. (ex. target=0).
force: The command is executed without interactive operation with the user.

(3) Usage example
・ Example:When you start MDC to the logical drive#0.
start raid mdc SB 0-0 target=0

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.70 cancel raid mdc

Cancels make data consistency (MDC) to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid mdc [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> target=<TargetID>
{force}
```

(2) Option
target: This option specifies targetID of the logical drive. (ex. target=0).
force: The command is executed without interactive operation with the user.

(3) Usage example
・ Example:When you start MDC to the logical drive#0.
start raid mdc SB 0-0 target=0

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.71 start raid patrol

Starts patrol read to the specified adapter.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid patrol [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> {force}
```

(2) Option

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you start patrol read to the adapter attached to SB#0.

```
# start raid patrol SB 0-0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.72 cancel raid patrol

Cancels patrol read to the specified adapter.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid patrol [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> {force}
```

(2) Option

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you cancel patrol read to the adapter attached to SB#0.

```
# cancel raid patrol SB 0-0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.73 make raid online

Makes online the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
make raid online [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> disk=[<DISKSLOT#> |
<PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you make online a disk attached to slot#0.

```
# make raid online SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.74 make raid offline

Makes offline the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
make raid offline [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> disk=[<DISKSLOT#>
| <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you make offline a disk attached to slot#0.

```
# make raid offline SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.75 replace raid missing_drive

Replaces the disk to the specified logical drive which has missing drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
replace raid missing_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] target=<TargetID#> {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).
target: This option specifies targetID of the logical drive which has missing drives. (ex. target=0)
force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you replace a disk attached to slot#0 to the logical drive#0 which has missing drive.
replace raid missing_drive SB 0-0 disk=0 target=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.2.76 set mmbcontrol reset

Specified MMB is reset.
This command cannot be executed for the maintenance mode period.
When issuing this command twice or more consecutively, leave an interval of about 15 minutes between each resetting of MMB.

- 0 : MMB#0
- 1 : MMB#1

■ Privilege: Administrator

(1) Input format

```
set mmbcontrol reset [0|1] {quiet}
```

(2) Option
quiet: Command is executed without interacting with the user.

(3) Usage example
・ Example:When you reset MMB#1.
set mmbcontrol reset 1

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Unable to execute this command under maintenance.

2.2.77 set mmbcontrol switch_over

Specified MMB is reset. Active/Standby of MMB is switched.
This command cannot be executed for the maintenance mode period.
This command cannot be executed by one MMB cofiguration.
When issuing this command twice or more consecutively, leave an interval of about 15 minutes between each resetting of MMB.

■ Privilege: Administrator

(1) Input format

```
set mmbcontrol switch_over {quiet}
```

(2) Option
quiet: Command is executed without interacting with the user.

(3) Usage example
・ Example:When you switch Active/Standby.
  # set mmbcontrol switch_over

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Unable to execute this command under maintenance.

2.2.78 set special_account

This command sets the special account used with LDAP.
One special account can respectively be set to Administrator and CE.
A special account has already been overwrited when having set it.
When a special account of Administrator and CE is not made by this command, the LDAP function cannot be made effective.
It is necessary to make the user-name of a special account of Administrator and CE made by this command by the alias with a local user-name and a global user-name of external LDAP server.
When the LDAP function is invalidated, log in cannot be done in the special account made by this command.

■ Privilege: Administrator

(1) Input format

```
set special_account <user name> <privilege: [admin | ce] {quiet} <password>
<confirm password>
```

(2) Option
quiet: Command is executed without interacting with the user.

(3) Usage example
・ Example:When you set a special account of the Admin privilege (The user-name: special_admin).
  # set special_account special_admin admin
  Password:******
  Confirm Password: ******

・ Example:When you set a special account of the CE privilege (The user-name: special_ce).
  # set special_account special_ce ce
  Password:******
  Confirm Password: ******

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Unable to execute this command under maintenance.

2.2.79 set partition pci_ecrc_mode

Enable/disable of ECRC(End-to-End CRC Protection for PCIe IO Subsystem) of the specified partition is set.
This function can be available in the PRIMEQUEST 2400E3/2800E3.
A set value of default is enable (effective).

enable : ECRC effective
disable : ECRC invalidity

This command is executable only for power supply Off of the object partition, and the setting is reflected at the time of power supply On of the partition.
The following messages are displayed when this command is executed for the partition of power supply On and the setting is controlled.

Unable to change the mode while the partition is running.
Please try to change the mode after the partition is shutdown.

When the specified partition is an Extended Partition, the error message is displayed, and the operation to the specified partition is controlled.

■ Privilege: Administrator, Operator, Partition Operator (Only managed partition)

(1) Input format

```
set partition pci_ecrc_mode <partition#> [enable|disable ]
```

(2) Option
quiet: Command is executed without interacting with the user.

(3) Usage example
・ Example: When you invalidate the ECRC setting of Partition3.

```
# set partition pci_ecrc_mode 3 disable
pci_ecrc_mode : disable
#
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

pci_ecrc_mode : enable
pci_ecrc_mode : disable
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute set pci_ecrc_mode command.
Unable to change the mode while the partition is running. Please try to change the mode after the partition is shutdown.
Unable to execute this command because you have not authority to operate this partition.

2.3 Commands for Display

Command for displaying the information is as follows.

2.3.1 show access_control
2.3.2 show active_mmb
2.3.3 show date
2.3.4 show exit_code
2.3.5 show partition configuration
2.3.6 show partition dynamic_reconfiguration
2.3.7 show partition home
2.3.8 show partition lan_device_mode
2.3.9 show partition name
2.3.10 show partition memory_mirror_ras_mode
2.3.11 show partition memory_operation_mode
2.3.12 show partition pci_address_mode
2.3.13 show timezone
2.3.14 show gateway
2.3.15 show gateway_ipv6
2.3.16 show http
2.3.17 show http_port
2.3.18 show https
2.3.19 show https_port
2.3.20 show ip
2.3.21 show ipv6
2.3.22 show hostname
2.3.23 show maintenance_ip
2.3.24 show ssh
2.3.25 show ssh_port
2.3.26 show telnet
2.3.27 show telnet_port
2.3.28 show network
2.3.29 show ntpq
2.3.30 who
2.3.31 help
2.3.32 netck traceroute
2.3.33 netck arptbl
2.3.34 netck arping
2.3.35 netck ifconfig
2.3.36 netck stat
2.3.37 show dynamic_reconfiguration status
2.3.38 show partition extended_partitioning_mode
2.3.39 show partition dimm_excl_mode
2.3.40 show partition skt_binding_mode
2.3.41 show extended_partition configuration
2.3.42 show partition status
2.3.43 show partition extended_socket_mode
2.3.44 show partition extended_socket_zone
2.3.45 show partition memory_sparing_mode
2.3.46 show raid adapter
2.3.47 show raid disk_enclosure
2.3.48 show raid physical_drive
2.3.49 show raid physical_drive_count
2.3.50 show raid logical_drive
2.3.51 show raid logical_drive_count
2.3.52 show raid bbu
2.3.53 show special_account
2.3.54 show partition pci_ecrc_mode

2.3.1 show access_control

Setting value of current access control is displayed.

- **Privilege: Administrator**

(1) Input format

```
show access_control
```

(2) Option

None

(3) Usage example

```
# Administrator> show access_control
SSH: All
Telnet:All
HTTP:
HTTPS:IP Address: 10.66.250.190: Netmask:24
SNMP: All
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified command is invalid

2.3.2 show active_mmb

Displays current Active MMB.

- **Privilege: All**

(1) Input format

```
show active_mmb
```

(2) Option

None

(3) Usage example

```
#show active_mmb
SSH: Al Active MMB: 1l
#
```

(4) Message

None

2.3.3 show date

Displays current date and time.

- **Privilege: All**

(1) Input format

```
show date
```

(2) Option

None

(3) Usage example

```
#show date
2009-11-30 11:14:21 JST
#
```

(4) Message

None

2.3.4 show exit_code

Displays the exit code of last execution command.

- **Privilege: All**

(1) Input format

```
show exit_code
```

(2) Option

None

(3) Usage example

```
#power on all
#
#show exit_code
0
#
```

(4) Message

None

2.3.5 show partition configuration

Displays the SB and IOU included in the partition.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

Output Format:

Information related to one partition is displayed in one line.
Display contents of each row are as follows.

1st row: Partition number
2nd row: Partition name
3rd row: Home SB (Display in the format of SB#x)

The above mentioned rows are displayed in the ascending order of numbers in the SB, IOU.
The Reserved SB is displayed as RSB#x, with "R" in front of SB # x.

- **Privilege: All**

(1) Input format

```
show partition configuration [all | free | <partition#> {[, | -] ¥
<partition#>}]
```

¥: Indicates that there is no line feed.

(2) Option

all: Displays SB/IOU which does not belong to all partitions and to any partition.
free: Displays SB/IOU which does not belong to any partition.
<partition#>: Displays the specified partition.

The specification method when multiple partitions are specified is as follows.

- The partition number is delimited by a comma and is specified.
- Partition number is specified within the range

Remarks

Specifications of comma-delimited and number range of can be mixed.

(3) Usage example

- Example: When configuration information of partition of partition number 0~2 with PRIMEQUEST 2800E is displayed

```
# show partition configuration 0-2

0 hogehoge      SB#0    SB#0    RSB#3   IOU#0
1 testserver    SB#1    SB#1    IOU#0
2               SB#2    SB#2    IOU#1
#
```

- Example: When all the specifications for the configuration which are the same as the above-mentioned are used

```
# show partition configuration all

0 hogehoge      SB#0    SB#0    RSB#3   IOU#0
1 testserver    SB#1    SB#1    IOU#1
2               SB#2    SB#2    IOU#2
3 <Since nothing is registered, it is displayed as blank>
free                    IOU#3
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute show partition configuration command.

2.3.6 show partition dynamic_reconfiguration

Displays the status of Dynamic Reconfiguration of the specified partition..

- **Privilege: All**

(1) Input format

```
show partition dynamic_reconfiguration <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When the status of Dynamic Reconfiguration of Partition#3 is displayed

```
# show partition dynamic_reconfiguration 3
current: disabled
setting: enabled
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute show partition dynamic_reconfiguration command.
DR can't be enabled, because of no DR license

2.3.7 show partition home

Displays Home SB of the specified partition.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: All**

(1) Input format

```
show partition home <partition#>
```

(2) Option

None

(3) Usage example

When Home SB of partition 3 is displayed

```
#show partition home 3
SB#2
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Home SB is not set in Partition#x.
Failed to execute show partition home command.
Partition#x is not defined.

2.3.8 show partition lan_device_mode

Displays the setting (enable/disable) of LAN Device/WOL in IOU unit of the specified partition.

When the specified partition is an Extended Partitioning, an error message is displayed, and the specified partition cannot be operated.

- **Privilege: All**

(1) Input format

```
show partition lan_devoce_mode <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When LAN Device Mode of IOU (In example it is IOU#2 or IOU#3) from Partition#3 is displayed

```
#show partition lan_device_mode 3
iou#2: LAN Device: enable WOL: enable
iou#3:LAN Device: disable WOL: disable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show partition command.

2.3.9 show partition name

Displays the name of the specified partition.

- **Privilege: All**

(1) Input format

```
show partition name <partition#>
```

(2) Option

None

(3) Usage example

When name of the partition 3 is displayed

```
#show partition name 3
hogehoge
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to show partition name command.

2.3.10 show partition memory_mirror_ras_mode

Displays Memory Mirror RAS Mode of the specified partition.

mirror_keep: Sets the Mirror Keep Mode.
capacity_keep: Sets the Capacity Keep mode.

- **Privilege: All**

(1) Input format

```
show partition memory_mirror_ras_mode <partition#>
```

(2) Option

None

(3) Usage example

- Example: When Memory Mirror RAS Mode of partition 3 is displayed

```
#show partition memory_mirror_ras_mode3
current: mirror_keep
setting: capacity_keep
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show partition command.
Partition#x is not defined.

2.3.11 show partition memory_operation_mode

Displays the Memory Operation Mode of the specified partition.

performance: Shows the Performance Mode
normal: Shows the Normal Mode
partial_mirror: Shows the Partial Mode
full_mirror: Shows the Full Mode
spare: Shows the Spare Mode.
address_range_mirror Shows the Address Range Mirror Mode (This function can be available in the PRIMEQUEST 2400E3/2800E3)

- **Privilege: All**

(1) Input format

```
show partition memory_operation_mode <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When Memory Operation Mode of partition#3 is displayed

```
#show partition memory_operation_mode3
current: normal
setting: performance
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show partition command.
Partition#x is not defined.

2.3.12 show partition pci_address_mode

Displays the PCI Address Mode of the specified partition.

- **Privilege: All**

(1) Input format

```
show partition pci_address_mode <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When PCI Address Mode of partition#3 is displayed

```
#show partition pci_address_mode 3
current: bus
setting: segment
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show partition command.
Partition#x is not defined.

2.3.13 show timezone

Displays timezone.

- **Privilege: All**

(1) Input format

```
show timezone
```

(2) Option

None

(3) Usage example

```
#show timezone
Timezone is set to Asia/Tokyo
#
```

(4) Message

None

2.3.14 show gateway

Displays the IP address of default gateway set to the Management LAN Interface.

- **Privilege: All**

(1) Input format

```
show gateway
```

(2) Option

None

(3) Usage example

```
# show gateway
Gateway Address: 10.1.2.1
#
```

(4) Message

None

2.3.15 show gateway_ipv6

Displays the IP address of default gateway of IPv6 set to the Management LAN Interface.

- **Privilege: All**

(1) Input format

```
show gateway_ipv6
```

(2) Option

None

(3) Usage example

```
# show gateway_ipv6
Gateway Address: fe80:: 1234:f3ff:fe03:5666
#
```

(4) Message

None

2.3.16 show http

Displays the status (enable/ disable) of current HTTP.

- **Privilege: All**

(1) Input format

```
show http
```

(2) Option

None

(3) Usage example

```
# show http
HTTP: disabled
#
```

(4) Message

None

2.3.17 show http_port

Displays the port to which HTTP session is currently connected.

- **Privilege: All**

(1) Input format

```
show http_port
```

(2) Option

None

(3) Usage example

```
#show http_port
HTTP Port Number: 8081
#
```

(4) Message

None

2.3.18 show https

Displays the status (enable/ disable) of current HTTPS server.

- **Privilege: All**

(1) Input format

```
show https
```

(2) Option

None

(3) Usage example

#show https
HTTPS: disabled
#

(4) Message

None

2.3.19 show https_port

Displays the port to which HTTPS is currently connected.

- **Privilege: All**

(1) Input format

```
show https_port
```

(2) Option

None

(3) Usage example

show https_port
HTTPS Port Number: 432
#

(4) Message

None

2.3.20 show legacy_tls

Display status (enable/disable) of TLS 1.0/1.1/1.2 connection permission in current HTTPS server.
- Enable: Permit HTTPS connection with TLS1.0, TLS1.1, TLS1.2.
- Disable: Permit HTTPS connection with onty TLS1.2

- **Privilege:All**

(1) Input format

```
show legacy_tls
```

(2) Option

None

(3) Usage example

None

(4) Message

None

2.3.21 show ip

Displays the IP address, the net mask set in the management LAN interface.

- **Privilege: All**

(1) Input format

```
show ip
```

(2) Option

None

(3) Usage example

```
# show ip
IP Address: 10.1.2.124
Netmask: 255.255.255.0
#
```

(4) Message

None

2.3.22 show ipv6

Displays the global address, the prefix length for IPv6 set in the management LAN interface.

- **Privilege: All**

(1) Input format

```
show ipv6
```

(2) Option

None

(3) Usage example

```
# show ipv6
IP Address/Prefix: 2000:2002:2003:2004:2005:2006:2007:2008/64
#
```

(4) Message

None

2.3.23 show hostname

Displays host name of MMB.

- **Privilege: All**

(1) Input format

```
show hostname
```

(2) Option

None

(3) Usage example

```
# show hostname
HostName: hogehoge.fujitsu.com
#
```

(4) Message

None

2.3.24 show maintenance_ip

Displays the IP address of Maintenance port

- **Privilege: All**

(1) Input format

```
show maintenance_ip
```

(2) Option

None

(3) Usage example

```
# show maintenance_ip
IP Address: 192.168.1.10
NetMask: 255.255.255.0
Gateway Address: 192.168.1.1
SMTP Address: 172.128.1.2
#
```

(4) Message

None

2.3.25 show ssh

Displays the status (enable/disable) of existing SSH server.

- **Privilege: All**

(1) Input format

```
show ssh
```

(2) Option

None

(3) Usage example

```
# show ssh
SSH: disabled
#
```

(4) Message

None

2.3.26 show ssh_port

Displays the port where SSH session is currently connected.

- **Privilege: All**

(1) Input format

```
show ssh_port
```

(2) Option

None

(3) Usage example

```
# show ssh_port
SSH Port Number: 22
#
```

(4) Message

None

2.3.27 show telnet

Displays the status (enable/disable) of existing Telnet server.

- **Privilege: All**

(1) Input format

```
show telnet
```

(2) Option

None

(3) Usage example

```
# show telnet
Telnet: disabled
#
```

(4) Message

None

2.3.28 show telnet_port

Displays the port to which the Telnet session is currently connected.

- **Privilege: All**

(1) Input format

```
show telnet_port
```

(2) Option

None

(3) Usage example

```
# show telnet_port
Telnet Port Number: 23
#
```

(4) Message

None

2.3.29 show network

Displays the network configuration configured in management LAN interface. Also displays IPv6 information when IPv6 is configured.

Displays the following information.

- Hostname
- IP Address
- Netmask
- Gateway Address
- IPv6 IP Address /Prefix length
- IPv6 Gateway Address
- MAC Address
- HTTP status
- HTTP Port Number
- TLS 1.0/1.1
- HTTPS status
- HTTPS Port Number
- Telnet status
- Telnet Port Number
- SSH status
- SSH Port Number

■ Privilege: All

(1) Input format

```
show telnet_port
```

(2) Option

None

(3) Usage example

```
# show network
Hostname:hogehoge.fujitsu.com
IP Address:10.1.2.124
Netmask:255.255.255.0
Gateway Address: 10.1.2.1
IPv6 IP Address/Prefix: 2000:2002:2003:2004:2005:2006:2007:2008/64
IPv6 Gateway Address: fe80::1234:f3ff:fe03:5555
MAC Address:00:AA:00:12:34:55
HTTP:disabled
HTTP Port Number:8081
TLS1.0/1.1: disabled
HTTPS:disabled
HTTPS Port Number:432
Telnet:disabled
Telnet Port Number:23
SSH:enabled
SSH Port Number:22
#
```

(4) Message

None

2.3.30 show ntpq

Displays the operating conditions of ntp.

Remarks

Support of IPv4, IPv6

- **Privilege: All**

(1) Input format

```
show ntpq
```

(2) Option

None

(3) Usage example

```
# show ntpq
     remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*10.23.4.3       10.0.50.32       4 u  882 1024  377    0.941   -0.154   0.284
 10.49.51.3      .INIT.          16 u    - 1024    0    0.000    0.000   0.000
 LOCAL(0)        .LOCL.           5 l  23h   64    0    0.000    0.000   0.000
#
```

TABLE 2.8 Output Items of show ntpq

Item	Description
Symbols on the top of remote	Meanings of the symbols displayed on the top of a remote are listed below. Blank: reject. It is not referred when request is not attained or the distance is far (the period for to-fro communication to server is more than 16 seconds). x:falsetick. The time, acquired from all other remote servers registered in MMB, deviates (The value of jitter is deviated more than the allowance range of deviation) as compared to the time acquired from more than two remotes. Therefore, it was excluded from the reference list. Falsetick cannot be detected when all the clocks are off. -: outlyer. It is not referred because jitter value of this remote is greater than offset of remote during the current synchronization +: candidate. Can be synchronized any time. #: selected. It is possible to synchronize but as the distance is far (the to-fro communication period of the server is more than 1 second), it is departed from candidate. *: sys.peer. Synchronizing.
remote	Host name (“LOCAL” indicates MMB) referred as NTP Server (Server providing internal clock to other computers trough ntp protocol).
refid	Indicates from where remote synchronizes the time. When it is not clear, 0.0.0.0.
st	A number showing the level of server. Generally, as this number gets larger, the reliability of time gets declined.
t	Type of remote server 1: Local server. Acquisition of internal clock of MMB (This type is considered only when remote is LOCAL). u: Unicast server. Executes time request for the remote from MMB and acquires the transmitted time.
when	Elapsed time from the time when packet is received for the last time from remote. (Unit: seconds).
poll	Interval to acquire time from remote (Unit: seconds).
reach	Flag of failure and success of time acquisition of past 8 times. (Octal numeral expression). The result of failure and success of time acquisition of past eight times is expressed in 8 bits (0: Failure, 1: Success) and it is octal numeral expression. Whenever time is acquired, bits are shifted to the left, the right most bit is the latest result of acquisition. For example, when this value is 356(8) =11, 101, 110(2), the latest acquisition among past eight acquisition results and fourth acquisition failed. If the next time acquisition succeeds, the value becomes 335(8) =11, 011, 101 (2).
delay	Communication time (Unit: milliseconds) pertaining to the network round trip for remote communication.
offset	Time deviation between a remote clock and an internal clock (Unit: milliseconds)
jitter	The error is generated due to the time which is an addition of previously acquired time and interval of poll, and error value of latest time which is actually acquired (Unit: milliseconds), accuracy of respective clocks and the network condition.

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to ntpq command.

2.3.31 who

Displays the following information regarding the user logged in the current MMB.

- Login name
- Login time
- Remote host name (or, IP address of remote host)
  Displays remote host name when the remote host name is recognized by DNS configured in MMB at the time of login. Displays IP address when remote host name is not recognized. Moreover, "-" (Hyphen) is displayed when the user logs in from the serial port.
  Displays whether the user is connected to the Telnet/SSH, or to the Web-UI, or whether connected to the serial port.

Remarks

Support of IPv4, IPv6

■ Privilege: All

(1) Input format

```
who
```

(2) Option

None

(3) Usage example

```
# who
Suzuki    2012-11-08 10:35:51  Telnet/SSH 10.24.6.94
takahashi          2012-11-08 10:38:02  Telnet/SSH 2001:2345::3dfb:dc43:4d75:5a71
tanaka    2012-11-08 10:34:26  WebUI 10.24.6.191
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Failed to get login information.

2.3.32 help

Displays the help of enabled command.

- **Privilege: All**

(1) Input format

```
help
```

(2) Option

None

(3) Usage example

Omission

Help of the command that can be used by each authority of the account is displayed.

(4) Message

None

2.3.33 netck traceroute

The network route from the specified IP address to the target host is displayed in the list.

Remarks

Support only IPv4.

- **Privilege: All**

(1) Input format

```
netck traceroute   <ip>
```

(2) Option

None

(3) Usage example

```
# netck traceroute 10.2.3.4
traceroute to 10.2.3.4 (10.2.3.4), 30 hops max, 40 byte packets
1 10.2.4.1 (10.2.4.1) 0.822 ms 5.142 ms 0.59 ms
2 10.2.5.1 (10.2.5.1) 0.923 ms 0.747 ms 0.679 ms
3 10.2.6.1 (10.2.6.1) 0.955 ms 0.736 ms 0.71 ms
4 10.3.2.1 (10.3.2.1) 1.023 ms 0.861 ms 0.837 ms
5 10.3.2.2 (10.3.2.2) 1.049 ms 0.939 ms 0.887 ms
6 10.2.3.5 (10.2.3.5) 1.285 ms 1.005 ms 0.997 ms
7 10.2.3.4 (10.2.3.4) 0.976 ms 0.828 ms 0.891 ms
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

(5) Process

Executes “traceroute<ip>”

2.3.34 netck arptbl

Displays the physical address (MAC address) of the Ethernet from the specified IP address.

- **Privilege: All**

(1) Input format

```
netck arptbl
```

(2) Option

None

(3) Usage example

```
# netck arptbl
 IP address      HW type      Flags      HW address           Mask      Device
 10.1.2.3        0x1          0x2        00:21:A1:1A:32:45    *         bond0
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

(5) Process

Displays only bond 0 of cat/proc/net/arp (Control LAN).

2.3.35 netck arping

Displays the physical address (MAC address) of the Ethernet from the specified IP address.

Remarks

Support only IPv4.

- **Privilege: All**

(1) Input format

```
netck arping <ip>
```

(2) Option

None

(3) Usage example

```
# netck arping 10.1.2.3
ARPING to 10.1.2.3 from 10.1.2.33 via bond0
Unicast reply from 10.1.2.3 [0:21:a1:1a:32:45] 1.253ms
Sent 1 probes (1 broadcast(s))
Received 1 reply
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

(5) Process

Executes arping -I bond0 -c 1 <ip>

2.3.36 netck ifconfig

Displays the setting status of (IPv4 or IPv6) network environment.

- **Privilege: All**

(1) Input format

```
netck ifconfig
```

(2) Option

None

(3) Usage example

```
#netck ifconfig
bond0 Link encap:Ethernet HWaddr 00:17:42:9B:D9:78
inet addr:10.24.77.80 Bcast:10.24.77.255 Mask:255.255.255.0
inet6 addr:2001:2345::10/64 Scope: Global
inet6 addr:fe80::217:42ff:fe9b:d978/64 Scope:Link
UP BROADCAST RUNNING MASTER MULTICAST MTU:1500 Metric:1
RX packets:4765 errors:0 dropped:0 overruns:0 frame:0
TX packets:3438 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:637685 (622.7 KiB) TX bytes:1318710 (1.2 MiB)
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

(5) Process

Executes “ifconfig bond0”

2.3.37 netck stat

Displays the list of the port number which is used by the process during operation.

- **Privilege: All**

(1) Input format

```
netck stat
```

(2) Option

None

(3) Usage example

```
#netck stat
Active Internet connections (w/o servers)
Proto       Recv-Q  Send-Q  Local Address          Foreign Address        State
tcp         0       0       PRIME123063:telnet     10.1.2.3:4015          TIME_WAIT
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

(5) Process

Clears the internal information like Private-LAN etc. from netstat-tuwn.

2.3.38 show dynamic_reconfiguration status

Displays the progress of Dynamic Reconfiguration

- **Privilege: All**

(1) Input format

```
show dynamic_reconfiguration status
```

(2) Option

None

(3) Usage example

・ Example: When SB#3 is to be added to Partition#2

```
# show dynamic_reconfiguration status
Adding SB#3 to Partition#2, running : 35%
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Adding SB#%d to Partition#%d, completed
Adding IOU#%d to Partition#%d, completed
Removing SB#%d from Partition#%d, completed.
Removing IOU#%d from Partition#%d completed.
not executed.
The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to show dynamic_reconfiguration status command.
Adding SB#%d to Partition#%d,running xx%
Adding IOU#%d to Partition#%d,running xx%
Adding [SB#%d|IOU#%d] to Partition#%d, Failed.
Removing SB#%d from Partition#%d,running xx%
Removing IOU#%d from Partition#%d,running xx%
Removing [SB#%d|IOU#%d] from Partition#%d, Falied.

2.3.39 show partition extended_partitioning_mode

Displays the setting (enable/disable) of Extended Partitioning Mode of the specified partition.

When the specified partition is an Extended Partitioning, an error message displays and the specified partition cannot be operated.

- **Privilege: All**

(1) Input format

```
show partition extended_partitioning_mode <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When Extended Partitioning mode of Partition#1 is displayed,

```
# show partition extended_partitioning_mode 1
Partition#1: Extended Partitioning Mode: enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘show partition extended_partitioning_mode’ command.
Partition#x is not defined.

2.3.40 show partition dimm_excl_mode

Displays the settings (enable/disable) of DIMM exclusive allocation mode of the specified Extended Partitioning.

When the specified partition is not an Extended Partitioning, an error message is displayed and the specified partition cannot be operated.

- **Privilege: All**

(1) Input format

```
show partition dimm_excl_mode <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When DIMM exclusive binding mode of Partition#4 is displayed,

```
# show partition dimm_excl_mode 4
Partition#4: DIMM excl mode: enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘show partition dimm_excl_mode’ command.
Partition#x is not defined.

2.3.41 show partition skt_binding_mode

Displays the settings (enable/ disable) of binding mode except CPU socket of the specified Extended Partitioning.

When the specified partition is not an Extended Partitioning, an error message is displayed and the specified partition cannot be operated.

- **Privilege: All**

(1) Input format

```
show partition skt_binding_mode <partition#>
```

(2) Option

None

(3) Usage example

・ Example: When CPU socket binding mode of Partition#4 is displayed,

```
# show partition skt_binding_mode 4
Partition#4: CPU Socket binding mode: enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘show partition skt_binding_mode’ command.
Partition#x is not defined.

2.3.42 show extended_partition configuration

Displays SB, IOU and PCI_Box included in Extended Partitioning.

When the specified partition is not an Extended Partitioning, an error message is displayed and the specified partition cannot be operated.

Output Format:

The information relates to one partition is displayed in one line. The display contents of each line are as follows.

First line: Partition Number
Second line: Partition Name
Third line: CPU core number
Fourth line: Memory size (in GB unit)
Fifth line onwards: The contents are displayed in the order of CPU core number, USB1, VGA/USB2, DU, On-board GbE and PCI Express slot which are included in targeted partition.
DU and On-board GbE displays in the ascending order of IOU.
PCI Express slot displays in the order of SB, IOU and PCI_Box.

- **Privilege: All**

(1) Input format

```
show extended_partition configuration [all | free | <partition#> {[, | -]
<partition#>}]
```

(2) Option
all: Displays all the partitions and the resources of the SB/IOU/ PCI_Box which does not belong to any of the partitions.
free: Displays the resources of SB/IOU/ PCI_Box which does not belong to any of the partitions.
<partition#>: Displays the information for the specified partition.

The specification method while specifying multiple partitions are as follows.

- Specifies Partition numbers by delimiting with comma
- Specifies with the range of partition number

Remarks
Specifications of comma delimiter or number range can be mixed.

(3) Usage example

・ Example: When the partition configuration information of Partition 4~5 is displayed in PRIMEQUEST 2800E

```
# show extended_partition configuration 4-5

4 Web front 1    8CPU          512GB          USB1           GbE(IOU#1)
                 PCISLOT(SB#1 IOU#1{1}  PCIBOX#0{1  4})
5 Web front 2    6CPU          1024GB         VGA/USB2       DU(IOU#1)
                 PCISLOT(IOU#1{3}  PCIBOX#0{0  3} )
#
```

・ Example: When 'all' specification is used for the configuration same as above

```
# show extended_partition configuration all

4 Web front 1    8CPU          512GB          USB1           GbE(IOU#1)
                 PCISLOT(SB#1 IOU#1{1}  PCIBOX#0{1  4})
5 Web front 2    6CPU          1024GB         VGA/USB2       DU(IOU#1)
                 PCISLOT(IOU#1{3}  PCIBOX#0{0  3} )
6 <Blank display since nothing is registered>
7 <Blank display since nothing is registered>
8 <Blank display since nothing is registered>
9 <Blank display since nothing is registered>
10 <Blank display since nothing is registered>
11 <Blank display since nothing is registered>
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified parameter is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'show partition extended_partition configuration' command.
Partition#x is not defined.

2.3.43 show partition status

Displays State of the power supply and status (System Progress) of Partition.

Output Format:

The information relates to one partition is displayed in one line. The display contents of each line are as follows.

First line:	Partition Number
Second line:	Physical Partition Information - "P" indicating Physical Partition of the parent is displayed in Physical Partition where setting of Extended Partitioning Mode is enable. - "-" is displayed in Physical Partition where setting of Extended Partitioning Mode is disable. - Parents' Physical Partition numbers are displayed for Extended Partitioning.
Third line:	Partition Name
Fourth line:	Power Status of partition - On - Standby
Fifth line onwards:	System Progress of partition - Power Off - Power On In Progress - Reset - EFI - Boot - OS Running - OS Shutdown - Panic - Power Off In Progress - Fatal - Dumping - Halt - Extended Partitioning Running

- **Privilege: All**

(1) Input format

```
show partition status [all | <partition#> {[, | -] <partition#>}]
```

(2) Option

all: Displays all the partitions.

<partition#>: Displays the information for the specified partition.

The specification method while specifying multiple partitions are as follows.

- Specifies Partition numbers by delimiting with comma
- Specifies with the range of partition number

Remarks

Specifications of comma delimiter or number range can be mixed.

(3) Usage example

・ Example: When 'all' specification is used for the status in PRIMEQUEST 2800E3/2800E2/2800E

```
# show partition status all
0  P   hogehoge  On       Extended Partitioning Running
1  -   testserver  Standby Power Off
2  -    part2       On       EFI
4  0    Expar4      On       Reset
5  0    test5       Standby Power Off
#
```

・ Example: When partition number 0~2 is used for the status same as above

```
# show partition status 0-2
0  P   hogehoge  On       OS Running
1  -   testserver  Standby Power Off
2  -   part2       On       EFI
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute show partition status command.

2.3.44 show partition extended_socket_mode

Displays the settings (enable/disable) of of Extended Socket mode of specified Extended Partitioning.

■ Privilege: All

(1) Input format

```
show partition extended_socket_mode <Extended Partitioning#>
```

(2) Option

None

(3) Usage example

・ Example: When you display Extended Socket mode of Extended Partitioning 4,

```
# show partition extended_socket_mode 4
Extended Socket Mode: enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute 'show partition extended_socket_mode' command.
Extended Partitioning#x is not defined.

2.3.45 show partition extended_socket_zone

Displays the The setting of Extended Socket Zone.

Output Format:

The information relates to one Extended Partitioning is displayed in one line. The display contents of each line are as follows.

First line:	Extended Partitioning number
Second line:	Physical Partition number
Third line:	Power Status (On/Standby)
Fourth line:	Extended Socket Modesetting(enable/disable)
Fifth line:	Zone number

- **Privilege: All**

(1) Input format

```
show partition extended_socket_zone
```

(2) Option

None

(3) Usage example

・ Example:Extended Socket Zone is displayed.

```
# show partition extended_socket_zone
4  0        Standby     enable   0
5  0        On          enable   0
6  0        On          disable   none
7  0        Standby     disable  none
8  2        On          disable  none
9  2        On          enable    1
10 3        On          enable   3
11 3        On          enable   3
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified command is not supported.(error=[%s])
Unable to execute this command on a standby MMB.
Failed to execute ‘show partition extended_socket_zone’ command.
Extended Partitioning#x is not defined.

2.3.46 show partition memory_sparing_mode

This command can be display only in case of the PRIMEQUEST 2400E3/2800E3/2400E2/2800E2 models.
Displays the settings Rank of Memory Sparing Mode of specified partition.

- **Privilege: All**

(1) Input format

```
show partition memory_sparing_mode <Partition#>
```

(2) Option

None

(3) Usage example

- Example: When you display Rank of Memory Sparing Mode of Partitioning 3,

```
# show partition memory_sparing_mode 3
current: 1
setting: 1
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show partition command.
Partition#x is not defined.

2.3.47 show raid adapter

Displays RAID adapter information.

- **Privilege: All**

(1) Input format

```
show raid adapter {[SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>} {[supported-
raid-level | mfg-data | settings | log]}
```

(2) Option

supported-raid-level: This option shows supported raid level for the specify RAID adapter.
mfg-data: This option shows manufacturer data for the specify RAID adapter.
settings: This option shows an adapter firmware settings for the specify RAID adapter.
log: This option shows an adapter firmware log for the specify RAID adapter.

(3) Usage example

・ Example: When you display RAID adapter list.

```
# show raid adapter
```

Location	Product Name	Serial number	FW version
SB 0-0	FTS RAID Ctrl SAS 6G 1GB (D3116C)	0000000041232964	23.9.0-0029
DU 0-0	FTS RAID Ctrl SAS 6G 1GB (D3116C)	0000000041432879	23.9.0-0029
DU 0-1	FTS RAID Ctrl SAS 6G 1GB (D3116C)	0000000041433203	23.9.0-0029
IOU 2-3	LSI MegaRAID SAS 9286CV-8e	SV225P2246	23.9.0-0029
PCIBox 1-8	LSI MegaRAID SAS 9286CV-8e	SV225P2374	23.9.0-0029

・ Example: When you display the RAID adapter on SB#0.

```
# show raid adapter SB 0-0
```

Product Name:	FTS RAID Ctrl SAS 6G 1GB (D3116C)
Serial Number:	0000000041232964
Ports:	8
Protocol:	SAS600
VendorID/ DeviceID:	1000/005B
SubVendorVID/SubDeviceID:	1734/11E4
Firmware package version:	23.9.0-0029
NVRAM size:	32 KB
Memory size:	1024 MB
FlashROM size:	16 MB
Temperature:	49 deg C

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No controller is available.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.3.48 show raid disk_enclosure

Displays disk enclosures information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid disk_enclosure [IOU | PCI_BOX] <UNIT#>-<PCISLOT#> {encl=<Port#>-
<Cascade#>}
```

(2) Option

encl: This option specifies port number and cascade number for the target disk enclosure. (ex. encl=0-0).

(3) Usage example

・ Example: When you display disk enclosures attached to the RAID adapter on IOU#2-PCI slot#3.

```
# show raid disk_enclosure IOU 2-3
```

Port	Cascade	Vendor	Product	Type
0	0	FUJITSU	JX40	0302
0	1	FUJITSU	JX40	0302
1	0	FUJITSU	JX40	0302
1	1	FUJITSU	JX40	0302

・ Example: When you display the disk enclosure attached to port#0-cascade#0 of RAID adapter on IOP#2-PCI slot#3.

```
# show raid disk_enclosure IOU 2-3 encl=0-0
```

Product Name:	FUJITSU ETERNUS JX40
Status:	OK
Vendor:	FUJITSU
Product:	JX40
Port number:	0
Cascade:	1
DeviceID:	48
SAS address:	51463080001ABC3E
Firmware version:	0302

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No enclosure is connected to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
The specified enclosure is not connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.3.49 show raid physical_drive

Displays disk information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid physical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
{disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]} {action-progress}
```

(2) Option

disk: This option specifies disk slot number (ex. disk=0) or port, cascade and slot number. (ex. disk=0-0-0).
action-progress: This option shows action progress for the specify disk.

(3) Usage example

・ Example: When you display disk list attached to the RAID adapter on SB#0.

```
# show raid physical_drive SB 0-0
```

Slot	Status	Interface	Type	Vendor	Product	Capacity	Action in progress
0	Operational	SAS	HDD	FUJITSU	MBD2300RC	300 GB	-
1	Operational	SAS	HDD	FUJITSU	MBD2300RC	300 GB	-
3	Available	SAS	SSD	SEAGATE	ST9146802SS	146 GB	-

・ Example: When you display the disk on slot#1 on SB#0.

```
# show raid physical_drive SB 0-0  disk=1
```

Slot:	1
Status:	Operational
Foreign configuration:	No
Interface type:	SAS
Interface type	SAS
Link speed:	6.0Gb/s
Max device speed:	6.0Gb/s
Type:	HDD
Vendor:	FUJITSU
Product:	MBD2300RC
Firmware version:	5201
Serial number:	D0A7PA303NMF
Physical size:	300 GB
Configured size:	300 GB
SAS address:	500000E114722F42
Power status:	Active
Action in progress	-

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No physical drive is connected to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
Unable to execute the command because the system is under maintenance.
Unable to execute the command because the Partition#%d is under maintenance.

2.3.50 show raid physical_drive_count

Displays disk counts attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid physical_drive_count [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
{encl=<Port#>-<Cascade#>}
```

(2) Option

encl: This option specifies port, cascade and slot number for the target disk enclosure. (ex. encl=0-0).

(3) Usage example

- Example: When you display disk count attached to the RAID adapter on SB#0.
  ```
  # show raid physical_drive_count SB 0-0
  3
  ```

- Example: When you display disk count in the disk enclosure port#0-cascade#0 attached to the RAID adapter on IOU#0-PCI slot#1.
  ```
  # show raid physical_drive_count IOU 0-1 encl 0-0
  24
  ```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.3.51 show raid logical_drive

Displays logical drive information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
{target=<Target#>} {action-progress}
```

(2) Option

target: This option specifies target id (ex. target=0)
action-progress: This option shows action progress for the specify logical drive.

(3) Usage example

・ Example: When you display logical drive list attached to the RAID adapter on SB#0.

```
# show raid logical_drive SB 0-0
```

Target Id	Status	Name	Size	RAID	Action in progress
0	Operational	RHEL7	136.00 GB	RAID-0	-
1	Operational	WS2012R2	278.00 GB	RAID-1	Back ground initialization

・ Example: When you display the logical drive#1 on SB#0.

```
# show raid logical_drive SB 0-0  target=1
```

Target ID:	1
Status:	Operational
Name:	WS2012R2
RAID level:	RAID-1
Strip size	64K
Logical size	278.00 GB
Read mode	Read-ahead
Write mode:	Write-back
Cache mode:	Direct
Disk cache mode:	Disabled
Background initialization:	Enabled
Action in progress	Back ground initialization

Configured drives:

Slot	Span	Start block	Length[Blocks]	Length[MB/GB]
1	0	0	584843264	285568/278
2	0	0	584843264	285568/278

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No logical drive is assigned to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.3.52 show raid logical_drive_count

Displays logical drive counts attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid logical_drive_count [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
```

(2) Option

None.

(3) Usage example

- Example: When you display logical drive count attached to the RAID adapter on SB#0.

```
# show raid logical_drive_count SB 0-0
2
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.3.53 show raid bbu

Displays FBU information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid bbu [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
```

(2) Option

None

(3) Usage example

・ Example: When you display FBU information on SB#0.

```
# show raid bbu SB 0-0
  Status:                 Normal
  Type:                   FBU
  Vendor:                 LSI
  Manufacturer date:      03/21/2012
  Intelligent BBU:        Yes
  Auto learn mode:        Transparent
  Next learn time:        Thu 17 Jul 2014 01:09:23 PM
  Auto learn period:      28 Days
  Design voltage:         9.411 V
  Voltage:                9.518 V
  Temperature:            27 deg C
  Design capacity:        283 J
  Remaining capacity:     321 J
  Capacitance:            100 %
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No logical drive is assigned to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.3.54 show special_account

Displays the registered special account used with LDAP.

■ Privilege: Administrator

(1) Input format

```
show special_account
```

(2) Option

None

(3) Usage example

・ Example: When a special account is set.

```
# show special_account
Admin: special_admin
CE : special_ce
#
```

・ Example: When a special account is not set.

```
# show special_account
Admin: -
CE : -
#
```

(4) Message

None

2.3.55 show partition pci_ecrc_mode

Displays a setting of ECRC of the specified partition enable/disable.
This function can be available in the PRIMEQUEST 2400E3/2800E3.

enable : ECRC effective
disable : ECRC invalidity

- **Privilege: All**

(1) Input format

```
show partition pci_ecrc_mode <partition#>
```

(2) Option

None.

(3) Usage example

・ Example: When you display the ECRC setting of Partition2.

```
# show partition pci_ecrc_mode 2
pci_ecrc_mode : enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show partition command.
Partition#x is not defined.

2.4 Update Command

Update Commands are as follows.

2.4.1 Update ALL
2.4.2 show update_status

This section describes operation procedure of these commands.

2.4.1 Update ALL

The update ALL command batch-downloads firmware from the specified URL and updates the MMB, BMC, and BIOS with the downloaded firmware.

Specify the URL as follows:

http://host/path/file
ftp://host/path/file

The update sequence is as follows:

(1) MMB firmware update (standby)
(2) MMB firmware update (active)
(3) BMC firmware update
(4) BIOS firmware update

You can check the progress by using the show update_status command.

Note

If the MMB or SB is faulty, perform maintenance on it before updating the firmware. Do not update the firmware in a configuration with a faulty MMB or SB.

- **Privilege: Administrator or CE**

(1) Input format

```
update ALL <url> {force} {quiet}
```

(2) Option

force: This option forcibly updates the firmware based on the applicable general firmware version.
quiet: This option updates the firmware without user interaction.

(3) Usage example

```
# update ALL http://host/path/allfirm001
Downloading an unified firmware file.....
Extracting an unified firmware file.....

Current Unified Firmware Version: xxxxx
New Unified Firmware Version: yyyyy

Are you sure to continue Firmware Update? [Y|N]: Y
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure to continue Firmware Update? [Y|N]:
The specified parameter is invalid
Unable to execute this command on a standby MMB.
Failed to get the firmware version.
The checksum of the firmware file is invalid.
The size of the firmware file is invalid.
The CRC of the firmware file is invalid.
Specified file is NOT a Firmware file.
Specified host does NOT respond.
Unable to execute the update under maintenance.
Current firmware is newer version.
Unable to execute the online update.
Please try the update after the system power off.
Unable to execute the update. TPM is effective.
Unable to execute the update. Standby MMB is fault or disable.
Unable to execute Firmware Update due to resource lock.
Please retry after waiting a while.
The firmware is being updated now.
The chassis information could not be retrieved.
The chassis information is invalid.

(5) Process

MMB checks whether the firmware update of online is executable. When it is not possible to execute it, the error message is output and the update processing is interrupted.

The condition that firmware update of online becomes improper:

- MMB is an unredundant configuration.
- There is no combination in the interchangeability table between the farm version numbers that can be updated firmware online.

- Without the force option specified:

The general firmware version to be applied is compared with that in use. If the version to be applied is the same or older than that in use, the command does not update the firmware.
Also, the versions of the individual firmware instances are checked. If the version to be applied is the same as that of a firmware instance, the command does not update the firmware instance. In other words, the command updates the firmware instance only if the versions are different.

- With the force option specified:

The general firmware version to be applied is not compared with that in use. The command forcibly updates the current firmware with the applicable firmware version.
The online firmware update cannot specify force for an option.

2.4.2 show update_status

The show update_status command displays the version of the firmware being batch-updated as well as the update progress.

The possible status is as follows:

- completed: Normal end
- failed: Abnormal end
- updating: Firmware update in progress (percentage displayed)
- being updated: Firmware update in progress (firmware being downloaded)
- not executed: Firmware update not started

■ Privilege: Administrator or CE

(1) Input format

```
show update_status
```

(2) Option

None

(3) Usage example

#show update_status
Unified Firmware Version : BA13012, update status:updating 35%
#

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Unified Firmware Version : XX, update status:completed
Unified Firmware Version : XX, update status:not executed
Unable to execute this command on a standby MMB.
Failed to execute show update_status command.
Unified Firmware Version : XX, update status:being updated
Unified Firmware Version : XX, update status:updating YY%
Unified Firmware Version : XX, update status:failed

2.5 Other Commands

The following commands are not information configuration, display, or update commands:

2.5.1 exit
2.5.2 passwd
2.5.3 ping

This section describes how to use these commands.

2.5.1 exit

The exit command logs out the user.

- **Privilege: All**

(1) Input format

```
exit
```

(2) Option

None

(3) Usage example

None

(4) Message

None

2.5.2 passwd

The passwd command changes the password of the specified user. Users without Administrator privileges can change only their own passwords. Users with Administrator privileges can change the password of any user.

If no user is specified, the command changes the password of the currently logged-in user.

For details on characters that can be entered and other conditions, see TABLE 1.87 Display Items and Setting Items in [Mode] Window.

■ Privilege: All

(1) Input format

```
passwd {USER}
```

(2) Option

USER: This option sets the name of the user whose password is to be changed.

(3) Usage example

```
# passwd
Current password: *************
New password: ******************
Re-enter new password: ******************
Password changed.
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

This command cannot be executed on the standby MMB.
The specified parameter is invalid.
Password changed.
change passwd failed (code=0x%04x)
Could not set attributes
invalid passwd
password needs 8 characters at least
password needs 32 characters or less
Failed to the password authentication.
New password differs from Re-enter new password.

2.5.3 ping

The ping command sends an ICMP echo message to the recipient identified by <IP address> or <server name>.

Remarks

Supported only for IPv4.

- **Privilege: All**

(1) Input format

```
ping {-c <count> } [<IP address>|<server name>]
```

(2) Option

-c <count>: This option ends the command after sending a certain number <count> of packets.
The default is 1.

(3) Usage example

None

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

If the parameter specification is incorrect, an ICMP ping error message may appear since ping in ICMP is used.

2.6 PRIMEQUEST 2800B3/2800B2/2800B model Commands

2.6.1 PRIMEQUEST 2800B3/2800B2/2800B model CLI command list

This chapter describes the functions of the PRIMEQUEST 2800B3/2800B2/2800B model CLI commands. Follow Chapter 2.5 from Chapter 2.2 about the part not described in this chapter.

The following tables list the account privileges required for individual commands.
"Permitted" in an account privilege column indicates the command can be used with those account privileges.

- TABLE 2.9 MMB CLI commands (Administrator)
- TABLE 2.10 MMB CLI commands (Operator)
- TABLE 2.11 MMB CLI commands (User)
- TABLE 2.12 MMB CLI commands (CE)

TABLE 2.9 MMB CLI commands (Administrator)

Command	Administrator	Outline
Power control		
power off	Permitted	Turns the power off.
power on	Permitted	Turns the power on.
Partition creation		
add partition	-	Adds a partition component.
remove partition	-	Removes a partition component.
show partition configuration	-	Displays the partition configuration.
set reserved_sb	-	Sets the Reserved SB.
show reserved_sb	-	Displays the Reserved SB.
set partition home	-	Sets the Home SB.
show partition home	-	Displays the Home SB.
set partition dynamic_reconfiguration	-	Sets DR state of partition.
show partition dynamic_reconfiguration	-	Displays DR state of partition.
set memory_operation_mode	Permitted	Sets Memory operation mode.
show memory_operation_mode	Permitted	Displays Memory operation mode.
set memory_mirror_ras_mode	Permitted	Sets Memory operation at Mode.
show memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set pci_address_mode	-	Sets PCI bus number allocation mod.
show pci_address_mode	-	Displays PCI bus number allocation mod.
set lan_device_mode	Permitted	Sets LAN device mode.
show lan_device_mode	Permitted	Displays LAN device mode.
set pci_express_mode	-	Sets PCI-express mode.
show pci_express_mode	-	Displays PCI-express mode.
set partition name	-	Sets the partition name.
show partition name	-	Displays the partition name.
hotadd partition	-	Dynamic Reconfiguration HotAdd
hotremove partition	-	Dynamic Reconfiguration HotRemove
show system_power status	Permitted	Displays System Power status.
set memory_sparing_mode	Permitted	Sets the memory operation at spare mode.
show memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set pci_ecrc_mode	Permitted	Sets the ECRC.
show pci_ecrc_mode	Permitted	Displays the ECRC.
Partition control		
sadump	-	sadump instruction
reset	Permitted	Hard Reset instruction
nmi	Permitted	NMI interrupt instruction
Partition connection		
console	Permitted	Text Console connection to partition
DR-related	-	DR related commands
Extended Partitioning-related	-	Extended Partitioning related commands
MMB configuration and other		
set active_mmb	-	Sets the active MMB.
show active_mmb	-	Displays the active MMB.
help	Permitted	Help information

Command	Administrator	Outline
Systemconfiguration		
set mmbcontrol reset	Permitted	Resets the MMB.
set mmb control switch_over	-	Switch Over the MMB.
add user	Permitted	Adds User.
show user_list	Permitted	Displays Users.
create raid logical_drive	Permitted	Create RAID logical drive
delete raid logical_drive	Permitted	Delete RAID logical drive
modify raid logical_drive_policy	Permitted	Modify RAID logical drive policy
modify raid logical_drive	Permitted	Modify RAID logical drive
create raid global_hotspare	Permitted	Create RAID global hotspare disk
create raid dedicated_hotspare	Permitted	Create RAID dedicated hospare disk
delete raid hotspare	Permitted	Delete RAID hotspare disk
start raid locate_pd	Permitted	Start locate disk LED
stop raid locate_pd	Permitted	Stop locate disk LED
start raid locate_ld	Permitted	Start locate disk LEDs for logical drive
stop raid locate_ld	Permitted	Stop locate disk LEDs for logical drive
start raid locate_encl	Permitted	Start locate disk enclosure LED
stop raid locate_encl	Permitted	Stop locate disk enclosure LED
start raid rebuild	Permitted	Start disk rebuilding
cancel raid rebuild	Permitted	Cancel disk rebuilding
start raid copyback	Permitted	Start disk copyback
cancel raid copyback	Permitted	Stop disk copyback
start raid mdc	Permitted	Start make data consistency (MDC)
cancel raid mdc	Permitted	Cancel MDC
start raid patrol	Permitted	Start RAID patrol
cancel raid patrol	Permitted	Cancel RAID patrol
make raid online	Permitted	Make disk online
make raid offline	Permitted	Make disk offline
replace raid missing_drive	Permitted	Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information

TABLE 2.10 MMB CLI commands (Operator)

Command	Operator	Outline
Power control		
power off	Permitted	Turns the power off.
power on	Permitted	Turns the power on.
Partition creation		
add partition	-	Adds a partition component.
remove partition	-	Removes a partition component.
show partition configuration	-	Displays the partition configuration.
set reserved_sb	-	Sets the Reserved SB.
show reserved_sb	-	Displays the Reserved SB.
set partition home	-	Sets the Home SB.
show partition home	-	Displays the Home SB.
set partition dynamic_reconfiguration	-	Sets DR state of partition.
show partition dynamic_reconfiguration	-	Displays DR state of partition.
set memory_operation_mode	Permitted	Sets Memory operation mode.
show memory_operation_mode	Permitted	Displays Memory operation mode.
set memory_mirror_ras_mode	Permitted	Sets Memory operation at Mode.
show memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set pci_address_mode	-	Sets PCI bus number allocation mod.
show pci_address_mode	-	Displays PCI bus number allocation mod.
set lan_device_mode	Permitted	Sets LAN device mode.
show lan_device_mode	Permitted	Displays LAN device mode.
set pci_express_mode	-	Sets PCI-express mode.
show pci_express_mode	-	Displays PCI-express mode.
set partition name	-	Sets the partition name.
show partition name	-	Displays the partition name.
hotadd partition	-	Dynamic Reconfiguration HotAdd
hotremove partition	-	Dynamic Reconfiguration HotRemove
show system_power status	Permitted	Displays System Power status.
set memory_sparing_mode	Permitted	Sets the memory operation at spare mode.
show memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set pci_ecrc_mode	Permitted	Sets the ECRC.
show pci_ecrc_mode	Permitted	Displays the ECRC.
Partition control		
sadump	-	sadump instruction
reset	Permitted	Hard Reset instruction
nmi	Permitted	NMI interrupt instruction
Partition connection		
console	Permitted	Text Console connection to partition
DR-related	-	DR related commands
Extended Partitioning-related	-	Extended Partitioning related commands
MMB configuration and other		
set active_mmb	-	Sets the active MMB.
show active_mmb	-	Displays the active MMB.
help	Permitted	Help information

Command	Operator	Outline
System configuration		
set mmbcontrol reset	-	Resets the MMB.
set mmbcontrol switch_over	-	Switch Over the MMB.
add user	-	Adds User.
show user_list	-	Displays Users.
create raid logical_drive	Permitted	Create RAID logical drive
delete raid logical_drive	Permitted	Delete RAID logical drive
modify raid logical_drive_policy	Permitted	Modify RAID logical drive policy
modify raid logical_drive	Permitted	Modify RAID logical drive
create raid global_hotspare	Permitted	Create RAID global hotspare disk
create raid dedicated_hotspare	Permitted	Create RAID dedicated hospare disk
delete raid hotspare	Permitted	Delete RAID hotspare disk
start raid locate_pd	Permitted	Start locate disk LED
stop raid locate_pd	Permitted	Stop locate disk LED
start raid locate_ld	Permitted	Start locate disk LEDs for logical drive
stop raid locate_ld	Permitted	Stop locate disk LEDs for logical drive
start raid locate_encl	Permitted	Start locate disk enclosure LED
stop raid locate_encl	Permitted	Stop locate disk enclosure LED
start raid rebuild	Permitted	Start disk rebuilding
cancel raid rebuild	Permitted	Cancel disk rebuilding
start raid copyback	Permitted	Start disk copyback
cancel raid copyback	Permitted	Stop disk copyback
start raid mdc	Permitted	Start make data consistency (MDC)
cancel raid mdc	Permitted	Cancel MDC
start raid patrol	Permitted	Start RAID patrol
cancel raid patrol	Permitted	Cancel RAID patrol
make raid online	Permitted	Make disk online
make raid offline	Permitted	Make disk offline
replace raid missing_drive	Permitted	Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information

TABLE 2.11 MMB CLI commands (User)

Command	User	Outline
Power control		
power off	-	Turns the power off.
power on	-	Turns the power on.
Partition creation		
add partition	-	Adds a partition component.
remove partition	-	Removes a partition component.
show partition configuration	-	Displays the partition configuration.
set reserved_sb	-	Sets the Reserved SB.
show reserved_sb	-	Displays the Reserved SB.
set partition home	-	Sets the Home SB.
show partition home	-	Displays the Home SB.
set partition dynamic_reconfiguration	-	Sets DR state of partition.
show partition dynamic_reconfiguration	-	Displays DR state of partition.
set memory_operation_mode	-	Sets Memory operation mode.
show memory_operation_mode	Permitted	Displays Memory operation mode.
set memory_mirror_ras_mode	-	Sets Memory operation at Mode.
show memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set pci_address_mode	-	Sets PCI bus number allocation mod.
show pci_address_mode	-	Displays PCI bus number allocation mod.
set lan_device_mode	-	Sets LAN device mode.
show lan_device_mode	Permitted	Displays LAN device mode.
set pci_express_mode	-	Sets PCI-express mode.
show pci_express_mode	-	Displays PCI-express mode.
set partition name	-	Sets the partition name.
show partition name	-	Displays the partition name.
hotadd partition	-	Dynamic Reconfiguration HotAdd
hotremove partition	-	Dynamic Reconfiguration HotRemove
show system_power status	Permitted	Displays System Power status.
set memory_sparing_mode	-	Sets the memory operation at spare mode.
show memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set pci_ecrc_mode	-	Sets the ECRC.
show pci_ecrc_mode	Permitted	Displays the ECRC.
Partition control		
sadump	-	sadump instruction
reset	-	Hard Reset instruction
nmi	-	NMI interrupt instruction
Partition connection		
console	-	Text Console connection to partition
DR-related	-	DR related commands
Extended Partitioning-related	-	Extended Partitioning related commands
MMB configuration and other		
set active_mmb	-	Sets the active MMB.
show active_mmb	-	Displays the active MMB.
help	Permitted	Help information

Command	User	Outline
System configuration		
set mmbcontrol reset	-	Resets the MMB.
set mmbcontrol switch_over	-	Switch Over the MMB.
add user	-	Adds User.
show user_list	-	Displays Users.
create raid logical_drive	-	Create RAID logical drive
delete raid logical_drive	-	Delete RAID logical drive
modify raid logical_drive_policy	-	Modify RAID logical drive policy
modify raid logical_drive	-	Modify RAID logical drive
create raid global_hotspare	-	Create RAID global hotspare disk
create raid dedicated_hotspare	-	Create RAID dedicated hospare disk
delete raid hotspare	-	Delete RAID hotspare disk
start raid locate_pd	-	Start locate disk LED
stop raid locate_pd	-	Stop locate disk LED
start raid locate_ld	-	Start locate disk LEDs for logical drive
stop raid locate_ld	-	Stop locate disk LEDs for logical drive
start raid locate_encl	-	Start locate disk enclosure LED
stop raid locate_encl	-	Stop locate disk enclosure LED
start raid rebuild	-	Start disk rebuilding
cancel raid rebuild	-	Cancel disk rebuilding
start raid copyback	-	Start disk copyback
cancel raid copyback	-	Stop disk copyback
start raid mdc	-	Start make data consistency (MDC)
cancel raid mdc	-	Cancel MDC
start raid patrol	-	Start RAID patrol
cancel raid patrol	-	Cancel RAID patrol
make raid online	-	Make disk online
make raid offline	-	Make disk offline
replace raid missing_drive	-	Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information

TABLE 2.12 MMB CLI commands (CE)

Command	CE	Outline
Power control		
power off	-	Turns the power off.
power on	-	Turns the power on.
Partition creation		
add partition	-	Adds a partition component.
remove partition	-	Removes a partition component.
show partition configuration	-	Displays the partition configuration.
set reserved_sb	-	Sets the Reserved SB.
show reserved_sb	-	Displays the Reserved SB.
set partition home	-	Sets the Home SB.
show partition home	-	Displays the Home SB.
set partition dynamic_reconfiguration	-	Sets DR state of partition.
show partition dynamic_reconfiguration	-	Displays DR state of partition.
set memory_operation_mode	-	Sets Memory operation mode.
show memory_operation_mode	Permitted	Displays Memory operation mode.
set memory_mirror_ras_mode	-	Sets Memory operation at Mode.
show memory_mirror_ras_mode	Permitted	Displays Memory operation at Mode.
set pci_address_mode	-	Sets PCI bus number allocation mod.
show pci_address_mode	-	Displays PCI bus number allocation mod.
set lan_device_mode	-	Sets LAN device mode.
show lan_device_mode	Permitted	Displays LAN device mode.
set pci_express_mode	-	Sets PCI-express mode.
show pci_express_mode	-	Displays PCI-express mode.
set partition name	-	Sets the partition name.
show partition name	-	Displays the partition name.
hotadd partition	-	Dynamic Reconfiguration HotAdd
hotremove partition	-	Dynamic Reconfiguration HotRemove
show system_power status	Permitted	Displays System Power status.
set memory_sparing_mode	-	Sets the memory operation at spare mode.
show memory_sparing_mode	Permitted	Displays the memory operation at spare mode.
set pci_ecrc_mode	-	Sets the ECRC.
show pci_ecrc_mode	Permitted	Displays the ECRC.
Partition control		
sadump	-	sadump instruction
reset	-	Hard Reset instruction
nmi	-	NMI interrupt instruction
Partition connection		
console	-	Text Console connection to partition
DR-related	-	DR related commands
Extended Partitioning-related	-	Extended Partitioning related commands
MMB configuration and other		
set active_mmb	-	Sets the active MMB.
show active_mmb	-	Displays the active MMB.
help	Permitted	Help information

Command	CE	Outline
System configuration		
set mmbcontrol reset	-	Resets the MMB.
set mmbcontrol switch_over	-	Switch Over the MMB.
add user	-	Adds User.
show user_list	-	Displays Users.
create raid logical_drive	-	Create RAID logical drive
delete raid logical_drive	-	Delete RAID logical drive
modify raid logical_drive_policy	-	Modify RAID logical drive policy
modify raid logical_drive	-	Modify RAID logical drive
create raid global_hotspare	-	Create RAID global hotspare disk
create raid dedicated_hotspare	-	Create RAID dedicated hospare disk
delete raid hotspare	-	Delete RAID hotspare disk
start raid locate_pd	-	Start locate disk LED
stop raid locate_pd	-	Stop locate disk LED
start raid locate_ld	-	Start locate disk LEDs for logical drive
stop raid locate_ld	-	Stop locate disk LEDs for logical drive
start raid locate_encl	-	Start locate disk enclosure LED
stop raid locate_encl	-	Stop locate disk enclosure LED
start raid rebuild	-	Start disk rebuilding
cancel raid rebuild	-	Cancel disk rebuilding
start raid copyback	-	Start disk copyback
cancel raid copyback	-	Stop disk copyback
start raid mdc	-	Start make data consistency (MDC)
cancel raid mdc	-	Cancel MDC
start raid patrol	-	Start RAID patrol
cancel raid patrol	-	Cancel RAID patrol
make raid online	-	Make disk online
make raid offline	-	Make disk offline
replace raid missing_drive	-	Replace missing drive
show raid adapter	Permitted	Display RAID adapter information
show raid disk_enclosure	Permitted	Display disk enclosure information
show raid physical_drive	Permitted	Display disk information
show raid physical_drive_count	Permitted	Display disk counts
show raid logical_drive	Permitted	Display logical drive information
show raid logical_drive_count	Permitted	Display logical drive counts
show raid bbu	Permitted	Display FBU information

2.6.2 power off

Turn off the power of entire system.

When the entire system is already in power off state, any process will not be executed for entire system.

- **Privilege: Administrator, Operator**

(1) Input format

```
power off {force}
```

(2) Option
force: Shows that the power of the system turns off forcefully without shutting down the operating system of system.

(3) Usage example
None

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to power off the system.
Unable to force power off on the system.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command because the system is under maintenance.
Unable to power off the System because you have not authority to operate this system.
System Configuration Failed.

2.6.3 power on

Turn on the power supply of the entire system.

When the power supply for the entire system is already turned on, processing for such system is not done.

- **Privilege: Administrator, Operator**

(1) Input format

```
power on
```

(2) Option
None

(3) Usage example
None

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to power on the partition#%d due to CPU mismatch between SBs.
Unable to power on the partition#%d due to DIMM does not satisfy requirements of Mode.
Unable to power on due to mismatch between supply voltage and input voltage.
Unable to power on the partition#%d due to abnormal DIMM composition.
Unable to power on the partition#%d due to abnormal SB composition.
Unable to power on the system.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command because the system is under maintenance.
The Power On failed, because of switching the Home SB. Please execute it after a while again.
Unable to power on the system because you have not authority to operate this system.
System Configuration Failed.

2.6.4 reset

Specify the Hard Reset to the system.

When the entire system is not in Power On state, any kind of processing for such system is not done.

- **Privilege: Administrator, Operator**

(1) Input format

```
reset {quiet}
```

(2) Option
quiet: The command is executed without interactive operation with the user.

(3) Usage example
Example: When reset is directed by the Administrator authority.

```
Administrator> reset
Are you sure you want to Reset? [Y/N]: Y
Administrator>
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to Reset to system? [Y/N]:
The specified parameter is invalid.
Unable to Reset the system.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command because the system is under maintenance.
Unable to Reset the System because you have not authority to operate this system.
System Configuration Failed.

2.6.5 nmi

Specify NMI interruption to the system.

When the entire system is not in Power On state, any kind of processing for such system is not done.

- **Privilege: Administrator, Operator, Partition Operator (Only the partition to be managed)**

(1) Input format

```
nmi {quiet}
```

(2) Option
quiet: The command is executed without interactive operation with the user.

(3) Usage example
Example: When NMI is directed by the Administrator authority.

```
Administrator > nmi
Are you sure you want to NMI? [Y/N]: Y
Administrator >
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

Are you sure you want to NMI to System? [Y/N]:
The specified parameter is invalid.
Unable to NMI the system.
Command Failed. Code=0x%04X, 0x%02X
Unable to execute this command because the system is under maintenance.
Unable to NMI the System because you have not authority to operate this system.
System Configuration Failed.

2.6.6 set memory_operation_mode

It sets the Memory Operation Mode of the system.

By default normal (Mode invalid) is set.

performance : sets the Performance Mode
normal : sets the Normal Mode
partial_mirror : sets the Partial Mode
full_mirror : sets the Full Mode
spare : sets the Spare Mode
address_range_mirror : sets the Address Range Mirror Mode (This function can be available in the PRIMEQUEST 2800B3)

For the system which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

"Unable to change the mode while the system is running.
Please try to change the mode after the system is shutdown."

For the system which is already powered OFF, when the settings are changed by this command, power OFF/ON is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when the values which are the same as the current values are set, power off/on is not required and the above-mentioned message is not displayed.

- **Privilege: Administrator, Operator**

(1) Input format

```
set memory_operation_mode [performance |normal | partial_mirror | full_mirror |
spare | address_range_mirror] {quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

Example: When setting Memory Operation Mode of the system to performance

```
# set memory_operation_mode performance
The setting will become effective the next time the system power off/on is performed
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the system power off/on is performed.
The specified parameter is invalid.
Unable to register the System as Mode enable because the CPU mismatch between SBs.
Unable to register the System as Mode enable because the DIMM does not satisfy requirements of Mode.
Unable to register the System as Mode enable because the unsupported CPU configuration.
Unable to register the System as Mode enable because of abnormal CPU composition.
Unable to register the System as Mode enable because of abnormal DIMM composition.
Unable to register the System as Mode enable because of abnormal SB composition.
Failed to execute %s command.
Failed to execute set memory_operation_mode command.
Unable to change the mode while the system is running. Please try to change the mode after the system is shutdown.
Unable to execute this command because you have not authority to operate this system.
System Configuration Failed.

2.6.7 set memory_mirror_ras_mode

It sets the Memory Mirror RAS mode of the system.

Memory Operation Mode can be set only at the time of Mode settings. Default value is set to mirror_keep (RAS emphasized mode).

mirror_keep	: Mode is maintained
capacity_keep	: Capacity of the memory is maintained.

For the system which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

"Unable to change the mode while the system is running.
Please try to change the mode after the system is shutdown."

For the system which is already powered OFF, when the settings are changed by this command, power OFF/ON is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when values which are the same as the current values are set, power ff/on is not required and the above-mentioned message is not displayed.

- **Privilege: Administrator, Operator**

(1) Input format

```
set memory_mirror_ras_mode [mirror_keep |capacity_keep ] {quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

Example: When setting Memory Mirror RAS Mode of the system to Mirror Keep Mode

```
# set memory_mirror_ras_mode mirror_keep
The setting will become effective the next time the system power off/on is performed
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the system power off/on is performed.
The specified parameter is invalid.
Unable to register the System as Mode enable because the CPU mismatch between SBs.
Unable to register the System as Mode enable because the DIMM does not satisfy requirements of Mode.
Unable to register the System as Mode enable because the unsupported CPU configuration.
Unable to register the System as Mode enable because of abnormal CPU composition.
Unable to register the System as Mode enable because of abnormal DIMM composition.
Unable to register the System as Mode enable because of abnormal SB composition.
Failed to execute %s command.
Failed to execute set memory_mirror_ras_mode command.
Unable to change the mode while the system is running. Please try to change the mode after the system is shutdown.
Unable to execute this command because you have not authority to operate this system.
System Configuration Failed.

2.6.8 set lan_device_mode

LAN Device Mode is set by the IOU unit in the system.
Default value set is wol_disable.

wol_enable	: Onboard LAN enabled with AC On.
wol_disable	: Onboard LAN enabled with Partition On.
device_disable	: Onboard LAN device disabled always.

For the system which is already powered ON, when the settings are performed by this command, following message is displayed and settings cannot be performed.

“Unable to change the mode while the system is running.
Please try to change the mode after the system is shutdown.”

For the system which is already powered OFF, when the settings are changed by this command, power OFF/ON is not required. The value which is set is reflected instantly instead of displaying the above-mentioned message.

Moreover, also when values which are the same as the current values are set, power off/on is not required and the above-mentioned message is not displayed.

■ Privilege: Administrator, Operator

(1) Input format

```
set lan_device_mode <IOU#> [wol_enable| wol_disable | device_disable ] {quiet}
```

(2) Option

quiet: The command is executed without interactive operation to User.

(3) Usage example

Example: When setting IOU#2 to Enable (WOL enabled) in the system.

```
# set lan_device_mode 2 wol_enable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The setting will become effective the next time the system power off/on is performed.
The specified parameter is invalid.
Failed to execute %s command.
Failed to execute set lan_device_mode command.
Unable to change the mode while the system is running. Please try to change the mode after the system is shutdown.
Unable to execute this command because you have not authority to operate this system.
System Configuration Failed.

2.6.9 show memory_operation_mode

Displays the Memory Operation Mode of the system.

performance: Shows the Performance Mode
normal: Shows the Normal Mode
partial_mirror: Shows the Partial Mode
full_mirror: Shows the Full Mode
spare: Shows the Spare Mode
address_range_mirror:Shows the Address Range Mirror Mode (This function can be available in the PRIMEQUEST 2800B3)

- **Privilege: All**

(1) Input format

```
show memory_operation_mode
```

(2) Option

None

(3) Usage example

・ Example: When Memory Operation Mode of system is displayed

```
#show memory_operation_mode
current: normal
setting: performance
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Failed to execute %s command.
Failed to execute show memory_operation_mode command.
System Configuration Failed.

2.6.10 show memory_mirror_ras_mode

Displays Memory Mirror RAS Mode of the system.

mirror_keep	: Sets the Mirror Keep Mode.
capacity_keep	: Sets the Capacity Keep mode.

- **Privilege: All**

(1) Input format

```
show memory_mirror_ras_mode
```

(2) Option

None

(3) Usage example

・ Example: When Memory Mirror RAS Mode of system is displayed

```
#show memory_mirror_ras_mode
current: mirror_keep
setting: capacity_keep
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Failed to execute %s command.
Failed to execute show memory_mirror_ras_mode command.
System Configuration Failed.

2.6.11 show lan_device_mode

Displays the setting (enable/disable) of LAN Device/WOL in IOU unit of the system.

■ Privilege: All

(1) Input format

```
show lan_devoce_mode
```

(2) Option

None

(3) Usage example

・ Example: When LAN Device Mode of IOU (In example it is IOU#2 or IOU#3) from system is displayed

```
#show lan_device_mode
iou#2: LAN Device: enable WOL: enable
iou#3:LAN Device: disable WOL: disable
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Failed to execute %s command.
Failed to execute show lan_device_mode command.
System Configuration Failed.

2.6.12 set mmbcontrol reset

Specify the MMB reset.

This command execution is controlled at the time of the maintenance mode.

■ Privilege: Administrator

(1) Input format

```
set mmbcontrol reset {quiet}
```

(2) Option

quiet: The command is executed without interactive operation with the user.

(3) Usage example

```
# set mmbcontrol reset
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Unable to execute this command under maintenance.

2.6.13 add user

The user account is newly registered.

■ Privilege: Administrator

(1) Input format

```
add user <user name> <password> < confirm password> [admin | operator | user |
ce] {quiet}
```

(2) Option

user name : Sets the user name.
You can enter a total of 3 to 32 characters.
You can enter the following characters in a user name:
[0-9], [a-z], [A-Z], - (hyphen), _ (underscore).
However, the first character of the user name must be a letter from a to z or A to Z.

password : Sets the password.
You can enter a total of 8 to 32 characters.
You can specify the following characters in a password:
[0-9], [a-z], [A-Z], and
special characters: ! " # $ % & ' ( ) = - ^ ~ ¥ @ `[/] { } : * ; + ? < . > , _ |

confirm password : Used to reenter a password for confirmation.

privilege : Sets the privileges of the user account.
You can specify either admin, operator, user or ce.

Quiet : The command is executed without interactive operation with the user.

(3) Usage example

Example: In case of admin authority.

```
# add user Aaaaaaaa Bbbbbbbb Bbbbbbbb admin
```

Example: In case of operator authority.

```
# add user Aaaaaaaa Bbbbbbbb Bbbbbbbb operator
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
No more User addition
Same name already exists. User addition failed.

2.6.14 show user_list

User account information registered in the system is displayed.

■ Privilege: Administrator

(1) Input format

```
show user_list
```

(2) Option
None

(3) Usage example

```
# show user_list
user_name       privilege
Aaaaaaaa        Admin
Ccccccccc       Operator
Ddddddd         CE
```

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

2.6.15 console

Login to the system by telnet. Execute the Text Console connection of BMC.

The Text Console connection to BMC can be connected only by one command per BMC. However, the following messages are displayed when the following console command is executed when other users have already executed the console command, and the Text Console connection to BMC can be done compulsorily by inputting as 'Y'. In that case, the compulsion cutting is done as for the console command under the connection.

```
Console redirection already in use
If needed, the current user can be disconnected

Do you really want to force disconnect current user? [Y|N]:
```

- **Privilege: Administrator, Operator, CE**

(1) Input format

```
console {<timeout>} {quiet}
```

(2) Option

timeout: Sets timeout value.
Set by 0 or within the range of 1~120 minutes.
0 consists of the special meaning, it indicates no Timeout.
Default setting is 10 minutes.
Perform the operation by default value when this option is not specified.

quiet: Executes the command without interactive operation with User.

(3) Usage example

Example: In case of Login to BMC.

```
# console
```

Example: When logged in to BMC by timeout value of 20 minutes.

```
# console 20
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.
Failed to execute 'console' command.
Unable to execute this command because you have not authority to operate this system.
System Configuration Failed.

2.6.16 show system_control status

Displays State of the power supply and status (System Progress) of System.

Power Status of partition
- On
- Standby

System Progress of partition
- Power Off
- Power On In Progress
- Reset
- EFI
- Boot
- OS Running
- OS Shutdown
- Panic
- Power Off In Progress
- Fatal
- Dumping
- Halt

■ Privilege: All

(1) Input format

```
show system_control status
```

(2) Option

None

(3) Usage example

・ Example:

```
#show system_control status
Power Status: On
System Progress: OS Running
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified parameter is invalid.

2.6.17 set memory_sparing_mode

This command can be set only in case of the PRIMEQUEST 2800B3/2800B2 models.
Rank of Memory Sparing Mode of system is set.
When this command is used, it is necessary to set Memory Operation Mode to Spare Mode beforehand.
The default value is 1Rank.

1 : 1 Rank is set.
2 : 2 Rank is set.
auto : Automatic setting.

Because the setting is restrained when this command is executed for system that has already done power supply On, the following messages are displayed.

"Unable to change the mode while the system is running.
Please try to change the mode after the system is shutdown."

When the setting is changed to system that has already done power supply Off by this command, there is no necessity of off/on of the power supply, and the value set at once without displaying the above-mentioned message is reflected. Moreover, when the value is set to the same value now, the above-mentioned message is not displayed about power supply off/on because it is unnecessary.

■ Privilege: Administrator, Operator

(1) Input format

```
set memory_sparing_mode [1 | 2 | auto] {quiet}
```

(2) Option

quiet: The command is executed without interacting with the user.

(3) Usage example

・ Example: When you set Rank of Memory Sparing Mode to 1.

```
# set memory_sparing_mode 1
The setting will become effective the next time the system power off/on is performed
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The specified partition number is invalid.The setting will become effective the next time the partition power off/on is performed.
The specified parameter is invalid.
Unable to register the specified Partition#%d as Mode enable because the CPU mismatch between SBs.
Unable to register the specified Partition#%s as Mode enable because of abnormal SB composition.
Unable to change the mode because Memory Operation Mode is not spare mode.
Failed to execute %s command.
Failed to execute set partition command.
Unable to change the mode while the system is running. Please try to change the mode after the system is shutdown.
Unable to execute this command because you have not authority to operate this system.
System Configuration Failed.

2.6.18 show memory_sparing_mode

This command can be display only in case of the PRIMEQUEST 2800B3/2800B2 models.
Displays the settings Rank of Memory Sparing Mode of system.

- **Privilege: All**

(1) Input format

```
show memory_sparing_mode
```

(2) Option

None

(3) Usage example

・ Example: When you display Rank of Memory Sparing Mode,

```
# show memory_sparing_mode
current: 1
setting: 1
#
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

The specified partition number is invalid.
Failed to execute %s command.
Failed to execute show memory_sparing_mode command.
System Configuration Failed.

2.6.19 create raid logical_drive

Creates a logical drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
create raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#>{,<DISKSLOT#>…} | <PORT#>-<CASCADE#>-o<DISKSLOT#>{,<PORT#>-
<CASCADE#>-<DISKSLOT#>…}] level=<RAIDlevel> {spansize=<Span>} {size=<Size>[MB |
GB | TB]} {name="<Name>"}  {stripe=<StripeSize>} {init=[no | fast | slow]}
{force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0,1,2,3) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0,0-0-1,1-0-0,1-0-1).

level: This option specifies RAID level from 0, 1, 5, 6 1E, 10, 50 or 60. (ex. level=5).

spansize: This option specifies number of drives per span. If the specified RAIDlevel is neither RAID-50 nor RAID-60, the parameter is meaningless. (ex. spansize=5).

size: This option specifies size of the creation of logical drive. If this parameter is omitted, maximum size will be assigned. (ex. size=512GB).

name: This option specifies name strings of the logical drive. If this parameter is omitted, ""(null) will be set for the name. (ex. name="Logical_Drive_0").

stripe: This option specifies stripe size for the creation of logical drive from 8, 16, 32, 64, 128, 256, 512 or 1024. If this parameter is omitted, 64 will be set. (ex. stripe=1024).

init: This option specifies how you want to initialize the logical drive after the creation. If this parameter is omitted, no initialization will be done. (ex. init=fast).

force: The command is executed without interactive operation with the user.

The mandatory options are "disk" and "level", and the other options are omitted. The following table shows the default values.

Options	Default values
spansize	If RAID-50 or RAID-60, Span=num of specified drives / 2. Else if RAID-10, Span=2 Else, Span=num of specified drives.
size	maximum possible size
name	"LogicalDrive_0" (0 is changed corresponding to target ID)
stripe	64
init	Fast

(3) Usage example

・ Example:When you create a logical drive as RAID level 5 with using disk slot#0,1,2,3 on SB#0.
  # create raid logical_drive SB 0-0 disk=0,1,2,3 level=5 size=512GB name="Logical_Drive_0" stripe=1024 init=fast force

・ Example:When you create a logical drive as RAID level 6 with using disk slot#0,1 on disk enclosure 1(port 0 cascade 0) and disk slot#22,23 on disk enclosure 2(port1 cascade0). And these enclosures are attached to RAID card on IOU0-PCI Slot#0
  # create raid logical_drive IOU 0-0 disk=0-0-0,0-0-1,1-0-0,1-0-1 level=5 size=512GB name="Logical_Drive_0" stripe=1024 init=fast force

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
Missing mandatory options.
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

(5) Technical notes

・ Some policies of logical drive cannot be changed from default value when the logical drive is created. If you want to change these parameter, you should use “modify raid policy” command after created the logical drive. These policies are set default values in the table below

Parameter	Default value	Selectable values
Read Policy	No Read Ahead	No Read Ahead, Read Ahead
Write Policy	Write Back	Write Back, Write Through, Force Write Back
I/O Policy	Direct	Direct, Cached
Access Policy	Read/Write	Read/Write, Read Only, Blocked
Drive Cache	Enable	Unchanged, Enable, Disable

・ When requesting create raid logical_drive command, the “Internal error [12:0x8017]” or “Internal error [12:0x802f]” might be returned.
In this case, please verify if the expected logical drive is created by issuing “show raid logical_drive” command.
If the expected logical drive is created, ignore the “Internal error”.
If the expected logical drive is NOT created, please try “create raid logical_drive” command again.

2.6.20 delete raid logical_drive

Deletes a logical drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
delete raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID> {force}
```

(2) Option
target: This option specifies targetID of the logical drive which you want to delete. (ex. target=0).
force: The command is executed without interactive operation with the user.

(3) Usage example
・ Example:When you delete a logical drive 0 assigned to a RAID controller on SB#0.
delete raid logical_drive SB 0-0 target=0

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
Unable to execute the command because the system is under maintenance.
Unable to execute the command because the Partition#%d is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.21 modify raid logical_drive_policy

Modifies policies of the target logica drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
modify raid logical_drive_policy [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID> {read=<ReadPolicy>} {write=<WritePolicy>} {io=<IOPoclicy>}
{access=<AccessPolicy>} {cache=<DriveCachePolicy>} {force}
```

(2) Option

target: targetID of the logical drive which has missing drives. (ex. target=0).
read: This option specifies number of read policy from 0=No read ahead, 1=Read ahead.
No read Ahead - To specify that the controller does not use read ahead for the current logical drive.
Read Ahead - To allow the controller to read sequentially ahead of requested data and store the additional data in cache memory, anticipating that the data is required soon.
write: This option specifies number of write policy from 0=Write Back, 1=Write Through, 2=Force Write Back.
Write Back - To provide optimal performance, but data loss will occur if there is a power failure and there is no cache battery installed or the battery is failed or discharged.
Write Through - To eliminate risk of losing cached data in case of power failure. However, it may result in slower performance.
Force Write Back - The logical drive is in Write Back mode even if the battery is not present; data loss may occur in the event of a power failure.
io: This option number of IO policy from 0=Direct, 1=Cached.
cache: This option specifies number of drive cache policy from 0=Unchanged, 1=Enable, 2=Disable.
force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you modify a logical drive policy for RAID controller on SB#0.
modify raid logical_drive_policy SB 0-0 target=0 read=0 write=0 io=0 access=0 cache=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.22 modify raid logical_drive

Modifies a logical drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
modify raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID> {[disk=<DISKSLOT#>{,<DISKSLOT#>…} | disk=<PORT#>-<CASCADE#>-
<DISKSLOT#>{,<PORT#>-<CASCADE#>-<DISKSLOT#>…}]} {level=<RAIDlevel>} {force}
```

(2) Option

target: This option specifies targetID of the target logical drive which you want to modify. (ex. target=0)
disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0,1,2,3) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0,0-0-1,1-0-0,1-0-1).
level: This option specifies RAID level from 0, 1, 5, 6 1E, 10, 50 or 60. (ex. level=5).
force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you modify RAID level of a logical drive to RAID 6 as RAID level migration (RLM) with additional disk attached to slot#3.

```
# modify raid logical_drive SB 0-0 target=0 disk=3 level=6
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.23 create raid global_hotspare

Creates global hotspare drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
create raid global_hotspare [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you assign a global hotspare to a disk attached to slot#0.

```
# create raid global_hotspare SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.24 create raid dedicated_hotspare

Creates dedicated hotspare drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
create raid dedicated_hotspare [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]
target=<TargetID#>{,<TargetID#>…} {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

target: This options specifies targetID array of the logical drive which is target of the dedicated hot-spare. 16 targets are able to be specified in maximum.(ex. target=0)

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you assign a dedicated hotspare for the logical drive 0 to a disk attached to slot#0.
create raid dedicated_hotspare SB 0-0 disk=0 target=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.25 delete raid hotspare

Deletes global or dedicated hotspare drive to the specified RAID controller.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
delete raid hotspare [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you delete a hotspare to a disk attached to slot#0.

```
# delete raid hotspare SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.26 start raid locate_pd

Turns on a location LED of the specified disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid locate_pd [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

(3) Usage example

・ Example:When you turn on a location LED of a disk attached to slot#0.

```
# start raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.27 stop raid locate_pd

Turns off a location LED of the specified disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
stop raid locate_pd [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

(3) Usage example

・ Example:When you turn off a location LED of a disk attached to slot#0.

```
# stop raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.28 start raid locate_ld

Turns on a location LED of disks assigned to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid locate_ld [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID>
```

(2) Option

target: This option specifies targetID of the logical drive where you want to operate LEDs of physical drives assigned. (ex. target=0).

(3) Usage example

・ Example:When you turn on a location LED of a disk assigned to the logical drive#1.
start raid locate_ld SB 0-0 target=1

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.29 stop raid locate_ld

Turns off a location LED of disks assigned to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
stop raid locate_ld [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
target=<TargetID>
```

(2) Option

target: This option specifies targetID of the logical drive where you want to operate LEDs of physical drives assigned. (ex. target=0).

(3) Usage example

・ Example:When you turn off a location LED of a disk assigned to the logical drive#1.
stop raid locate_ld SB 0-0 target=1

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.30 start raid locate_encl

Turns on a location LED of the specified disk enclosure.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid locate_encl [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> encl=<PORT#>-
<CASCADE#>
```

(2) Option

encl: This option specifies port number of the RAID card where the disk enclosure connected. And specify cascade number of the disk enclosure. (ex. encl=0-0).

(3) Usage example

・ Example:When you turn on a location LED of a disk attached to slot#0.

```
# start raid locate_pd SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.31 stop raid locate_encl

Turns off a location LED of the specified disk enclosure.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
stop raid locate_encl [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> encl=<PORT#>-
<CASCADE#>
```

(2) Option

encl: This option specifies port number of the RAID card where the disk enclosure connected. And specify cascade number of the disk enclosure. (ex. encl=0-0).

(3) Usage example

・ Example:When you turn off a location LED of a disk attached to slot#0.
  # stop raid locate_pd SB 0-0 disk=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.32 start raid rebuild

Starts rebuilding the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid rebuild [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> disk=[<DISKSLOT#>
| <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you start rebuilding a disk attached to slot#0.

```
# start raid rebuild SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.33 cancel raid rebuild

Cancels rebuilding the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid rebuild [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you cancel rebuilding a disk attached to slot#0.

```
# cancel raid rebuild SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.34 start raid copyback

Starts copyback to the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid copyback [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> src=[<DISKSLOT#>
| < PORT#>-<CASCADE#>-<DISKSLOT#>] dist=[<DISKSLOT#> | < PORT#>-<CASCADE#>-
<DISKSLOT#>] {force}
```

(2) Option

src: This option specifies disk slot number which is a source of the copy. (ex. src=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures which is a source of the copy. (e.g. src=0-0-0).

dist: This option specifies disk slot number which is a destination of the copy. (ex. dist=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures which is a destination of the copy. (e.g. dist=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you start coyback from a disk attached to slot#0 to a disk attached to slot#1.

```
# start raid copyback SB 0-0 src=0 dist=1
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.35 cancel raid copyback

Cancels copyback to the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid copyback [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you cancel copyback to a disk attached to slot#0.

```
# cancel raid copyback SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.36 start raid mdc

Starts make data consistency (MDC) to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid mdc [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> target=<TargetID>
{force}
```

(2) Option
target: This option specifies targetID of the logical drive. (ex. target=0).
force: The command is executed without interactive operation with the user.

(3) Usage example
・ Example:When you start MDC to the logical drive#0.
start raid mdc SB 0-0 target=0

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.37 cancel raid mdc

Cancels make data consistency (MDC) to the specified logical drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid mdc [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> target=<TargetID>
{force}
```

(2) Option
target: This option specifies targetID of the logical drive. (ex. target=0).
force: The command is executed without interactive operation with the user.

(3) Usage example
・ Example:When you start MDC to the logical drive#0.
start raid mdc SB 0-0 target=0

(4) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.38 start raid patrol

Starts patrol read to the specified adapter.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
start raid patrol [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> {force}
```

(2) Option

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you start patrol read to the adapter attached to SB#0.

```
# start raid patrol SB 0-0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.39 cancel raid patrol

Cancels patrol read to the specified adapter.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
cancel raid patrol [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> {force}
```

(2) Option

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you cancel patrol read to the adapter attached to SB#0.

```
# cancel raid patrol SB 0-0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.40 make raid online

Makes online the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
make raid online [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> disk=[<DISKSLOT#> |
<PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you make online a disk attached to slot#0.

```
# make raid online SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.41 make raid offline

Makes offline the specificed disk.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
make raid offline [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#> disk=[<DISKSLOT#>
| <PORT#>-<CASCADE#>-<DISKSLOT#>] {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).

force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you make offline a disk attached to slot#0.

```
# make raid offline SB 0-0 disk=0
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.42 replace raid missing_drive

Replaces the disk to the specified logical drive which has missing drive.

- **Privilege: Administrator, Operator, Partition Operator (Only managed partition)**

(1) Input format

```
replace raid missing_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>] target=<TargetID#> {force}
```

(2) Option

disk: This option specifies disk slot numbers for the internal disks (e.g. disk=0) or port number and cascade numbers and disk slot numbers for the external disks on disk enclosures (e.g. disk=0-0-0).
target: This option specifies targetID of the logical drive which has missing drives. (ex. target=0)
force: The command is executed without interactive operation with the user.

(3) Usage example

・ Example:When you replace a disk attached to slot#0 to the logical drive#0 which has missing drive.
replace raid missing_drive SB 0-0 disk=0 target=0

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

The command is executed successfully.
The operation is canceled
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.
Unable to process raid operation because you have not authority to access to the system assigned to the raid controller.
Unable to process raid operation because you have not authority to access to the Partition#%d assigned to the raid controller.

2.6.43 show raid adapter

Displays RAID adapter information.

- **Privilege: All**

(1) Input format

```
show raid adapter {[SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>} {[supported-
raid-level | mfg-data | settings | log]}
```

(2) Option

supported-raid-level: This option shows supported raid level for the specify RAID adapter.
mfg-data: This option shows manufacturer data for the specify RAID adapter.
settings: This option shows an adapter firmware settings for the specify RAID adapter.
log: This option shows an adapter firmware log for the specify RAID adapter.

(3) Usage example

・ Example: When you display RAID adapter list.

show raid adapter

Location	Product Name	Serial number	FW version
SB 0-0	FTS RAID Ctrl SAS 6G 1GB (D3116C)	0000000041232964	23.9.0-0029
DU 0-0	FTS RAID Ctrl SAS 6G 1GB (D3116C)	0000000041432879	23.9.0-0029
DU 0-1	FTS RAID Ctrl SAS 6G 1GB (D3116C)	0000000041433203	23.9.0-0029
IOU 2-3	LSI MegaRAID SAS 9286CV-8e	SV225P2246	23.9.0-0029
PCIBox 1-8	LSI MegaRAID SAS 9286CV-8e	SV225P2374	23.9.0-0029

・ Example: When you display the RAID adapter on SB#0.

show raid adapter SB 0-0

Product Name:	FTS RAID Ctrl SAS 6G 1GB (D3116C)
Serial Number:	0000000041232964
Ports:	8
Protocol:	SAS600
VendorID/ DeviceID:	1000/005B
SubVendorVID/SubDeviceID:	1734/11E4
Firmware package version:	23.9.0-0029
NVRAM size:	32 KB
Memory size:	1024 MB
FlashROM size:	16 MB
Temperature:	49 deg C

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No controller is available.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.6.44 show raid disk_enclosure

Displays disk enclosures information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid disk_enclosure [IOU | PCI_BOX] <UNIT#>-<PCISLOT#> {encl=<Port#>-
<Cascade#>}
```

(2) Option

encl: This option specifies port number and cascade number for the target disk enclosure. (ex. encl=0-0).

(3) Usage example

・ Example: When you display disk enclosures attached to the RAID adapter on IOU#2-PCI slot#3.

```
# show raid disk_enclosure IOU 2-3
```

Port	Cascade	Vendor	Product	Type
0	0	FUJITSU	JX40	0302
0	1	FUJITSU	JX40	0302
1	0	FUJITSU	JX40	0302
1	1	FUJITSU	JX40	0302

・ Example: When you display the disk enclosure attached to port#0-cascade#0 of RAID adapter on IOP#2-PCI slot#3.

```
# show raid disk_enclosure IOU 2-3 encl=0-0
```

Product Name:	FUJITSU ETERNUS JX40
Status:	OK
Vendor:	FUJITSU
Product:	JX40
Port number:	0
Cascade:	1
DeviceID:	48
SAS address:	51463080001ABC3E
Firmware version:	0302

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No enclosure is connected to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
The specified enclosure is not connected.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.6.45 show raid physical_drive

Displays disk information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid physical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
{disk=[<DISKSLOT#> | <PORT#>-<CASCADE#>-<DISKSLOT#>]} {action-progress}
```

(2) Option

disk: This option specifies disk slot number (ex. disk=0) or port, cascade and slot number. (ex. disk=0-0-0).
action-progress: This option shows action progress for the specify disk.

(3) Usage example

・ Example: When you display disk list attached to the RAID adapter on SB#0.

```
# show raid physical_drive SB 0-0
```

Slot	Status	Interface	Type	Vendor	Product	Capacity	Action in progress
0	Operational	SAS	HDD	FUJITSU	MBD2300RC	300 GB	-
1	Operational	SAS	HDD	FUJITSU	MBD2300RC	300 GB	-
3	Available	SAS	SSD	SEAGATE	ST9146802SS	146 GB	-

・ Example: When you display the disk on slot#1 on SB#0.

```
# show raid physical_drive SB 0-0  disk=1
```

Slot:	1
Status:	Operational
Foreign configuration:	No
Interface type:	SAS
Interface type	SAS
Link speed:	6.0Gb/s
Max device speed:	6.0Gb/s
Type:	HDD
Vendor:	FUJITSU
Product:	MBD2300RC
Firmware version:	5201
Serial number:	D0A7PA303NMF
Physical size:	300 GB
Configured size:	300 GB
SAS address:	500000E114722F42
Power status:	Active
Action in progress	-

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No physical drive is connected to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Port and cascade number is required in the parameter since more than 2 enclosures are connected.
Internal error [%d:%d].
Unable to execute the command because the system is under maintenance.
Unable to execute the command because the Partition#%d is under maintenance.

2.6.46 show raid physical_drive_count

Displays disk counts attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid physical_drive_count [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
{encl=<Port#>-<Cascade#>}
```

(2) Option

encl: This option specifies port, cascade and slot number for the target enclosure. (ex. encl=0-0).

(3) Usage example

- Example: When you display disk count attached to the RAID adapter on SB#0.
  # show raid physical_drive_count SB 0-0
  3

- Example: When you display disk count in the disk enclosure port#0-cascade#0 attached to the RAID adapter on IOU#0-PCI slot#1.
  # show raid physical_drive_count IOU 0-1 encl 0-0
  24

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.6.47 show raid logical_drive

Displays logical drive information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid logical_drive [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
{target=<Target#>} {action-progress}
```

(2) Option

target: This option specifies target id (ex. target=0)
action-progress: This option shows action progress for the specify logical drive.

(3) Usage example

・ Example: When you display logical drive list attached to the RAID adapter on SB#0.

```
# show raid logical_drive SB 0-0
```

Target Id	Status	Name	Size	RAID	Action in progress
0	Operational	RHEL7	136.00 GB	RAID-0	-
1	Operational	WS2012R2	278.00 GB	RAID-1	Back ground initialization

・ Example: When you display the logical drive#1 on SB#0.

```
# show raid logical_drive SB 0-0  target=1
```

Target ID:	1
Status:	Operational
Name:	WS2012R2
RAID level:	RAID-1
Strip size	64K
Logical size	278.00 GB
Read mode	Read-ahead
Write mode:	Write-back
Cache mode:	Direct
Disk cache mode:	Disabled
Background initialization:	Enabled
Action in progress	Back ground initialization

Configured drives:

Slot	Span	Start block	Length[Blocks]	Length[MB/GB]
1	0	0	584843264	285568/278
2	0	0	584843264	285568/278

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No logical drive is assigned to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.6.48 show raid logical_drive_count

Displays logical drive counts attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid logical_drive_count [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
```

(2) Option

None.

(3) Usage example

・ Example: When you display logical drive count attached to the RAID adapter on SB#0.

```
# show raid logical_drive_count SB 0-0
2
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.6.49 show raid bbu

Displays FBU information attached to the specified RAID adapter.

- **Privilege: All**

(1) Input format

```
show raid bbu [SB | DU | IOU | PCI_BOX] <UNIT#>-<PCISLOT#>
```

(2) Option

None

(3) Usage example

・ Example: When you display FBU information on SB#0.

```
# show raid bbu SB 0-0
  Status:                 Normal
  Type:                   FBU
  Vendor:                 LSI
  Manufacturer date:      03/21/2012
  Intelligent BBU:        Yes
  Auto learn mode:        Transparent
  Next learn time:        Thu 17 Jul 2014 01:09:23 PM
  Auto learn period:      28 Days
  Design voltage:         9.411 V
  Voltage:                9.518 V
  Temperature:            27 deg C
  Design capacity:        283 J
  Remaining capacity:     321 J
  Capacitance:            100 %
```

(4) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

No logical drive is assigned to the controller.
Too much arguments argc=%d.
Too few arguments argc=%d.
The specified parameter is invalid. %s
The specified controller is not found.
Internal error [%d:%d].
The operation is failed. %s
Unable to execute the command because the %s is under maintenance.

2.6.50 set pci_ecrc_mode

Enable/disable of ECRC(End-to-End CRC Protection for PCIe IO Subsystem) of the ssystem is set.
This function can be available in the PRIMEQUEST 2800B3.
A set value of default is enable (effective).

enable : ECRC effective
disable : ECRC invalidity

This command is executable only for power supply Off of the system, and the setting is reflected at the time of power supply On of the system.
The following messages are displayed when this command is executed for the system of power supply On and the setting is controlled.

Unable to change the mode while the system is running.
Please try to change the mode after the system is shutdown.

- **Privilege: Administrator, Operator**

(2) Input format

```
set pci_ecrc_mode [enable|disable ]
```

(3) Option
quiet: Command is executed without interacting with the user.

(5) Usage example
・ Example: When you invalidate the ECRC setting of system.

```
# set partition pci_ecrc_mode disable
pci_ecrc_mode : disable
#
```

(6) Message
The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540).

pci_ecrc_mode : enable
pci_ecrc_mode : disable
The specified parameter is invalid.
Failed to execute set pci_ecrc_mode command.
Unable to change the mode while the system is running. Please try to change the mode after the system is shutdown.
Unable to execute this command because you have not authority to operate this system.

2.6.51 show pci_ecrc_mode

Displays a setting of ECRC of the system enable/disable.
This function can be available in the PRIMEQUEST 2800B3.

enable : ECRC effective
disable : ECRC invalidity

- **Privilege: All**

(5) Input format

```
show pci_ecrc_mode
```

(6) Option

None.

(7) Usage example

・ Example: When you display the ECRC setting of system.

```
# show partition pci_ecrc_mode
pci_ecrc_mode : enable
#
```

(8) Message

The following table lists the messages which are displayed in this CLI.

For details of the messages, see the PRIMEQUEST 2000 Series Message Reference (CA92344-0540)..

pci_ecrc_mode : enable
pci_ecrc_mode : disable
The specified parameter is invalid.
Unable to execute this command on a standby MMB.
Failed to execute %s command.
Failed to execute show pci_ecrc_mode command.
System Configuration Failed.

CHAPTER 3 UEFI Menu Operations

This chapter describes about the UEFI menu operations.
The UEFI has a menu that offers operations including selective booting of the operating system, starting the UEFI shell, and changing the settings of boot options. To execute each function, move to the relevant menu from the front page of Boot Manager.
For details on [sadump Configuration], see “Chapter 6 Setting up the sadump Environment”.

3.1 Front page of Boot Manager

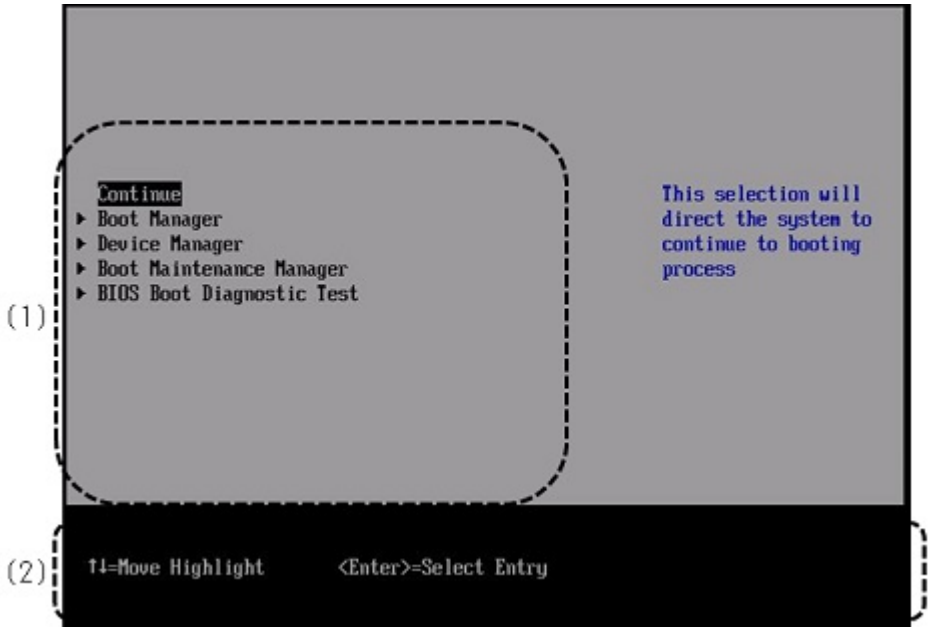
The Front page of Boot Manager is the top page of UEFI. In this window, you can move to Boot processing or can move to Boot Manager, Device Manager and Boot Maintenance Manager by using a relevant menu.

FIGURE 3.1 Display Example of Front page of Boot Manager

3.1.1 Window area

The Front page of Boot Manager is divided into 3 parts as shown in “FIGURE 3.2 Window area of Boot Manager Front Page”

FIGURE 3.2 Window area of Boot Manager Front Page



(1) Menu selection
Displays selection menu shown in “TABLE 3.1 Display item of menu selection”.

TABLE 3.1 Display item of menu selection

Item	Explanation
Continue	If you select ‘Continue’, boot is executed in the sequence that has presently been set.
Boot Manager	Displays “3.3 [Boot Manager] Menu”
Device Manager	Displays “3.4 [Device Manager] Menu”
Boot Maintenance Manager	Displays “3.5 [Boot maintenance Manager] Menu”
BIOS Boot Diagnotstic Test	Executes BIOS Boot Diagnotstic Test. After execution, the power supply to the partition must be turned Off.

(2) Operation help display part
The help for operations mentioned on this page is shown in the “TABLE 3.2 Display Items on Operation Help Display”.

TABLE 3.2 Display Items on Operation Help Display

Item	Description
↑↓=Move Highlight	Moves the cursor in up and down directions.
<Enter> = Select Entry	Selects the item.

3.2 [Continue] Menu

In [Continue] Menu, the process is transited to automatic boot of operating system, and the system is booted in the existing boot order.

3.3 [Boot Manager] Menu

In [Boot Manager] Menu, device for boot can be specified. The [Boot Manager] menu, lists boot devices as shown in "FIGURE 3.3 Display example of [Boot Manager] Menu" Individual Boot device which is displayed in menu is called as Boot option.

FIGURE 3.3 Display example of [Boot Manager] Menu

3.3.1 Boot Option

In boot option, there are two types such as boot type for UEFI Aware operating system and boot type for legacy operating system. The difference in these two types is given below.

■ Method of specifying the boot device

As for the boot device specification of UEFI Aware Operating System, the executable file can be specified up to the unit by the device path expression based on the UEFI specification. On the contrary, for the boot device specification of legacy operating system, the device can be specified up to the unit.

■ Method of specifying boot priority

Change of boot priority is possible by rearranging the boot option.
It can be changed by [Change Boot Order] window of [Boot options]
(See"■[Change Boot Order] menu")

■ Startup priority of Default

The following table shows the boot order of initial state.

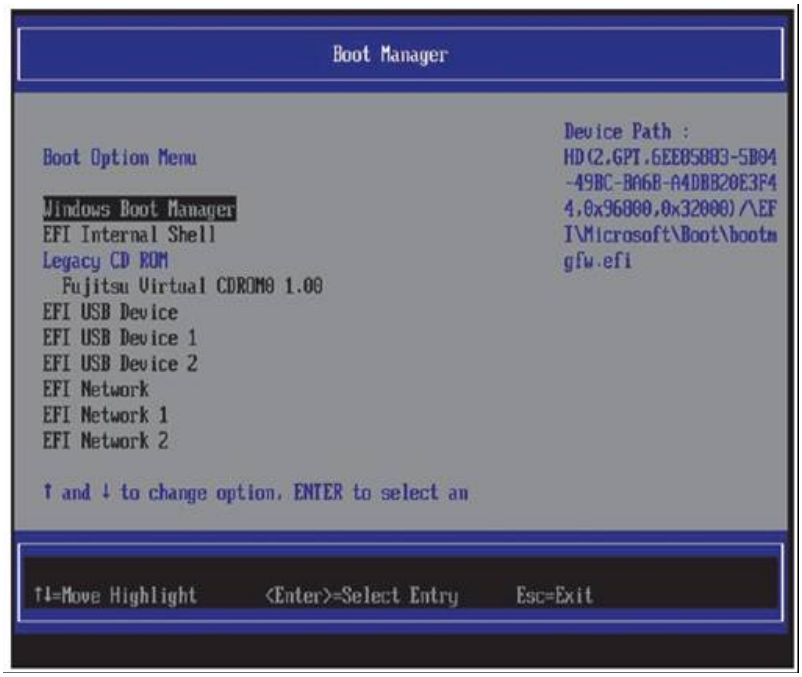
TABLE 3.3 Initial state of boot order when Virtual Media is connected

Priority	Boot option
1	Legacy CD ROM
2	Legacy Floppy
3	EFI Internal Shell
4	EFI: Fujitsu Virtual CDROM
5	EFI USB Device

3.3.2 Boot specification of UEFI

In boot manager menu boot option is displayed according to the boot priority. The boot option displayed at the top has highest priority option and the boot is tested first. [Windows Boot Manager] displayed in example shown in "FIGURE 3.4 Boot Option of Boot Manager" is created when Windows server of Windows Server 2008 (or later) which is UEFI Aware operating system, is installed. In this example, boot for Windows server 2008 (or later) of UEFI Aware operating system, is tested initially.

FIGURE 3.4 Boot Option of Boot Manager



If booting is successful, the operating system is booted. If the booting is failed, the following boot option is booted. In the example of "FIGURE 3.4 Boot Option of Boot Manager", EFI Internal Shell is booted.

The priority level of the boot of UEFI Aware operating system can be changed by the [Change Boot Order] window of the [Boot Options] menu. (See "■ [Change Boot Order] Menu".)

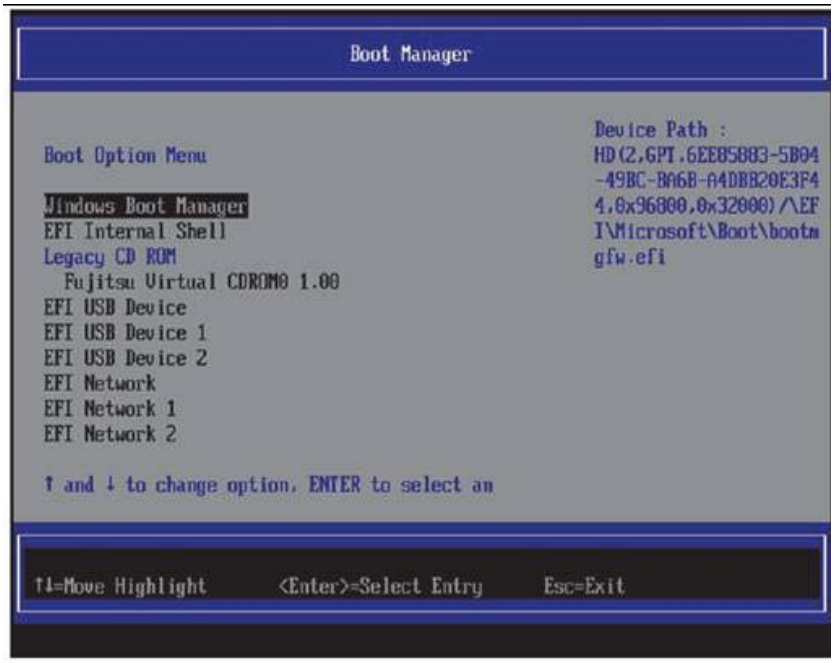
When the boot option is added, and deleted, the [Add Boot Option] menu (See "■ [Add Boot Option] menu") of the [Boot Options] menu and the [Delete Boot Option] menu (See "■ [Delete Boot Option] menu") are used.

3.3.3 About boot specification of legacy BIOS

Boot of legacy operating system is executed by specifying the legacy boot option (Boot option which displays device name without displaying EFI) from the [Boot Manager] menu.

In "FIGURE 3.5 Execution of Legacy Boot Option", Fujitsu Virtual CDROM0 1.00 which is under the control of Legacy CD ROM is a legacy boot option.

FIGURE 3.5 Execution of Legacy Boot Option



The priority level of starting the legacy operating system is changed from the [Change Boot Order] menu.

When the boot processing of legacy operating system is executed once, only the boot option of legacy operating system is executed. The boot option of the UEFI boot whose priority level is lower than the boot option of legacy operating system is not booted automatically. For example, boot of legacy operating system is executed when Legacy CD ROM is moved above Windows Boot Manager, and the boot of Windows is not executed automatically. Specifically, set according to the following procedures.

1. Decide the boot priority level by the [Change Boot Order] window of the [Boot Options] menu. (See "■ [Change Boot Order] menu".)

2. Set startup priority level of multiple Floppy in the [Set Legacy Floppy Drive Order] menu of the Boot Options menu. (See "■ [Set Legacy Floppy Drive Order] menu".)

3. Set startup priority level of multiple HDD in the [Set Legacy HardDisk Drive Order] menu of the Boot Options menu. (See "■ [Set Legacy HardDisk Drive Order] menu".)

4. Decide priority level between multiple DVD/CD according to the [Set Legacy DVD/CD-ROM Drive Order] menu of the Boot Options menu. (See "■ [Set Legacy DVD/CD-ROM Drive Order] menu".) In the boot specification of legacy BIOS, the priority level between multiple DVD/CD can be set in the DVD/CD type.

5. Decide priority level between multiple network ports according to the [Set Legacy NET Drive Order] menu of the [Boot Options] menu. (See "■ [Set Legacy NET Drive Order] menu".) In the boot specification of legacy BIOS, the priority level between multiple network ports can be set in the network port type.

3.3.4 Boot processing

1. Flow of startup of boot processing
The flow of the startup by the boot specification of the boot specification of UEFI and legacy BIOS is shown in "TABLE 3.4 Flow of startup by boot specification of UEFI and boot specification of legacy BIOS".

TABLE 3.4 Flow of startup by boot specification of UEFI and boot specification of legacy BIOS

UEFI boot specification	Flow of startup
< Boot priority level of UEFI Aware operating system> Tries boot of UEFI Aware in the sequence of Boot Order.	
1 Windows Boot Manager: Tries boot of Windows Boot Manager	
2 EFI USB Device: Tries boot of UEFI Aware operating system from USB Device.	
3 EFI Network Device: Tries boot of UEFI Aware operating system from network port.	
The legacy boot option from each legacy device described as follows is an example. The UEFI boot option whose priority level is lower than the legacy boot option is not booted automatically.	
4 Fujitsu Virtual CDROMO 1.00: Tries legacy operating system boot from CD ROM of legacy.	
5 EFI USB Device 2: Priority is lower than the Legacy Boot Option thus unable to boot automatically.	
6. Fujitsu Virtual Floppy0 1.00: Tries legacy operating system boot from Floppy drive of the legacy.	
7. EFI Internal Shell: Starts UEFI Shell.	

2. Flow of processing when boot processing success / fails
The flow of processing when success/fails in the boot processing of the each operating system is shown as follows.

・ If booting of Windows Server 2008 R2 which has UEFI Aware operating system is successful

TABLE 3.5 Boot success of Windows Server 2008 R2

UEFI Boot specifications	**Flow of start-up**
1 Windows Boot Manager : Tries the boot of Windows Boot Manager	
	Boot success – Windows Boot
2 EFI USB Device	
3 EFI Network Device	
4 FujitsuVirtualCDROM01.00	
5 EFI USBDevice2	
6 Fujitsu Virtual Floppy0 1.00	
7 UEFI Internal Shell: Starts UEFI Shell	

・ If boot of Windows Server 2008 on UEFI Aware operating system fails or if UEFI is booted from USB Device

TABLE 3.6 Boot failure of Windows Server 2008 (UEFI Boot success of EFI USB Device)

UEFI Boot specifications	Flow of start-up
1 Windows Boot Manager : Tries the boot of Windows Boot Manager	
	- Boot Failure
2 EFI USB Device	
	- Boot Start up
3 UEFI Network Device	
4 Fujitsu Virtual CDROM0 1.00	
5 EFI USB Device 2	
6 Fujitsu Virtual Floppy0 1.00	
7 EFI Internal Shell: Starts UEFI Shell	

・ If boot of Windows Boot Manager, EFI Network Device and EFI USB Device fails or if booted from Legacy Floppy

TABLE 3.7 If boot of Windows Boot Manager, EFI Network Device and EFI USB Device fails or if booted from Legacy Floppy

UEFI Boot specifications	Flow of start-up
1 Windows Boot Manager : Tries the boot of Windows Boot Manager	
	- Boot Failure
2 EFI USB Device	
	- Boot Failure
3 EFI Network Device	
	- Boot Failure
4 Fujitsu Virtual CDROM0 1.00	Tries the Legacy operating system Boot from high priority Set Legacy CD-ROM Drive Order.
	- Boot Failure
5 EFI USB Device 2	Priority is lower than the Legacy Boot Option thus unable to boot automatically.
6 Fujitsu Virtual Floppy0 1.00	
	- Boot Failure
7 EFI Internal Shell: Starts UEFI Shell	

・ If UEFI Aware Operating System Boot and Legacy Operating System Boot fails and if UEFI Start up is successful

TABLE 3.8 If UEFI Aware operating system Boot and Legacy operating system Boot fails and if UEFI Start up is successful

UEFI Boot specifications	Flow of start-up
1 Windows Boot Manager : Tries the boot of Windows Boot Manager	
	- Boot Failure
2 EFI USB Device	
	- Boot Failure
3 EFI Network Device	
	- Boot Failure
4 Fujitsu Virtual CDROM0 1.00	Tries the Legacy operating system Boot from high priority Set Legacy CD-ROM Drive Order.
	- Boot Failure
5 EFI USB Device 2	Priority is lower than the Legacy Boot Option thus unable to boot automatically.
6 Fujitsu Virtual Floppy0 1.00	
	- Boot Failure
7 EFI Internal Shell: Starts UEFI Shell	- UEFI Shell Start up

3. Definition of Boot failure
There are 2 types of failure for Booting process.

- Failure in which process can be shifted to the next boot option
- Failure in which process cannot be shifted to the next boot option

■ Failure in which process can be shifted to the next boot option
Failure in which process can be shifted to the next boot option is the state where boot process fails because of the absence of boot target. Specifically, following failure patterns exist.

- In boot process of UEFI Aware operating system (such as Windows Boot Manager), the targeted device cannot be connected.
- In boot process of UEFI Aware operating system (Such as Windows Boot Manager), the targeted device cannot be recognized.
- In boot process of UEFI Aware operating system (Such as Windows Boot Manager), UEFI partition was not exist in targeted device.
- In boot of UEFI: Embedded DVD/CD, UEFI: DVD/CD n, media was not found in the corresponding DVD/CD device.
- In boot of UEFI: Embedded DVD/CD, UEFI: DVD/CD n, media which is mounted on the corresponding DVD/CD device was not a media which can perform booting.
- In HDD boot of Legacy Boot, HDD cannot be connected.
- In HDD boot of Legacy Boot, HDD cannot be recognized.
- In HDD boot of Legacy Boot, nothing can be written in HDD.
- In DVD/CD boot of Legacy Boot, DVD/CD device cannot be recognized.
- In DVD/CD boot of Legacy Boot, media was not found in the corresponding DVD/CD device
- In DVD/CD boot of Legacy Boot, media which is mounted in the corresponding DVD/CD device was a media which can perform booting.
- In PXE boot of Legacy Boot, LAN cable cannot be connected.
- In PXE boot of Legacy Boot, setting of server side could not be done.
- In boot of EFI Network (MAC addr), LAN cable cannot be connected.
- In boot of EFI Network (MAC addr), the server side could not be set.

■ Failure by which processing cannot be moved to the following boot option
Failure by which processing cannot be moved to the following boot option is a case in which the boot processing fails after transferring the control to operating system. For example, the case is considered, in which operating system program stored in the device which is targeted for booting, fails.
“Example of displayed menu of "FIGURE 3.6 Example of displayed [Boot Manager] menu” is an example of window immediately after the startup of the [Boot Manager] menu.

FIGURE 3.6 Example of displayed [Boot Manager] menu

(1)Page information display
Displayed as [Boot Manager]

(2) Menu selection
The boot device list is displayed by the priority of the startup. The cursor is set to operating system which is booted with [↑] key or with [↓] key, or the cursor is set to UEFI Shell, and the selection is done. If [Enter] key is pressed, the selected UEFI Aware operating system or legacy operating system tries a boot and UEFI shell tries a startup.
If booting fails, returns to the Boot Manager front page.

(3) Operation help display
The help for operations mentioned on this page is shown in the “TABLE 3.9 Displayed contents of operation help display”.

TABLE 3.9 Displayed contents of operation help display

Items	Description
↑↓= Move Highlight	Moves the cursor to up and down
<Enter>=Select Entry	Selects the item.
Esc=Exit	Returns to “3.1 Boot Manager front page”

3.4 [Device Manager] Menu

Whether to allocate I/O space for each I/O device and whether to make PXE boot enable, are set in the [Device Manager] menu. The following window is window immediately after the startup of the [Device Manager] menu.

FIGURE 3.7 Example of displayed [Device Manager] menu

Remarks
Integrated firmware version can be checked in [Unified Firmware Version] of [System] → [Firmware Information] window of MMB Web-UI. For the details on [Firmware Information] window, see “ ”.

(1) Page information display
Displayed as [Device Manager]

(2) Menu selection
The menu shown in “TABLE 3.10 Displayed contents of menu selection” is displayed.

TABLE 3.10 Displayed contents of menu selection

Items	Description
System Information	Displays “3.4.1 [System Information] Menu”
LAN Remote Boot Configuration	Displays “3.4.2 [LAN Remote Boot Configuration] Menu”
CPU Configuration	Displays “3.4.3 [CPU Configuration] Menu” (*1)
PCI Subsystem Configuration	Displays “3.4.4 [PCI Subsystem Configuration] Menu” (*1)
iSCSI Configuration	Displays “3.4.5 [iSCSI Configuration] menu”
Memory Configuration	Displays “3.4.6 [Memory Configuration] menu” (*1)
USB Configuration	Displays “3.4.7 [USB Configuration] menu”
Security Configuration	Displays “3.4.8 [Security Configuration] menu” (*1)
Address Range Mirroring Configuration	Displays “3.4.11 [Address Range Mirroring Configuration] Menu” (*1)
Driver Health	Displays [Driver Health] menu (This menu is not supported in the PRIMEQUEST2000 series.)

*1: The function setting is restricted in Extended Partitioning.

Remarks
The sequence of the menu may be changed according to the device configuration. Besides the above-mentioned menu, the displayed items may be increased by the sadump menu and the installed I/O device. For the details on the method of operating the sadump menu, “CHAPTER 6 Setting of sadump environment”. Moreover, for the method of operating I/O device menu, see the manual which is provided by the vendor of I/O device.

(3) Operation help display
The description on operation key which is shown in the “TABLE 3.11 Displayed contents of operation help display” is displayed.

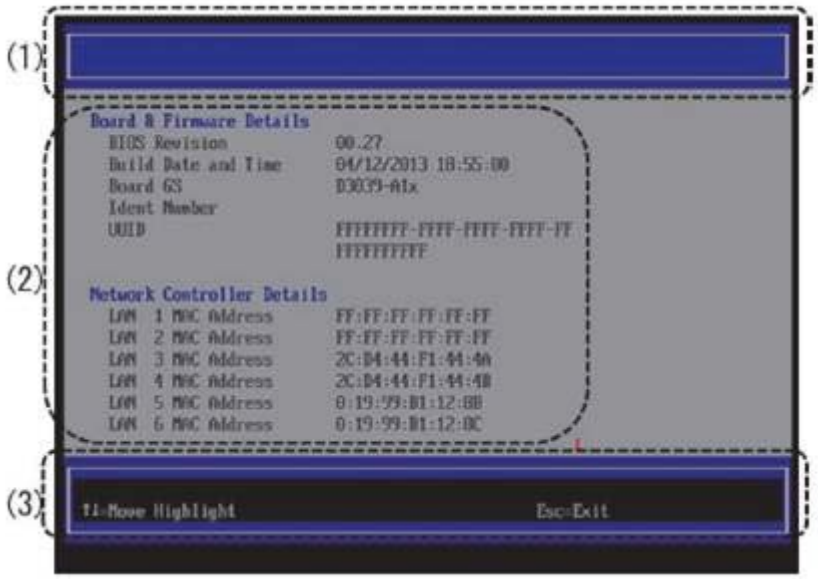
TABLE 3.11 Displayed contents of operation help display

Items	Description
↑↓= Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the item.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”

3.4.1 [System Information] Menu

The information on the system is displayed in the System Information menu. There is no item which needs to be set in this menu.
The example of displayed window of [System Information] menu is shown below.

FIGURE 3.8 Example of displaying [System Information] menu



(1) Page information display
Displayed as System Information.

(2) System information display
The contents shown in “TABLE 3.12 Display Contents of the System Information Display” are displayed.

TABLE 3.12 Display Contents of the System Information Display

Items	Display Contents
BIOS Revision	Displays BIOS revision. Display example 00.44
LAN N MAC Address *N: 1, 2,...*	Displays the MAC address of Network Controller. Display example 0:19:99:81:F9:31
Processor Type	Displays processor type. Display example Genuine Intel(R) CPU @ 2.70GHz
CPU - /Patch - ID	Displays CPUID, Patch ID. Display example 206D6 / 00000610
Processor Speed	Displays processor speed. Display example 2700 MHz
Cache Counts & Sizes（*1）	Displays cache size. Display example 8x8 KB / 8x32 KB / 1x 20 MB
Active Package, Core & Thread Count (maximum)	Displays the number of CPU packages, numbers of cores, and numbers of threads. Display example 2(2) Package(s) 8(16) Core(s) 16(32) Thread(s)
Memory Size / Frequency	Displays memory size and frequency. Display example 32768 MB (1333 MHz)

(3) Help Operation Display

Explanation of the operation key shown in the “TABLE 3.13 Display Contents of Help Operation Display” is displayed.

TABLE 3.13 Display Contents of Help Operation Display

Items	Description
↑↓ = Move Highlight	Move the cursor up and down
Esc=Exit	Return to the “3.1 Front page of Boot Manager”.

3.4.2 [LAN Remote Boot Configuration] Menu

Network port implementing PXE/iSCSI boot can be selected in [LAN Remote Boot Configuration] Menu. In the menu, PXE bootable network port is displayed. It is possible to boot PXE/iSCSI from the targeted device by setting Enable after selecting network port which enables PXE/iSCSI boot. By default, the setting is such that all network ports and PXE/iSCSI boot cannot be implemented (Disabled).

The settings changed in this menu are enabled after the system is set. For the contents set in this menu, see "TABLE 3.14 Reflection of [LAN Remote Boot Configuration] Menu"

TABLE 3.14 Reflection of [LAN Remote Boot Configuration] Menu

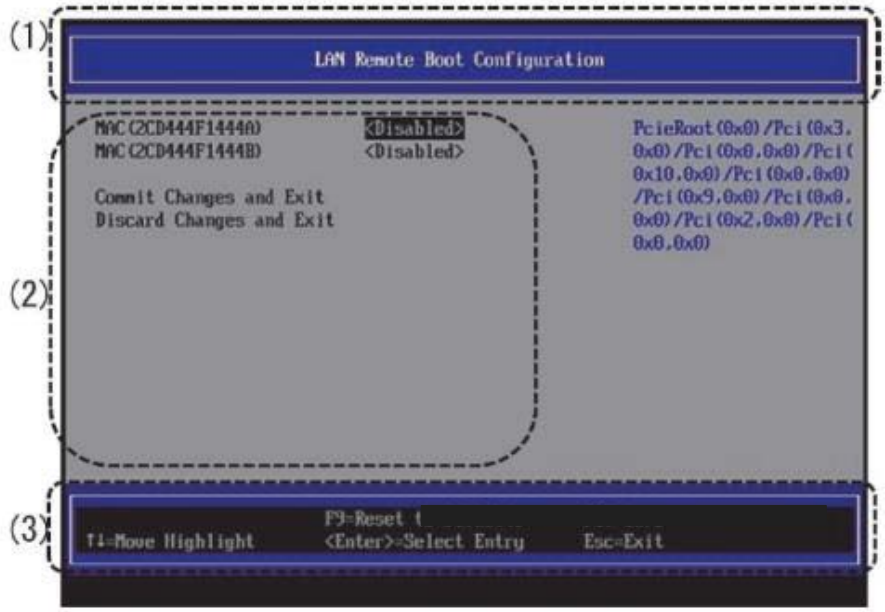
Setting contents	Reflected contents
UEFI (PXE/iSCSI) (*1)	Boot options of PXE boot are added in [Boot Manager]. Moreover, network ports are added to [iSCSI Configuration] Menu (See "3.4.5 [iSCSI Configuration] menu") of [Device Manager] menu.
Legacy PXE (*2)	Boot options of PXE boot are added to [Set Legacy NET Drive Order Menu ("■ Change in order of priority ((Set Legacy NET Drive Order)" of "3.5.2 [Boot Options] menu") of [Boot Maintenance Manager] Menu This item is not displayed for the network port of the PCI LAN card.
Legacy iSCSI (*3)	**"**Press <Ctrl+D> to run setup" message is displayed at the time of boot. When Ctrl+D is pressed in accordance with that message, setting menu of Legacy iSCSI is displayed. This item is not displayed for the network port of the PCI LAN card.
Disabled	Remote boot is disabled. Items added when [UEFI (PXE/iSCSI)], [Legacy PXE] or [Legacy iSCSI] is selected, are deleted.

*1: Settings which Enable PXE/iSCSI boot of UEFI Aware Operating System.
*2: Settings which Enable PXE boot of Legacy Operating System.
*3: Settings which Enable iSCSI boot of Legacy Operating System.

Please set the setting of [PCI ROM Priority] of the PCI Subsytem Configuration menu to [EFI Compatible ROM] to execute the PXE/iSCSI boot of UEFI.
Please set the setting of [PCI ROM Priority] of the PCI Subsytem Configuration menu to [Legacy ROM] to execute the PXE/iSCSI boot of the legacy.

Following is the display of [LAN Remote Boot Configuration] Menu.

FIGURE 3.9 Display of [LAN Remote Boot Configuration] Menu



(1) Display of page information
[LAN Remote Boot Configuration] is displayed.

(2) Menu Selection
Items shown in “TABLE 3.15 Display contents of Menu Selection” are displayed in Menu.

TABLE 3.15 Display contents of Menu Selection

Item	Display contents
(Network Port Information)	Each network port information and PXE/ iSCSI boot setting information is displayed. Network port information is displayed by the MAC address format for onboard LAN, and displayed by the slot number for the PCI LAN card. [Information on the network board of the PCI card can be available in case of the firmware situation since the BA14063 and in case of the PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2 model.]
Commit Changes and Exit	After saving the contents the setting of which are changed, exit from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	After cancelling the contents the setting of which are changed, exit from this menu.

(3) Display of Operation help
Description of operation key shown in “TABLE 3.16 Display contents of Display of Operation help” is displayed.

TABLE 3.16 Display contents of Display of Operation help

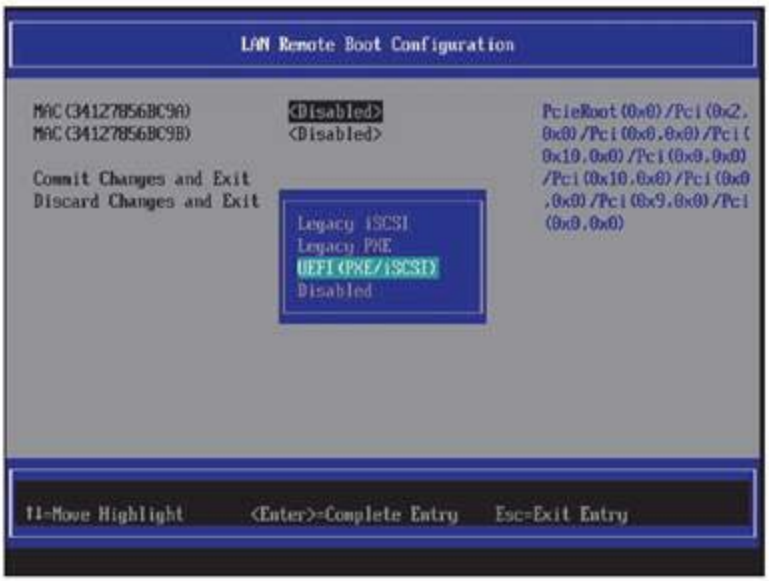
Item	Description
↑↓ =Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item
Esc=Exit	Returns to "3.1 Front page of Boot Manager" without saving the changed settings of this menu.

■ **Change in Enable/Disable settings of PXE/iSCSI boot**

The change in PXE/iSCSI boot settings of each network port is implemented by the following procedure.

1. Press "Enter" key placing the cursor on network port for which settings are to be changed.
Pop-up window shown in "FIGURE 3.10 Operation Window of PXE/iSCSI boot Enable Setting"" is displayed.

FIGURE 3.10 Operation Window of PXE/iSCSI boot Enable Setting"



2. Set PXE/iSCSI boot Enable/Disable.
• When PXE boot of UEFI Aware Operating System is set to Enable, [UEFI (PXE/iSCSI)] is selected.

• When PXE boot of Legacy Operation System is set to Enable, [Legacy PXE] is selected.

• When iSCSI boot of Legacy Operation System is set to Enable, [Legacy iSCSI] is selected.

• When PXE/iSCSI boot is set to Disable, [Disabled] is selected.
By default all are [Disabled].

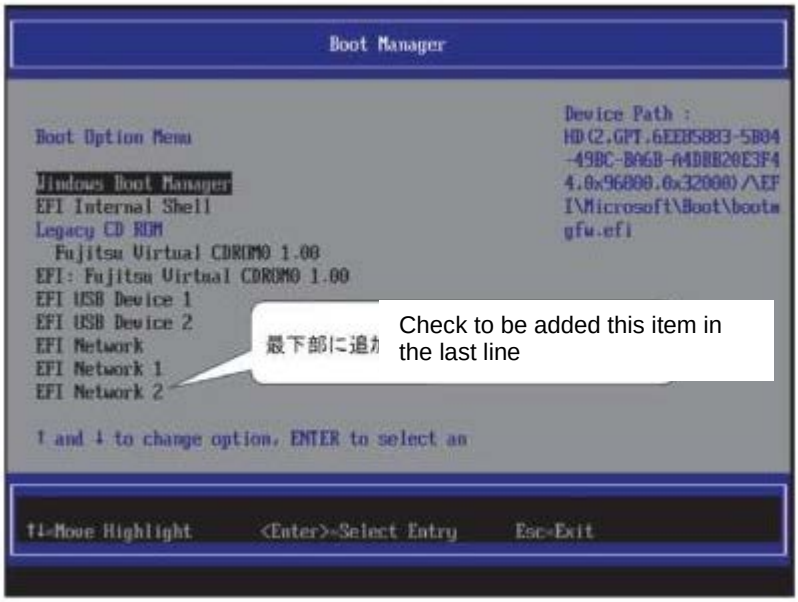
3. Press [Enter] key.

4. To exit from this menu after saving the changes in the settings, select [Commit Changes and Exit] and press [Enter] key.

5. To exit from this menu without saving the changes in the settings, select [Discard Changes and Exit] and press [Enter] key.

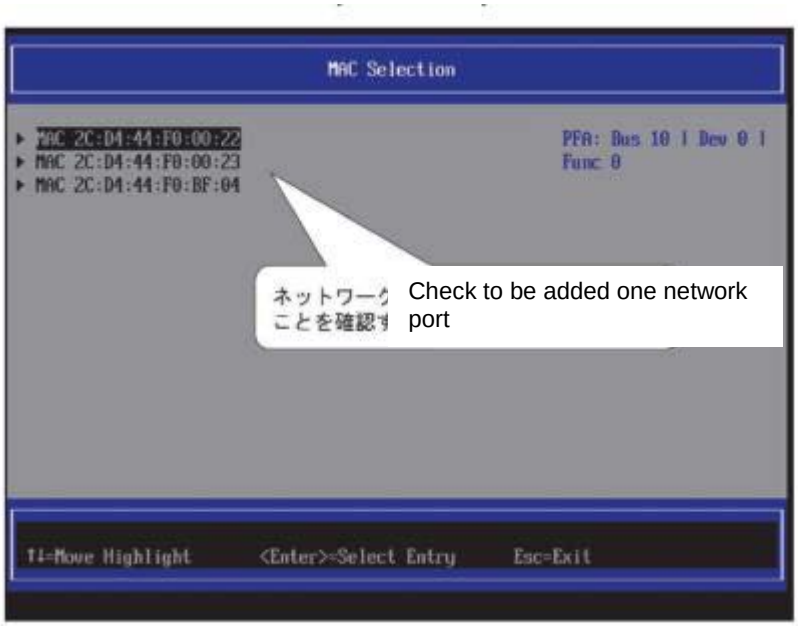
6. When UEFI (PXE/iSCSI) is selected, to confirm [Enable], [Boot Manager] Menu is activated after reset.
Boot options are added is confirmed as in “FIGURE 3.11 Display of [Boot Manager] Menu”.

FIGURE 3.11 Display of [Boot Manager] Menu



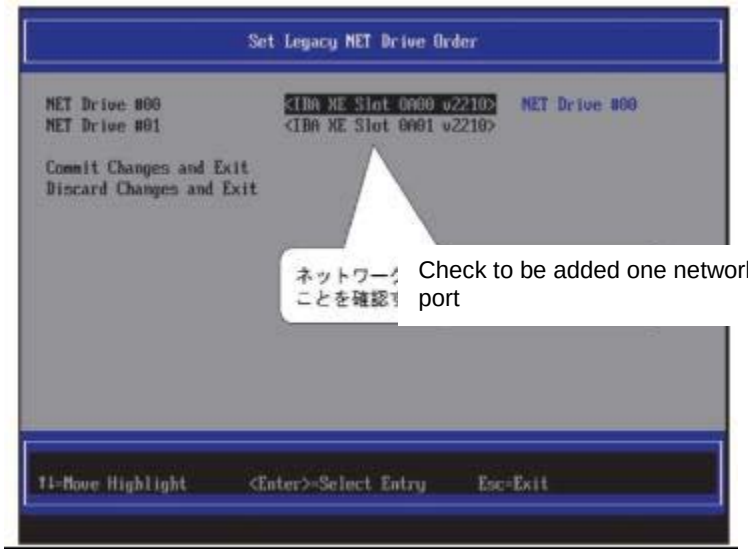
Remark
If [MAC Selection] Menu is activated from [Add An Attempt] of [iSCSI Configuration] Menu in [Device Manager] Menu, network ports are added as in “FIGURE 3.12 Display of [MAC Selection]”.

FIGURE 3.12 Display of [MAC Selection]



7. When Legacy PXE is set to [Enable], if [Set Legacy NET Drive Order] Menu of [Boot Maintenance Manager] Menu is activated after reset, network ports are added as in “FIGURE 3.13 Display of [Set Legacy Net Drive Order] Menu” See (“■[Set Legacy Net Drive Order] Menu”).

FIGURE 3.13 Display of [Set Legacy Net Drive Order] Menu

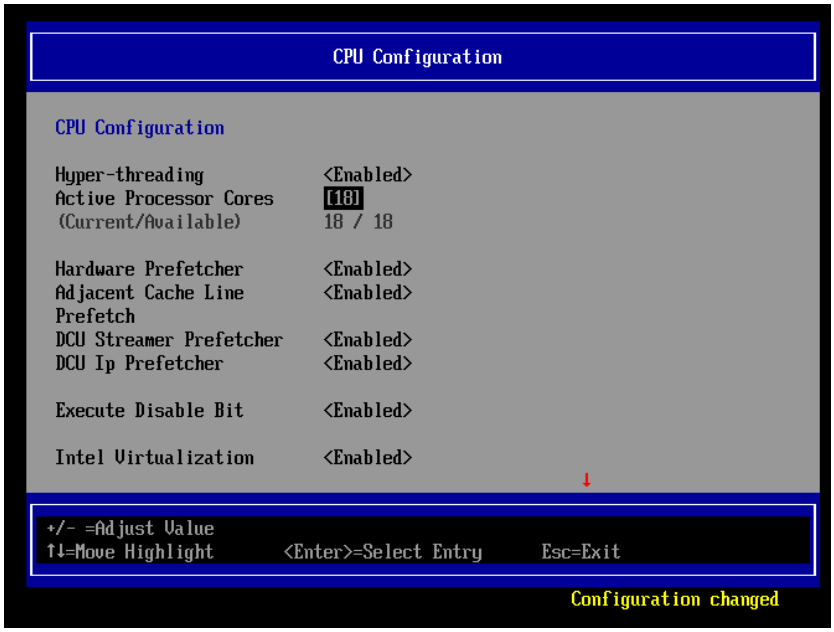


3.4.3 [CPU Configuration] Menu

Enable/Disable of Power saving function and hyper threading function of CPU can be set in [CPU Configuration] Menu. Following is the display of window immediately after start-up of [CPU Configuration] Menu.

FIGURE 3.14 Display Example of [CPU Configuration] Menu

FIGURE 3.15 Display Example of [CPU Configuration] Menu (PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2)



(1) Page Information Display
[CPU Configuration] is displayed.

(2) Menu Selection
The items shown in the “TABLE 3.17 Display Contents of Menu Selection” are displayed on the Menu.

TABLE 3.17 Display Contents of Menu Selection

Items	Display Contents
Hyper-threading (*1)	Sets the Hyper Threading function to enable or disable. · Enabled · Disabled Default setting is, Enabled.
Active Processor Cores (*2)	Set the core number to be enabled to each CPU socket. · All · 0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12 · 13 · 14 · 15 · 16 · 17 · 18 **Remarks** [For PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2] 0-24 can be input regardless of the mounted number of cores. All cores are effective in case of 0. When the input number is more than the mounted number of cores, all mounted cores are effective. Default setting is, 0. [For PRIMEQUEST 2400E/2800E/2800B] The number that can be selected according to the number of cores of mounted CPU changes. All and 1-14 can be selected for 15 cores CPU. Default setting is, All. **Remarks** This setting is reflected to all CPUs included in partition. **Remarks** After changing the setting of Active Processor Cores, select [Commit Change and Exit], and select [Continue] on BIOS Manager Front Page, and then restart the partition once.
(Current/Available) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2]	Number (XX) of effective processor cores now and all mounted numbers (YY) of cores are displayed. XX / YY
Hardware Prefetcher	Sets the Hardware Prefetcher function to enable or disable. · Enabled · Disabled Default setting is, Enabled.

Items	Display Contents
Adjacent Cache Line Prefetch	Sets the Adjacent Cache Line Prefetch function to enable or disable. · Enabled · Disabled Default setting is, Enabled.
DCU Streamer Prefetcher	Sets the DCU Streamer Prefetcher function to enable or disable. · Enabled · Disabled Default setting is, Enabled.
DCU Ip Prefetcher	Sets the DCU Ip Prefetcher function to enable or disable. · Enabled · Disabled Default setting is, Enabled.
Execute Disable Bit	Sets the Execute Disable Bit function to enable or disable. · Enabled · Disabled Default setting is, Enabled.
Intel Virtualization Technology(*3)	Sets the Intel Virtualization Technology function to enable or disable. · Enabled · Disabled Default setting is, Enabled.
Intel(R) VT-d (*3)(*6)	Sets the Intel(R) VT-d function to enable or disable. · Enabled · Disabled Default setting is, Disabled.
Power Technology (*4)	Sets the CPU Power Management function. · Disabled · Energy Efficient · Custom Default setting is, Energy Efficient.
Enhanced Speed Step (*1)	Sets the Enhanced Speed Step function of CPU to enable or disable. · Enabled · Disabled Default setting is, Enabled. **Remarks** Displays only when [Custom] is selected in [Power Technology].
Turbo Mode (*1)	Sets the Intel (R) Turbo Boost Technology function to enable or disable. · Enabled · Disabled Default setting is, Enabled. **Remarks** Displays only when [Custom] is selected in [Power Technology].
Energy Performance (*1)	Selects the Energy Performance mode. · Performance · Balanced Performance · Balanced Energy · Energy Efficient Default setting is, Performance. **Remarks** Displays only when [Custom] is selected in [Power Technology].
P-State Coordination (*1)	Sets the coordination method of P-State of CPU. · HW_ALL · SW_ALL · SW_ANY Default setting is, HW_ALL. **Remarks** Displays only when [Custom] is selected in [Power Technology].

Items	Display Contents
Enable CPU HWPM (*1) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3]	Sets the Hardware Controlled Power Management mode. ・ Disabled ・ HWPM NATIVE MODE ・ HWPM OOB MODE Default setting is, Disabled. **Remarks** Displays only when [Custom] is selected in [Enhanced Speed Step] and [Enabled] is selected in [Power Technology].
CPU C1E Support (*1) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. This item can be available in the firmware since BB15064 in the PRIMEQUEST 2400E2/2800E2/2800B2.]	Sets the CPU C1E Support function to enable or disable. ・ Enabled ・ Disabled Default setting is, Enabled. Remarks Displays only when [Custom] is selected in [Power Technology].
CPU C3 Report	Sets the CPU C3 Report function to enable or disable. ・ Enabled ・ Disabled Default setting is, Disabled. **Remarks** Displays only when [Custom] is selected in [Power Technology].
CPU C6 Report	Sets the CPU C6 Report function to enable or disable. ・ Enabled ・ Disabled Default setting is, Enabled. **Remarks** Displays only when [Custom] is selected in [Power Technology].
CPU C7 report	Sets the CPU C7 Report function to enable or disable. ・ Enabled ・ Disabled Default setting is, Enabled. **Remarks** Displays only when [Custom] is selected in [Power Technology].
Package C State limit	Sets the function by which the transition of C-state of CPU is limited. ・ C0: Allows transition till C0 state ・ C2: Allows transition till C2 state ・ C6: Allows transition till C6 state ・ C7: Allows transition till C7 state ・ No Limit: There is no limit for the transition of C state Default setting is, No Limit. **Remarks** Displays only when [Custom] is selected in [Power Technology].
QPI Link Frequency Select (*1)	Set the QPI Link Frequency. [For PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2] ・ Auto ・ 9.6GT/s ・ 8.0GT/s ・ 7.2GT/s ・ 6.4GT/s [For PRIMEQUEST 2400E/2800E/2800B] ・ Auto ・ 8.0GT/s ・ 7.2GT/s ・ 6.4GT/s Default setting is, Aluto.

Items	Display Contents
Frequency Floor Override (*1)(*5) [This item can be available in the PRIMEQUEST 2400E/2800E/2800B]	Sets the Frequency Floor Override function to enable or disable. ・ Enabled ・ Disabled Default setting is, Disabled.
Uncore Frequency Override(*1)(*5) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2.]	Sets the Uncore Frequency Scaling to enable or disable. ・ Enabled ・ Disabled Default setting is Enabled.
Perfmon and DFX devices (*1)	Sets the Perfmon and DFX devices function to enable or disable. ・ Enabled ・ Disabled Default setting is, Disabled.
ACPI MSCT [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. This item can be available in the firmware since BA15064 and in the PRIMEQUEST 2400E2/2800E2/2800B2.]	Sets the creation of ACPI MSCT to enable or disable. ・ Enabled ・ Disabled Default setting is Enabled.
x2APIC Mode (*3) [This item can be available in the PRIMEQUEST 2400E2/2800E2/2800B2]	Sets the x2APIC Mode to enable or disable. ・ Enabled ・ Disabled Default setting is Enabled. In Extended Partitioning, Default setting is Disabled.
EMCA Gen2 (*1)(*7)(*8)(*9) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. This item can be available in the firmware since BB15067 and in the PRIMEQUEST 2400E2/2800E2/2800B2]	Sets the EMCA Gen2 and Data Poisoning function to enable or disable. ・ Enabled ・ Disabled Default setting is Enabled.
Commit Changes and Exit	Exit from main menu after the changed contents of configuration are saved. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Exit from main menu after the changed contents of configuration are cancelled.

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.
*2: This item is not displayed in Extended Partitioning.
*3: This item is displayed by fixation in Extended Partitioning.
*4: The submenu displayed when "Custom" is selected is not displayed and becomes fixation set in the place where "Disabled" and "EnergyEfficient" are selected with a physical partition. It is likely to become different from a fixed setting of a physical partition set to succeed a part of setting of a physical partition in the enhancing partition.
*5:There is Uncore Frequency Scaling(UFS) as a succession function of Frequency Floor Override(FFO) since PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2, and the frequency of Uncore is controlled individually with the frequency in CPU core.
*6: This item becomes Enable disregarding a set value at the x2APIC mode.
*7: EMCA Gen2 can be set to Enabled without any relation to whether OS supports EMCA Gen2.

*8 When Extended Partition or Dynamic Reconfiguration is effectively set by setting MMB even if EMCA Gen2 is set to Enabled, the setting of EMCA Gen2 automatically becomes Disabled. It automatically returns to Enabled and it does not exist.
*9 The menu item EMCA Gen2 added with BB15062 of PRIMEQUEST 2400E2/2800E2/2800B2, and default are Enabled.
All items set by the [CPU Configuration] menu are succeeded when changing into Reserved SB.

(3) Operation Help Display
Description of Operating Keys is shown in the "TABLE 3.18 Display Contents of Operation Help Display".

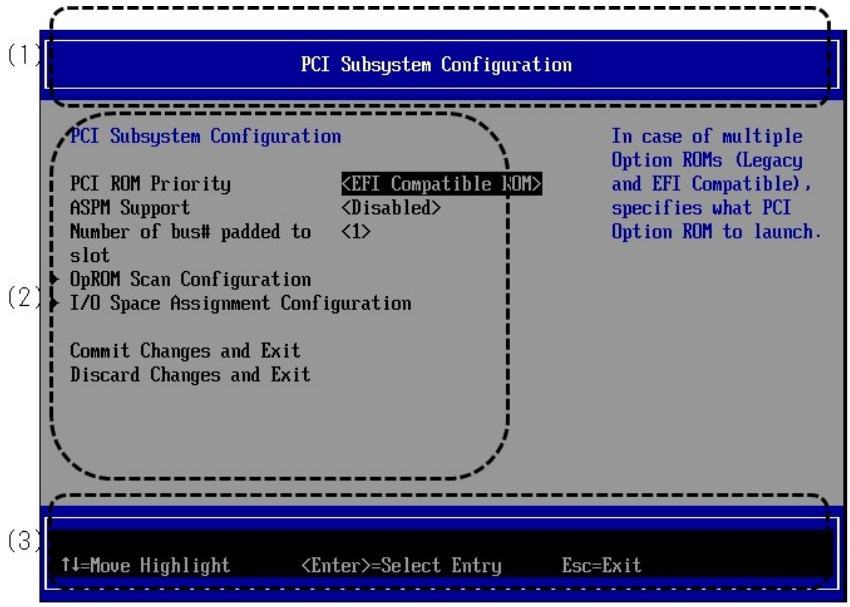
TABLE 3.18 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.1 Front page of Boot Manager' without saving changes of this menu'.

3.4.4 [PCI Subsystem Configuration] Menu

Option ROM of PCI card can be configured in [PCI Subsystem Configuration] menu.
The example of contents displayed on screen immediately after the activation of [PCI Subsystem Configuration] Menu is given below.

FIGURE 3.16 Display Example on [PCI Subsystem Configuration] Menu



(1) Page Information Display
[PCI Subsystem Configuration] is displayed.

(2) Menu Selection
The items shown in "TABLE 3.19 Display Contents of Menu Selection" are displayed.

TABLE 3.19 Display Contents of Menu Selection

Item	Display Contents
PCI ROM Priority	In case of Option ROM of EFI and Legacy, specifies the Option ROM to be start up. ・ Legacy ROM: Selects when Legacy operating system is started. ・ EFI Compatible ROM: Selects when UEFI Aware operating system is selected. Default setting is, EFI Compatible ROM. **Remarks** When "Dynamic Reconfiguration" setting or "Attempt Secure Boot" setting is enabled, PCI ROM Priority setting becomes to "EFI Compatible ROM" and cannot be changed.
ASPM Support	Uses Active State Power Management (ASPM) as power management of PCI Express Link. However, even though ASPM is enabled, if PCI express adopter and on-board controller dose not supports ASPM, link will not be enabled. ・ Disabled ・ Auto ・ Limit to L0s Default setting is, Disabled.
Number of bus# Padded to slot	Changes the number of Bus allocated in PCI Express Slot. ・ 1 ・ 2 ・ 3 Default setting is 1. When PCI Address Mode of MMB is [PCI Segment Mode] and pci_express_mode is [Flexible I/O], it does not depend on this setting and the bus of three or more allocates it in PCI Express Slot.
Above 4G decoding [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2. This item can be available in the firmware since BA14063 and in the PRIMEQUEST 2400E/2800E/2800B.]	Sets enable/disable of 4G or more Memory Mapped I/O. ・ Disabled ・ Enabled Default setting is, Disabled.
OpROM MMIO Assignment [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2. This item can be available in the firmware since BA15081 and in the PRIMEQUEST 2400E/2800E/2800B.]	Sets whether to allocate OpROM in MMIO. Use this item by the Enable setting. ・ Disabled ・ Enabled Default setting is, Enabled.

Internal LAN *1 [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. This item can be available in the firmware since BB15074 in the PRIMEQUEST 2400E2/2800E2/2800B2. This item can be available in the firmware since BA15072 in the PRIMEQUEST 2400E/2800E/2800B.]	Sets enable/disable of Internal LAN. ・ Disabled ・ Enabled Default setting is, Enabled.
OpROM Scan Configuration	Opens [OpROM Scan Configuration] Menu.
I/O Space Assignment Configuration	Opens [I/O Space Assignment Configuration] Menu.
Commit Changes and Exit	Exit from main menu after the changed contents of configuration are saved. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changed and Exit	Exit from main menu after the changed contents of configuration are cancelled.

*1: This item is not displayed in the Extended Partition. Moreover, it operates by Enabled in the Extended Partition.

(3) Operation Help Display
The help for operations mentioned on this page is shown in the "TABLE 3.20 Display Contents of Operation Help Display"

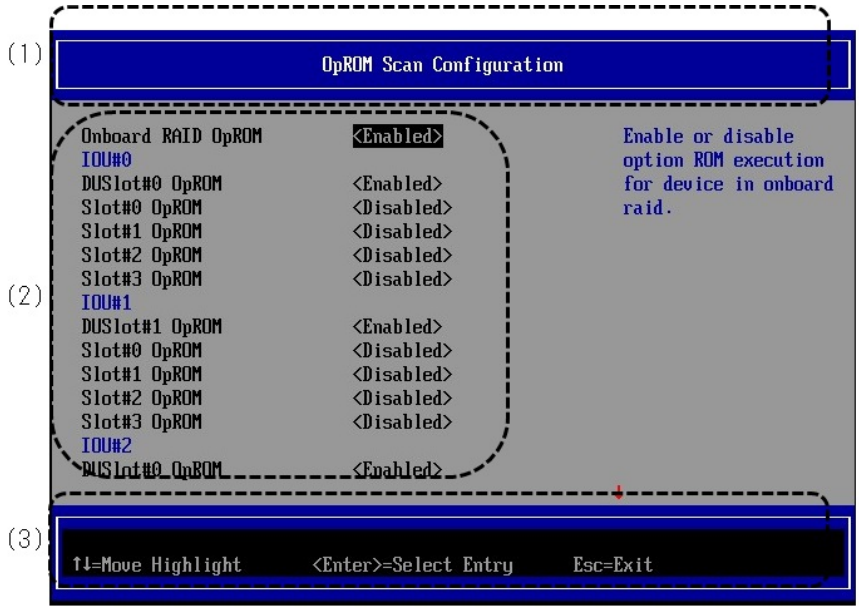
TABLE 3.20 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.1 Front page of Boot Manager' without saving changes of this menu'.

3.4.4.1 [OpROM Scan Configuration] Menu

The Option ROM of PCI card mounted on each IOU and each PCI_Box is configured on [OpROM Scan Configuration] Menu.
Window display example of [OpROM Scan Configuration] Menu shows in the following figure.

FIGURE 3.17 Display Example of [OpROM Scan Configuration] Menu



(1) Page Information Display
[OpROM Scan Configuration] is displayed.

(2) Menu Selection
Menu is shown in the "".

TABLE 3.21 Display Contents of Menu Selection

Item	Display Contents	Remarks
Onboard RAID OpROM	Sets enable/disable of Legacy OpROM of RAID card built into SB. · Enabled · Disabled Default setting is Enabled.	
IOU#0	Slot of IOU#0 (Only the display)	
DUSlot#0 OpROM	Sets enable/disable of Legacy OpROM of mounted PCI cards. · Enabled · Disabled Default setting is Enabled.	Settings for DU#0Slot#0
Slot#0 OpROM	Sets enable/disable of Legacy OpROM of mounted PCI cards. · Enabled · Disabled Default setting is Disabled.	Settings for PCI Express slot#0 of IOU#0
Slot#1 OpROM	Sets enable/disable of Legacy OpROM of mounted PCI cards. · Enabled · Disabled Default setting is Disabled.	Settings for PCI Express slot#1 of IOU#0
Slot#2 OpROM	Sets enable/disable of Legacy OpROM of mounted PCI cards. · Enabled · Disabled Default setting is Disabled.	Settings for PCI Express slot#2 of IOU#0
Slot#3 OpROM	Sets enable/disable of Legacy OpROM of mounted PCI cards. · Enabled · Disabled Default setting is Disabled.	Settings for PCI Express slot#3 of IOU#0
IOU#1	Slot of IOU#1 (Only the display)	
DUSlot#1 OpROM	Sets enable/disable of Legacy OpROM of mounted PCI cards. · Enabled · Disabled Default setting is Enabled.	Settings for DU#0Slot#1
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#0 of IOU#1
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#1 of IOU#1
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#2 of IOU#1

Item	Display Contents	Remarks
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#3 of IOU#1
IOU#2	Slot of IOU#2 (Only the display)	
DUSlot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Enabled	Setting for DU#1 Slot#0
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#0 of IOU#2
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#1 of IOU#2
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#2 of IOU#2
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#3 of IOU#2
IOU#3	Slot of IOU#3 (Only the display)	
DUSlot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Enabled	Setting for DU#1 Slot#1
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#0 of IOU#3
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#1 of IOU#3
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#2 of IOU#3

Item	Display Contents	Remarks
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#3 of IOU#3
PCI Box#0	Slot of PCI Box#0 (Only the display)	
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#0 of PCI_Box#0
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#1 of PCI_Box#0
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#2 of PCI_Box#0
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#3 of PCI_Box#0
Slot#4 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#4 of PCI_Box#0
Slot#5 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#5 of PCI_Box#0
Slot#6 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#6 of PCI_Box#0
Slot#7 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#7 of PCI_Box#0
Slot#8 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#8 of PCI_Box#0

Item	Display Contents	Remarks
Slot#9 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#9 of PCI_Box#0
Slot#10 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#10 of PCI_Box#0
Slot#11 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot#11 of PCI_Box#0
PCI Box#1	Slot of PCI Box#1 (Only the display)	
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #0 of PCI_Box#1
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #1 of PCI_Box#1
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #2 of PCI_Box#1
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #3 of PCI_Box#1
Slot#4 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #4 of PCI_Box#1
Slot#5 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #5 of PCI_Box#1
Slot#6 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #6 of PCI_Box#1

Item	Display Contents	Remarks
Slot#7 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #7 of PCI_Box#1
Slot#8 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #8 of PCI_Box#1
Slot#9 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled	Setting for PCI Express slot #9 of PCI_Box#1
Slot#10 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #10 of PCI_Box#1
Slot#11 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #11 of PCI_Box#1
PCI Box#2	Slot of PCI Box#2 (Only the display)	
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #0 of PCI_Box#2
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #1 of PCI_Box#2
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #2 of PCI_Box#2
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #3 of PCI_Box#2
Slot#4 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #4 of PCI_Box#2

Item	Display Contents	Remarks
Slot#5 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #5 of PCI_Box#2
Slot#6 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #6 of PCI_Box#2
Slot#7 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #7 of PCI_Box#2
Slot#8 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #8 of PCI_Box#2
Slot#9 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #9 of PCI_Box#2
Slot#10 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #10 of PCI_Box#2
Slot#11 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #11 of PCI_Box#2
PCI Box#3	Slot of PCI Box#3 (Only the display)	
Slot#0 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #0 of PCI_Box#3
Slot#1 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #1 of PCI_Box#3
Slot#2 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #2 of PCI_Box#3

Item	Display Contents	Remarks
Slot#3 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #3 of PCI_Box#3
Slot#4 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #4 of PCI_Box#3
Slot#5 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #5 of PCI_Box#3
Slot#6 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #6 of PCI_Box#3
Slot#7 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #7 of PCI_Box#3
Slot#8 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #8 of PCI_Box#3
Slot#9 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #9 of PCI_Box#3
Slot#10 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #10 of PCI_Box#3
Slot#11 OpROM	Enables/disables Legacy OpROM of the PCI card which is mounted. · Enabled · Disabled By default, it is Disabled.	Setting for PCI Express slot #11 of PCI_Box#3
Commit Changes and Exit	The contents having changes in the settings are saved and exit from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".	
Discard Changes and Exit	The contents having changes in the settings are cancelled and exit from this menu.	

Remaks:
Slot counting may differ depending on the type of IOUs in the system (IOU_1GbE: 4 PCI slots, IOU_10GbE: 3 PCI slots).

(3) Operation help display
The help for the operations mentioned on this page is shown in “TABLE 3.22 Display contents of operation help display”.

TABLE 3.22 Display contents of operation help display

Items	Description
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the items.
Esc=Exit	Returns to “3.1 Front page of Boot Manager” without saving the setting changes of this menu.

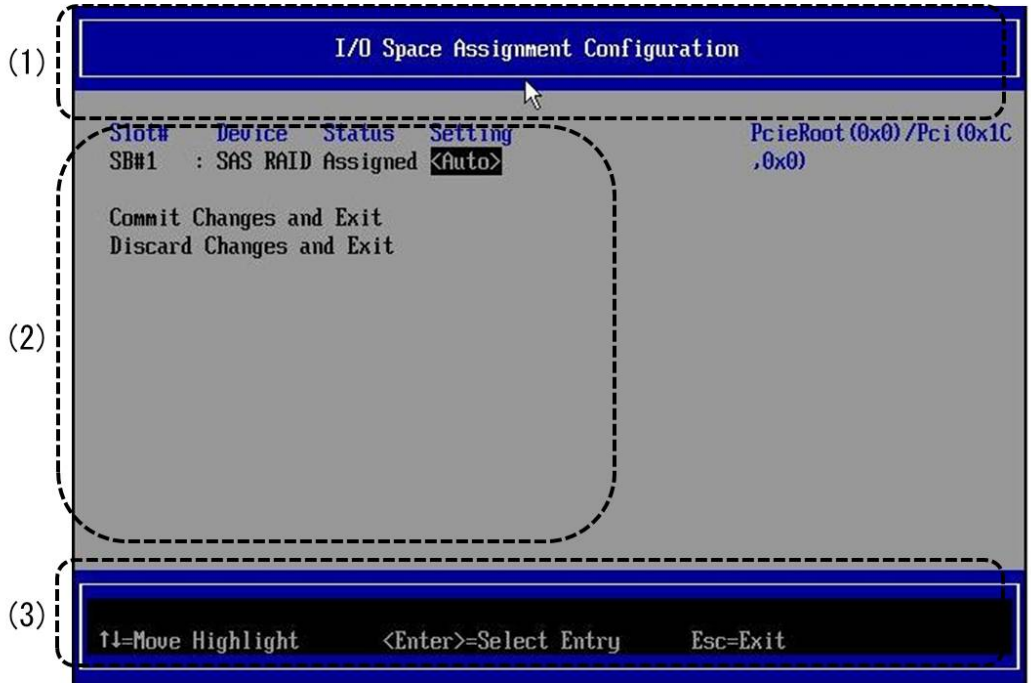
3.4.4.2 [I/O Space Assignment Configuration] Menu

I/O space assignment of various I/O devices in the system can be configured in [I/O Space Assignment Configuration] menu.
After resetting the system, UEFI assigns the I/O space to the I/O device for which [Auto] or [Force] are set in this menu.

The number of devices in which the I/O space can be allocated is limited, and there is a device to which the I/O space is not allocated either. To allocate the I/O space, as follows is surely done.

■ [Force] is set to the device that wants to allocate the I/O space.
■ After resetting the system for which I/O space is assigned in this menu, open this menu once again and confirm that the I/O space is assigned for the relevant system.
The settings changed in this menu are enabled after the system is reset.
Following is the display of window immediately after start-up of [I/O Space Assignment Configuration] Menu.

FIGURE 3.18 Display example of [I/O Space Assignment Configuration] Menu



(1) Display of page information
[I/O Space Assignment Configuration] is displayed.

(2) Menu Selection
Items shown in “” are displayed in Menu.

TABLE 3.23 Display Contents of Menu Selection

Items		Display contents
(I/O Device information)		
	Slot#	Displays "OnBoard" in case of the onboard device, Displays "SB#" in case of the device with built-in SB. Moreover, displays the PCI Slot number(decimal number) in case of Slot, and displays the SB number in case of SB.
	Device	Displays a type of device.
	Status	Displays information about current I/O space assignment. Assigned: I/O space is assigned. N/a: I/O space is not assigned.
	Setting (*1)	Displays the setting value. Following are the setting items. Force: I/O space is assigned. I/O space is assigned to the device for which [Force] is set, in preference to the device for which [Auto] is set. However, an error message is displayed if no. of slots, which can be assigned, exceeds and is set to [Force]. Auto: I/O space is assigned to the extent that there is no shortage of I/O space. Disabled: I/O space is not assigned. Default setting is Auto.
Commit Changes and Exit		After saving the contents the setting of which are changed, exit from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit		After cancelling the contents the setting of which are changed, exit from this menu.

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.

(3) Display of Operation help

Description of operation key shown in "TABLE 3.24 Display contents of Display of Operation help" is displayed.

TABLE 3.25 Display contents of Display of Operation help

Item	Description
↑↓ =Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item
Esc=Exit	Returns to "3.1 Front page of Boot Manager" without saving the changed settings of this menu.

3.4.5 [iSCSI Configuration] menu

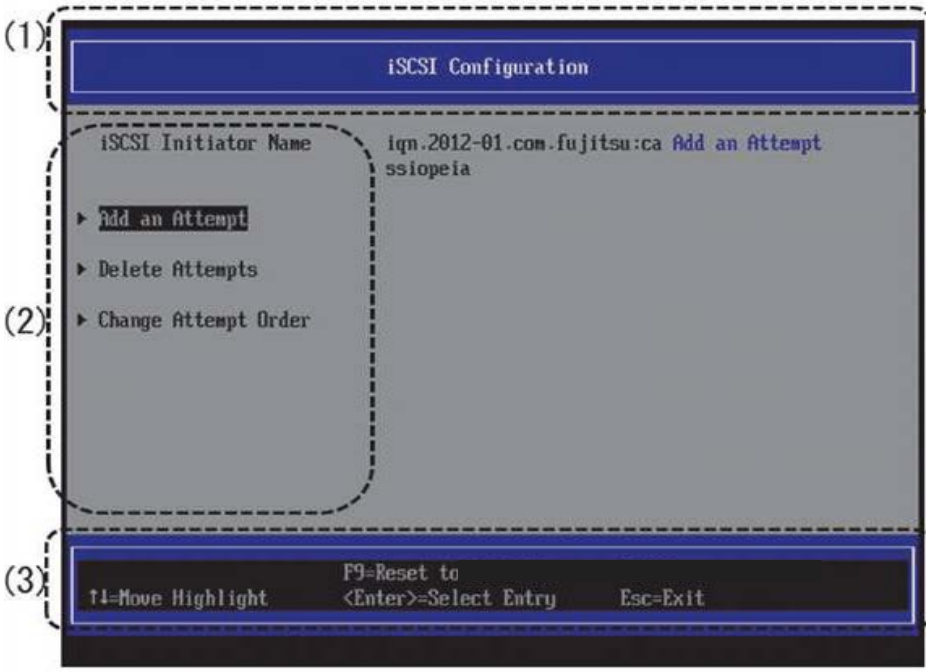
In [iSCSI Configuration] menu, as for the IOU network port and expansion card network port which were set in UEFI(PXE/iSCSI) of [LAN Remote Boot Configuration] menu, the environment of iSCSI boot of UEFI Aware Operating System can be set.

The iSCSI boot capable network port is displayed in the menu. The network port which boots the iSCSI is selected and with various settings, iSCSI can be booted from the intended device.

The settings which are changed in the menu will become valid after system reset.

The display example of [iSCSI Configuration] menu is as follows.

FIGURE 3.19 Example of [iSCSI Configuration] menu window display



(1) Page information display
Displayed as [iSCSI Configuration].

(2) Menu selection
The items shown in "TABLE 3.26 Display contents of Menu Selection" are displayed in the menu.

TABLE 3.26 Display contents of Menu Selection

Items	Display contents
iSCSI Initiator Name	Sets iSCSI Initiator Name
Add an Attempt	Opens MAC Selection menu.
Attempt xxxx	As for xxxx, the name set in “iSCSI Attempt Name" of the [Attempt Configuration] menu is displayed. Opens Attempt Configuration menu. Remarks Only number of LAN ports for which iSCSI is valid is displayed.
Delete Attempt	Opens Delete Attempt menu
Change Attempt Order	Opens Change Attempt Order menu.

(3) Operation help display
Description of operation key shown in “TABLE 3.27 Display contents of Operation Help Display” is displayed.

TABLE 3.27 Display contents of Operation Help Display

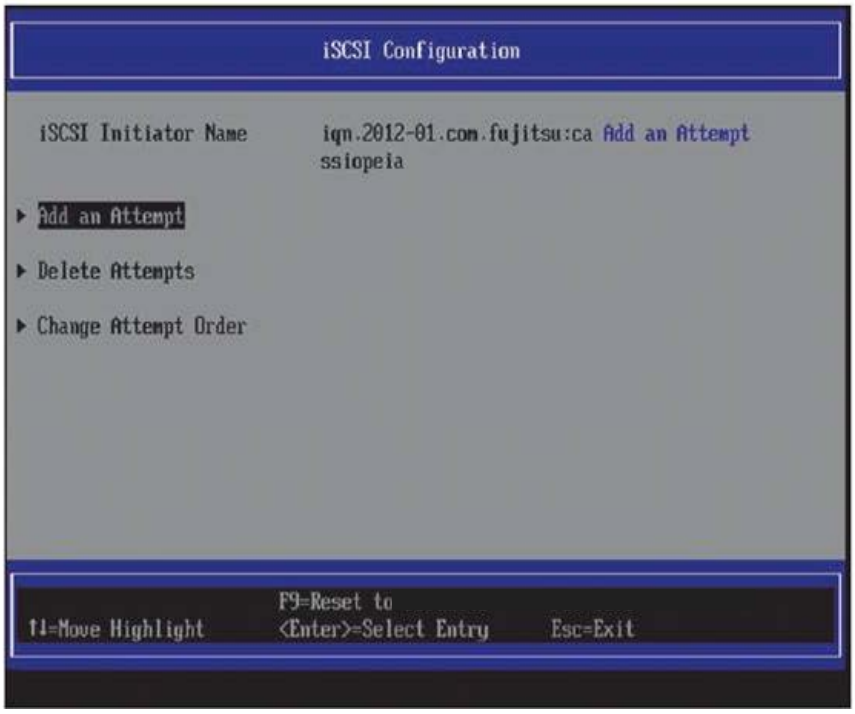
Items	Description
↑↓= Move Highlight	Moves the cursor in up and down direction.
<Enter>=Select Entry	Selects the item
Esc=Exit	Return to “3.1 Front page of Boot Manager” without saving the change setting of this menu.

■ **iSCSI Environment Setting**

Setting of iSCSI environment is executed according to the following procedures.

1. To set Initiator Name, [iSCSI Initiator Name] is set.
Number of characters which can be entered are within 4~223 characters.

FIGURE 3.20 iSCSI Environment Setting Operation Windows (1)



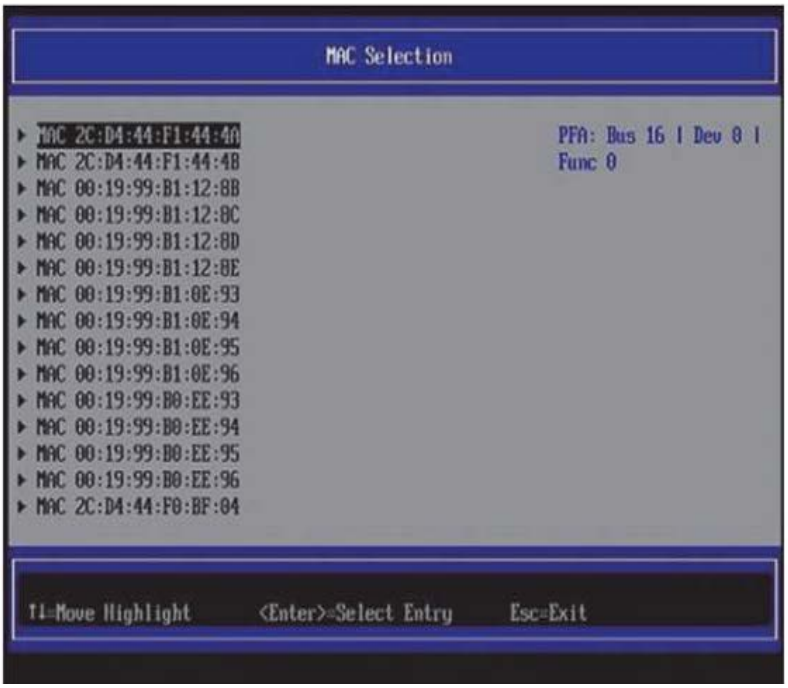
Remarks

•When the character string not related with IQN name is entered, Pop Up window of [Invalid iSCSI Name!] is displayed.
•When the number of characters which are entered are not enough, Pop Up window of [Please enter enough characters Press ENTER to continue] is displayed.
•Types of characters which can be entered here are as follows.
0 - 9, A - Z, a - z, ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [¥] ^ _ ` { | } ~

2. Attempt is created. Place the cursor on "Add an Attempt" of [iSCSI Configuration] menu and then press [Enter] key.

3. Displayed as per “FIGURE 3.21 iSCSI Environment Setting Operation Windows (2) [MAC Selection] menu. For details of [MAC Selection]menu, see “3.4.5.1 [MAC Selection] Menu”

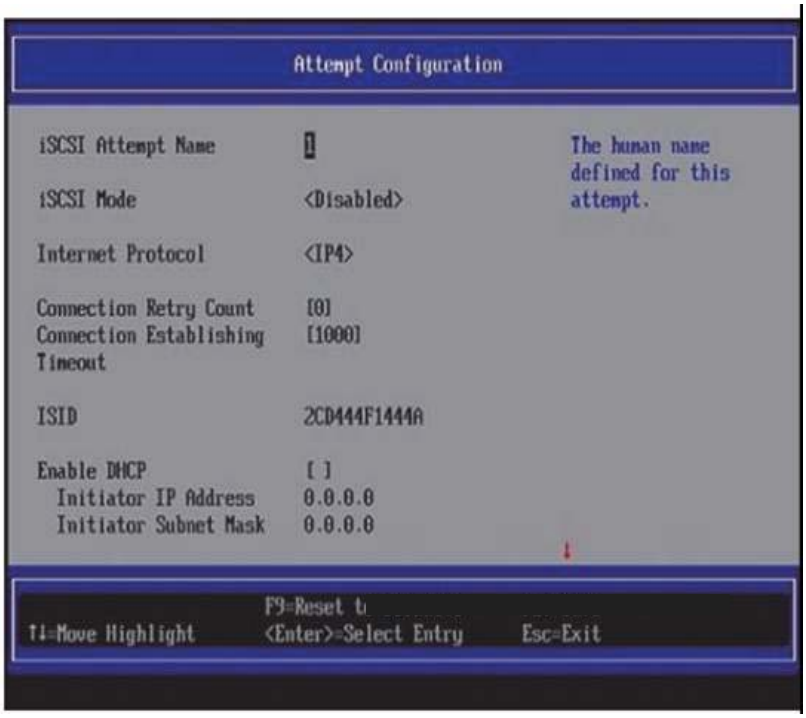
FIGURE 3.21 iSCSI Environment Setting Operation Windows (2) [MAC Selection] menu.



Place the cursor on network port in which iSCSI booting is done, and then press “Enter” key.

4. Displayed as per “FIGURE 3.22 iSCSI Environment Setting Operation Windows (3) [Attempt Configuration]menu”. For details of “[Attempt Configuration] menu”, see “3.4.5.2 [Attempt Configuration] Menu”.

FIGURE 3.22 iSCSI Environment Setting Operation Windows (3) [Attempt Configuration]menu



Place the cursor position on the item which is to be set, and then set each.

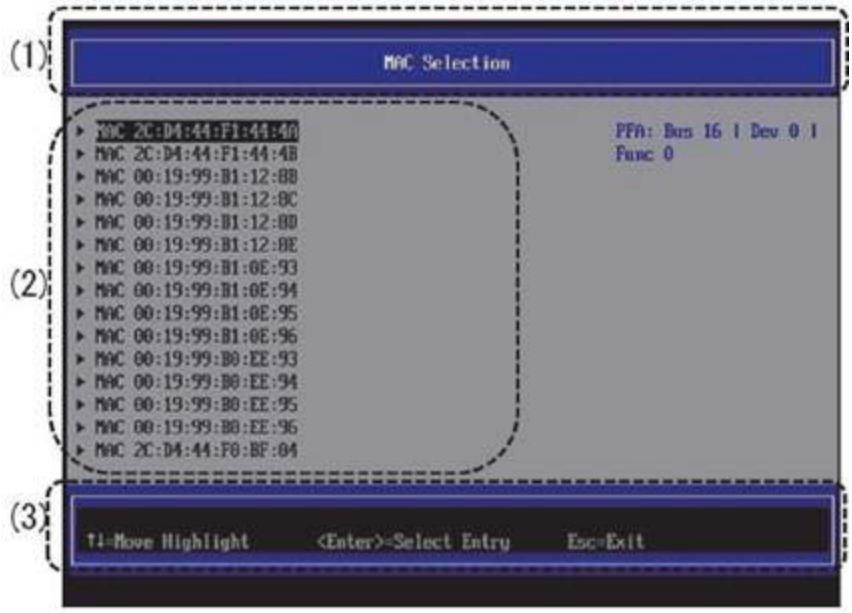
5. To exit from this menu after saving the changes, select [Save Changes] and then press [Enter] key.

6. To exit from this menu without saving the changes, select [Back to Previous Page] and then press [Enter] key.

3.4.5.1 [MAC Selection] Menu

Network port in which iSCSI booting is executed can be selected in [MAC selection] menu.
Example of window display immediately after the start up of [MAC Selection] menu is as follows.

FIGURE 3.23 Display example of [MAC Selection] menu



(1) Page information display
It is displayed as [MAC Selection].

(2) Menu selection
Selection menu shown in “TABLE 3.28 Display contents of menu selection” is displayed.

TABLE 3.28 Display contents of menu selection

Item	Display content
MAC xx:xx:xx:xx:xx:xx	Displays [] menu. Remarks xx:xx:xx:xx:xx:xx is MAC address. iSCSI configurable device is displayed in MAC address format.
Commit Changes and Exit	Saves the content having the setting changes and exit from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the content having the setting changes and exit from this menu.

(3) Operation help display

The help for operations mentioned on this page is shown in the “TABLE 3.29 Display contents of operation help display”.

TABLE 3.29 Display contents of operation help display

Item	Description
↑↓=Move Highlight	Moves cursor up and down
<Enter>=Select Entry	Selects the item.
Esc=Exit	Returns to “3.4.5 [iSCSI Configuration] menu”.

3.4.5.2 [Attempt Configuration] Menu

As for the Attempt xxxx which is selected from “3.4.5 [iSCSI Configuration] menu” or the network port MAC xx:xx:xx:xx:xx:xx which is selected from “3.4.5.1 [MAC Selection] Menu”, various settings related to iSCSI Boot can be done in [Attempt Configuration] menu.
The settings which were changed in this menu are enabled after system reset.
The example of window displayed immediately after starting the [Attempt Configuration] menu is shown below.

FIGURE 3.24 Display example of [Attempt Configuration] Menu

(1) Page information display
It is displayed as [Attempt Configuration].

(2) Menu selection
Menu shown in “TABLE 3.30 Display contents of menu selection” is displayed.

TABLE 3.30 Display contents of menu selection

Item	Display contents
iSCSI Attempt Name	Sets the name of iSCSI setting. Types of characters that can be entered are given below. 0-9,A-Z,a-z,!"#$%&'()*+,-./:;<=>?@[¥]^_'{|}
iSCSI Mode	Enables/disables the iSCSI boot setting. ・ Enabled for MPIO ・ Enabled ・ Disabled By default, it is Disabled.
Internet Protocol	Selects Internet Protocol. ・ IP4 ・ IP6 ・Autoconfigure By default, it is IP4. Remarks When it is set to "Autoconfigure", iSCSI boots with IPv4 and when it is failed, it is attempted to boot iSCSI with IPv6.
Connection Retry Count	Sets number of retries. ・ 0~16 By default, it is 5
Connection Establishing Timeout	Sets time out value. Unit is millisecond By default, it is 1000.
ISDI	6 digits of ISID (ID used when initiator establishes session with target) are required for input. Default setting is generated by MAC address. Remarks ・ When the characters entered are insufficient, a pop-up window showing the message, "Please enter enough characters Press ENTER to continue" appears. ・ If more than 7 digits are entered in ISDI, a pop-up window showing the message, "Error! Input is incorrect, please input 6 hex numbers!" appears. If 6 digits contain the value other than the hexadecimal number, that number should be entered as 0. (Example)ABCXYZ→ABC000
Enable DHCP	Enables/disables DHCP with space key. When [Internet Protocol] is set to [Autoconfigure], this item is not displayed. ・ [ ]: Disabled ・ [X]: Enabled By default, it is Disabled.
Initiation IP Address (*1)	Sets IP Address of iSCSI Initiator side. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and enabled DHCP.
Initiator Subnet Mask (*1)	Sets subnet mask of iSCSI Initiator side. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and enabled DHCP.
Gateway (*1)	Sets IP address of gateway. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and enabled DHCP.

Item	Display contents
Get Target info via DHCP (*1)	Sets the function to get the IP address, port of iSCSI Target from DHCP server with space key. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and enabled DHCP. ・ [ ]: Disabled ・ [X]: Enabled By default, it is disabled.
Target Name	Enters the IQN name of target. Number of characters that can be entered are 4~223 characters. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and disabled [Get Target info via DHCP]. Remarks ・ When character string not related to the IQN name is entered, pop-up window of [Invalid iSCSI Name!] is displayed. ・ When number of entered character is not enough, pop-up window of [Please enter enough characters Press ENTER to continue] is displayed. ・ Types of characters that can be entered are given below. 0-9,A-Z,a-z,!"#$%&'()*+,-./:;<=>?@[¥]^_'{|}
Target IP Address	Sets IP Address of target. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and disabled [Get Target info via DHCP]. By default, it is 0.0.0.0 Remarks If incorrect value is entered in IP address, subnet mask then pop-up window of [Invalid IP Address] is displayed.
Target Port	Sets TCP listening port of target. Numeric value which can be entered is in the range of 0~65535(decimal). This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and disabled [Get Target info via DHCP]. By default, it is 0
Boot LUN	Sets LUN number of target. This item is displayed when [Internet Protocol] is set to [IP4] or [IP6] and disabled [Get Target info via DHCP]. Numeric value is entered in the following format. x ~ xxxx - xxxx - xxxx - xxxx (hexadecimal) By default, it is 0
Authentication Type	Sets the Authentication Type. ・ None ・ CHAP By default, it is CHAP.
CHAP Type	Sets the CHAP Type. When [Authentication Type] is set to [None], this item is not displayed. ・ One way ・ Mutual By default, it is One way.
CHAP Name	Enters CHAP user name. When [Authentication Type] is set to [None], this item is not displayed. Number of characters that can be entered is 125. Remarks Types of characters that can be entered are given below. 0-9, A-Z, a-z,!"#$%&'()*+,-./:;<=>?@[¥]^_'{|}~

Item	Display contents
CHAP Secret	Enters CHAP password. When [Authentication Type] is set to [None], this item is not displayed. Number of characters that can be entered is in the range of 12~16. Remarks ・ If number of characters are not enough then pop up window of [Please enter enough characters Press ENTER to continue] is displayed. ・ Types of characters that can be entered are given below 0-9,A-Z,a-z,!"#$%&'()*+,-./:;<=>?@[¥]^_'{|}~
Revers CHAP Name	Enters CHAP user name. When [CHAP Type] is set to [One way], this item is not displayed, also when [Authentication Type] is set to [None], this item is not displayed. Number of characters that can be entered is 125. Remarks Types of characters that can be entered are given below. 0-9, A-Z, a-z,!"#$%&'()*+,-./:;<=>?@[¥]^_'{|}~
Revers CHAP Secret	Enters CHAP password. When [CHAP Type] is set to [One way], this item is not displayed, also when [Authentication Type] is set to [None], this item is not displayed. Number of characters that can be entered is in the range of 12~16. Remarks ・ If number of characters are not enough then pop up window of [Please enter enough characters Press ENTER to continue] is displayed. ・ Types of characters that can be entered are given below 0-9,A-Z,a-z,!"#$%&'()*+,-./:;<=>?@[¥]^_'{|}~
Save Changes	Saves the changed contents. **Attention** It is necessary to come off the menu by "Esc " after "Save Changes" is executed when the setting is changed".
Back to Previous Page	Cancels the changed contents which are set and exits from this menu.

*1: When Internet Protocol is set to IP6, this item is not displayed.

(3) Operation help display
The help for operations mentioned on this page is shown in the “TABLE 3.31 Display contents of operation help display”.

TABLE 3.31 Display contents of operation help display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to ‘3.1 Front page of Boot Manager’ without saving the changes of this menu.

3.4.5.3 [Delete Attempts] Menu

In [Delete Attempts] menu, Attempt can be cancelled and also SCSI settings set in that network port can be cancelled. Changes in this menu are enabled after the resetting the system.

FIGURE 3.25 Display example of [Delete Attempts] menu

(1) Page information display
Displayed with [Delete Attempts]

(2)Menu selection
Selection menu shown in ‘TABLE 3.32 Display contents of Menu selection’ is displayed.

TABLE 3.32 Display contents of Menu selection

Item	Display contents
Attempt xxxx	xxxx displays the name set in ‘iSCSI Attempt Name’ of ‘3.4.5.2 [Attempt Configuration] Menu’ “X” appears when space key is pressed. If “Commit Changes and Exit” is selected in this state, iSCSI settings get cancelled. •[ ] •[X]: If “Commit Changes and Exit” is selected at this state, iSCSI settings get cancelled.
Commit Changes and Exit	Saves the changed contents and exits from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changed contents and exits from this menu.

(3) Operation help display
The help for operations mentioned on this page is shown in the "TABLE 3.33 Display Contents of Operation Help Display".

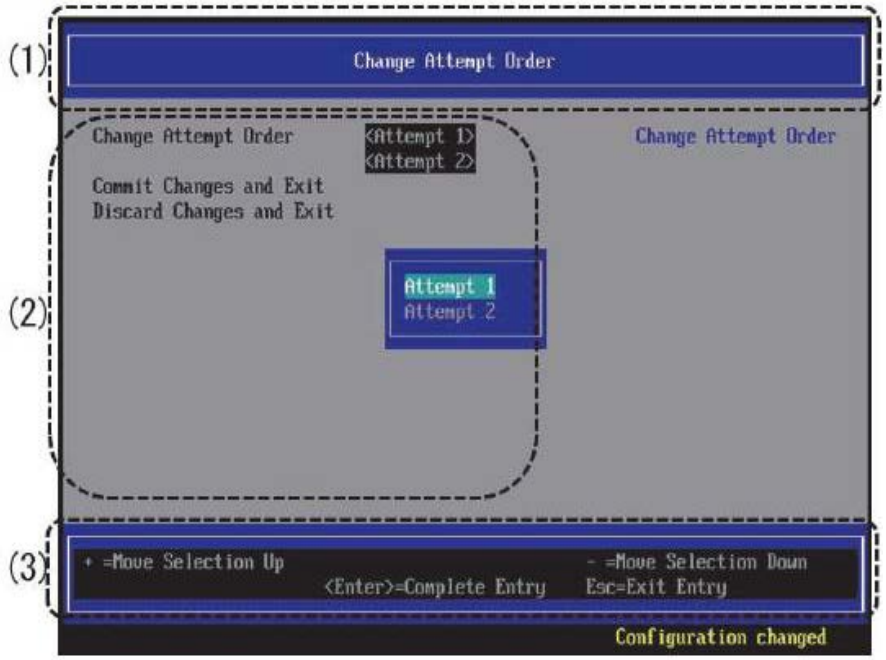
TABLE 3.33 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.4.5 [iSCSI Configuration] menu.'

3.4.5.4 [Change Attempt Order] menu

In [Change Attempt Order] menu, priority of boot of network which is booted with iSCSI, can be set.
Changes in this menu are enabled after resetting the system.

FIGURE 3.26 Display example of [Change Attempt Order] Menu



(1) Page information display
Displayed with [Change Attempt Order]

(2) Menu selection
Selection menu is shown in ‘TABLE 3.34 Display contents of Menu selection’.

TABLE 3.34 Display contents of Menu selection

Item	Display contents
Change Attempt Order	Priority level can be raised with ‘+ Key’ after selecting Attempt xxxx. xxxx displays the name set in ‘iSCSI Attempt Name’ of ‘3.4.5.2 [Attempt Configuration] Menu
Commit Changes and Exit	Saves the changed contents and exits from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changed contents and exits from this menu.

(3) Operation help display
The help for operations mentioned on this page is shown in the "TABLE 3.35 Display Contents of Operation Help Display".

TABLE 3.35 Display Contents of Operation Help Display

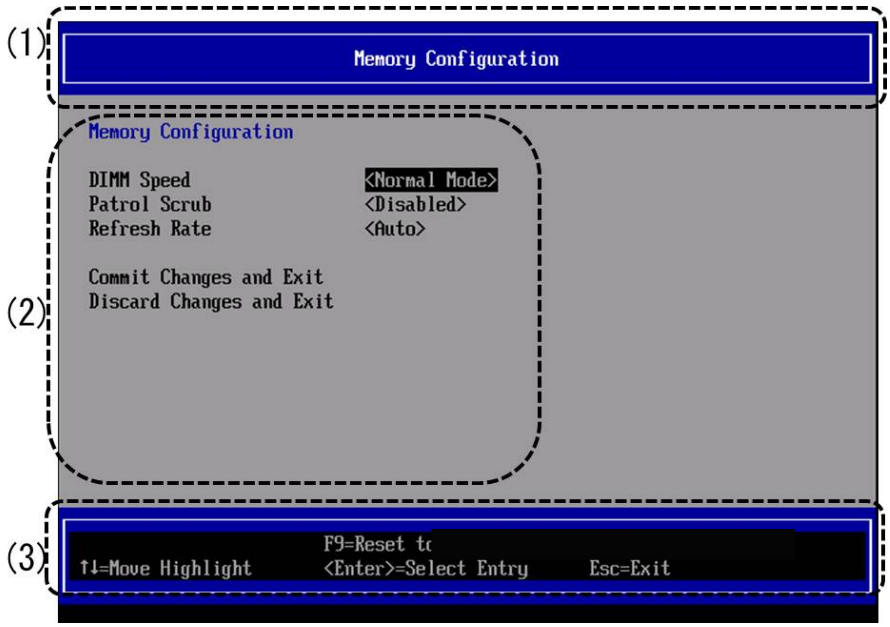
Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.4.5 [iSCSI Configuration] menu.'

Remarks
"TABLE 3.41 Display contents of operation help display" and the contents displayed differ as "FIGURE 3.26 Display example of [Change Attempt Order] Menu" is the display example window after selecting Attempt.
Contents displayed in 'TABLE 3.35 Display Contents of Operation Help Display' are displayed immediately after the activation of [Change Attempt Order] menu.

3.4.6 [Memory Configuration] menu

In [Memory Configuration] menu, memory related settings are done.
Changes in this menu are enabled after the system is reset.

FIGURE 3.27 Display Example of [Memory Configuration] Menu



The following section shows the window display example of [Memory Configuration] menu.

(1) Page information display
Displayed as [Memory Configuration]

(2) Menu selection
Items are shown in the "TABLE 3.36 Display Contents of Menu Selection" are shown in the menu.

TABLE 3.36 Display Contents of Menu Selection

Item	Description
DIMM Speed (*1)	Sets the operating speed of memory module. [For PRIMEQUEST 2400E/2800E/2800B] ・ Performance Mode: Sets maximum possible operating frequency for this mode. ・ Normal Mode: Sets the maximum possible operating frequency that can be operated by 1.35V voltage for this mode. Default setting is Normal mode. [For PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2] It is not displayed for DDR4 because it operates only by 1.2V.
Patrol Scrub (*1)	Scans memory module at regular interval. If CE is detected, the function which writes back the corrected data is enabled / disabled. ・ Disabled ・ Enabled Default setting is Disabled
Refresh Rate (*1)	Sets the refresh rate of the memory. ・ Auto ・ 1x Default setting is Auto
Memory Power States (*1) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2. This item can be available in the firmware since BA14063 and in the PRIMEQUEST 2400E/2800E/2800B model.]	Sets the Power State of the memory. ・ Default ・ Perfomance Mode Default setting is Default
DDR4 Command/Address Parity Check and Retry (*1) [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2.]	Sets the DDR4 Command/Address Parity Check and Retry function to enable or disable. ・ Enabled ・ Disabled Default setting is Enabled.
Commit Changes and Exit	Saves the changed contents and exits from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changed contents and exits from this menu.

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.

(3) Operation help display
Description of help key is shown in the “TABLE 3.37 Display Contents of Operation Help Display”.

TABLE 3.37 Display Contents of Operation Help Display

Item	Description

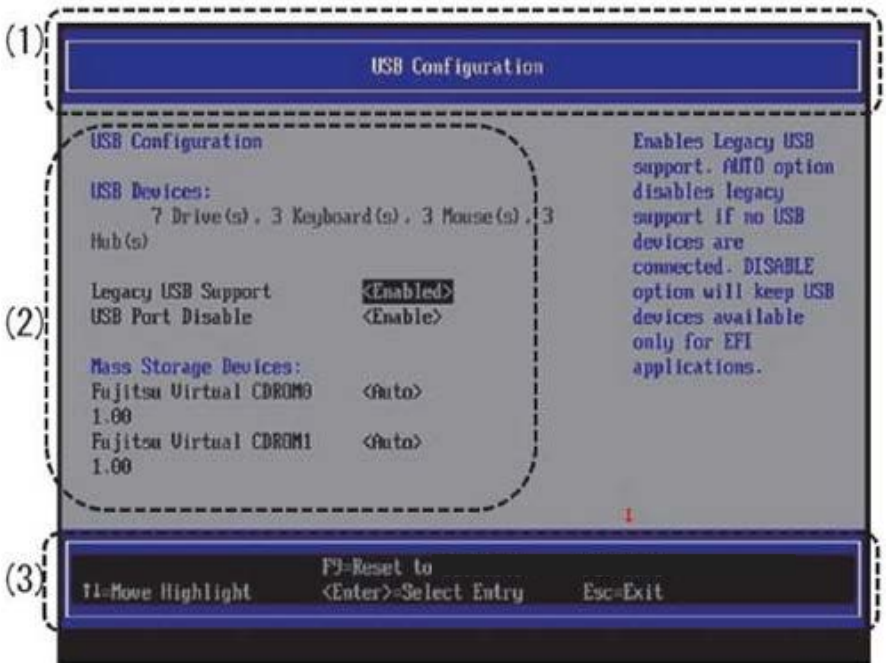
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to “3.1 Front page of Boot Manager” without saving changes of this menu’.

3.4.7 [USB Configuration] menu

In [USB Configuration] menu, USB related settings are performed.

Remarks
[USB Configuration] menu is not displayed in Extended Partitioning where USB controller is not allocated.
The following figure shows the example of window which is displayed immediately after activation of [USB Configuration] menu.

FIGURE 3.28 Display example of [USB Configuration] menu



(1) Page information display
Displayed with [USB Configuration]

(2) Menu selection
Items shown in “TABLE 3.38 Display contents of Menu selection” are shown in the Menu.

TABLE 3.38 Display contents of Menu selection

Item	Display contents
USB Devices:	Displays the number of usable USB drive, USB keyboard, USB mouse and USB hub. *n Drive(s),n Keyboard(s), n Mouse(s), n Hub(s)*
Legacy USB Support	Specifies whether USB Legacy support can be used. ・ Disabled ・ Enabled ・ Auto Default setting is Enabled. Remarks When operating system needs to be started from USB drive, it is necessary to set this item to 'Enabled' or to 'Auto'.
USB Port Disable(*1)	Sets the usage method of USB port. Disabled USB port cannot be used during POST and also by the operating system. ・ Enabled ・ Disabled Default setting is Enabled.
Mass Storage Devices: "Connection device name"	Sets the emulation pattern of device. ・ Auto ・ Floppy ・ Forced FDD ・ Hard Disk ・ CD - ROM Default setting is Auto. Remarks When 'Auto' is selected, it is emulated according to the media format of device. Optical disk drive is emulated as 'CD-ROM', drive without media is emulated according to the drive type.
Commit Changes and Exit	Saves the changed contents and exits from this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changed contents and exits from this menu.

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.

(3) Operation help display
Describes the operation key shown in "TABLE 3.39 Display Contents of Operation Help Display".

TABLE 3.39 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.1 Front page of Boot Manager' without saving changes of this menu'.

3.4.8 [Security Configuration] menu

In [Security Configuration] menu, settings related to TPM are performed.

Remarks
In Extended Partitioning, as TPM cannot be used, [Security Configuration] menu is not displayed. Moreover, if the TPM1.2 chip is not mounted, [Security Configuration] menu is not displayed.

The following figure shows the window display example of [Security Configuration] menu.

FIGURE 3.29 Display Example of [Security Configuration] Menu

(1) Page information display
Displayed as [Security Configuration] menu.

(2) Menu selection
Selection menu is shown in the "TABLE 3.40 Display Contents of Menu Selection".

TABLE 3.40 Display Contents of Menu Selection

Item	Display contents
TPM Support	Sets whether TPM1.2 is supported in BIOS. ・ Disabled ・ Enabled Default setting is Disabled.
TPM State	Performs the settings for status of TPM chip. ・ Disabled ・ Enabled Default setting is Disabled. Remarks Displayed when “Enabled” is selected in “TPM Support”. Sets the value of “TPM Enabled Status” and “TPM Active Status” as per the set value of “TPM Status”, as mentioned below. ・ When “Enabled” is selected TPM Enabled Status ⇒ Enabled TPM Activate Status ⇒Activated ・ When ‘Disabled’ is selected TPM Enabled Status ⇒ Disabled TPM Activate Status ⇒Deactivated
Pending TPM operation	Performs settings on other TPM chip. ・ None ・ Enable Take Ownership ・ Disable Take Ownership ・ TPM Clear Default setting is None. Remarks “Pending TPM operation” is displayed when “Enabled” is selected in “TPM Support”. “TPM Enabled Status” of “Current TPM operation” is “Enabled” and selection is possible if “TPM Active Status” is “Activated”. In other situations, gray out is displayed and selection is not possible.
Current Status Information	Current status of TPM chip is displayed. When TPM Support is set to Disabled, “SUPPORT TURNED OFF” is displayed. **Warning** Following is the TPM Chip status displayed as TPM Enabled Status, TPM Activate Status, and TPM Owner Status. No item is set. However, as the TPM Chip status cannot be read immediately after changing the settings of [TPM SUPPORT] from [Disabled] to [Enabled],the default value is set to [Disabled],[Deactivated],[Unowned]
TPM Enabled Status	Values which can be set as [TPM State] are displayed as follows. ・ [Enabled]: When [Enabled] is set as [TPM State] ・ [Disabled]: When [Disabled] is set as [TPM State]
TPM Active Status	Values which can be set in [TPM State] are displayed as follows. ・ [Activated]: When [Enabled] is selected as [TPM State] ・ [Deactivated]: When [Disabled] is selected as [TPM State]
TPM Owner Status	Shows whether the TPM chip is authorized ・ [Owned] ・ [Unowned]
Commit Changes and Exit	Exit from this menu after saving the changes in the settings. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".

Item	Display contents
Discard Changes and Exit	Exit from this menu after cancelling the changes in the settings.

(3) Operation Help Display
The help for the operations mentioned on this page is shown in "TABLE 3.41 Display contents of operation help display".

TABLE 3.41 Display contents of operation help display

Items	Description
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the items.
Esc=Exit	Returns to "3.1 Front page of Boot Manager" without saving the setting changes of this menu.

3.4.9 [Security Configuration2] menu

In [Security Configuration2] menu, settings related to TPM are performed.

Remarks
In Extended Partitioning, as TPM cannot be used, [Security Configuration2] menu is not displayed. Moreover, if the TPM2.0 chip is not mounted, [Security Configuration2] menu is not displayed.

TABLE 3.42 Display Contents of [Security Configuration2] Menu

Item	Display contents
TPM2 Support	Sets whether TPM2.0 is supported in BIOS. ・ Disabled ・ Enabled Default setting is Disabled.
TPM2 Operation	Sets the operation to the device of TPM. ・ No Action : Nothing is done. ・ Clear : The setting is cleared. Default setting is No Action. When "Enabled" is selected by "TPM2 Support", this item is displayed. After reactivation, the selected operation is executed for the device of TPM2.0.

3.4.10 [Secure Boot Configuration] menu

This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. firmware This item can be available in the PRIMEQUEST 2400E2/2800E2/2800B2 since the BB15074.
In [Secure Boot Configuration] menu, settings related to Secure Boot are performed.

TABLE 3.43 Display Contents of [Secure Boot Configuration] Menu

Items	Description
Current Secure Boot State	Displays the Current Secure Boot State. ・ Enabled : Secure Boot is enabled. ・ Disabled ; Secure Boot is disabled. When "Load Default Key" is selected, an initial key is loaded, and “Attempt Secure Boot" is set effectively, the state becomes Enabled. When the setting of “Attempt Secure Boot" is invalid, and PK is deleted, the state becomes Disabled.
Attempt Secure Boot	Sets the settings of Secure Boot. ・ [ ] : Invalidity ・ [X] : Effective
Secure Boot Mode	Sets the settings of Secure Boot Mode. ・ Standard：Key Management cannot be changed ・ Custom：Key Management can be changed *When the menu can be pulled out, the mode is changed to Standard Mode.
Custom Secure Boot Options	Opens [Custom Secure Boot Options] Menu. *When Secure Boot Mode is Custom, this item is displayed.

3.4.10.1 [Key Management] Menu

In [Key Management] Menu, it is possible to set it concerning Key of Secure Boot.

TABLE 3.44 Display Contents of [Key Management] Menu

Items	Description
Load Default Key	Load an initial key.
PK Options	Opens [PK Options] Menu.
KEK Options	Opens [KEK Options] Menu.
DB Options	Opens [DB Options] Menu.
DBX Options	Opens [DBX Options] Menu.
[This item can be available in the PRIMEQUEST 2400E3/ 2800E3/2800B3] DBT Options	Opens [DBT Options] Menu.

3.4.10.2**[PK Options] Menu**

In [PK Options] Menu, it is possible to set it concerning Platform Key.

TABLE 3.45 Display Contents of [PK Options] Menu

Items	Description
Enroll PK	It becomes possible to select when Platform Key is deleted. The Enroll PK menu is displayed, and when new Platform Key is selected with Enroll PK Using File, the [Save PK File] menu is displayed.
Delete PK	The following messages are displayed when selecting it with the space key, and Platform Key can be deleted by pushing 'Y' key. ・ [ ] ・ [X] “Are you sure you want to delete PK? Secure boot will be disabled! Press ‘Y’ to delete PK and exit, ‘N’ to discard change and return“ When Platform Key is deleted, Attempt Secure Boot is changed to Disabled. Platform Key of a system initial value is reregistered when rebooting a system with Platform Key deleted.

3.4.10.3**[Save PK file] Menu**

In [Save PK file] Menu, it is possible to register Platform Key.

TABLE 3.46 Display Contents of [Save PK file] Menu

Items	Description
File name of PK	Displays the file name of selected Platform Key.
Commit Changes and Exit	Saves the file and exits from this menu. When the file is not a certificate of the X509 standard, and when the file extension is not [cer/der/crt], the error message is displayed. Error Message : “ ERROR: Unsupported file type!” **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the file saving and exits from this menu.

3.4.10.4**[KEK Options] Menu**

In [KEK Options] Menu, it is possible to set it concerning Key Exchange Key.

TABLE 3.47 Display Contents of [KEK Options] Menu

Items	Description
Enroll KEK	Opens [Enroll KEK] Menu.
Delete KEK	Opens [Delete KEK] Menu.

3.4.10.5**[Enroll KEK] Menu**

In [Enroll KEK] Menu, it is possible to set it concerning Key Exchange Key.

TABLE 3.48 Display Contents of [Enroll KEK] Menu

Items	Description
Enroll KEK using File	Selects the Key Exchange Key file.
File name	Displays the file name of selected Key Exchange Key.
Signature GUID	Sets the GUID. 00000000-0000-0000-0000-000000000000
Commit Changes and Exit	Saves the file and exits from this menu. When the file is not a certificate of the X509 standard, when the file extension is not [cer/der/crt], and when the file extension is not [pbk] though the file is RSA2048 form, the error message is displayed. Error Message : " ERROR: Unsupported file type!" **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the file saving and exits from this menu.

3.4.10.6**[Delete KEK] Menu**

In [Delete KEK] Menu, it is possible to set it concerning Key Exchange Key.

TABLE 3.49 Display Contents of [Delete KEK] Menu

Items	Description
Signature GUID of KEK	Key Exchange Key is deleted when selecting it in space. ・ [ ] ・ [X] Key Exchange Key of a system initial value is reregistered when rebooting a system with there no Key Exchange Key.

3.4.10.7**[DB Options] Menu**

In [DB Options] Menu, it is possible to set it concerning DB.

TABLE 3.50 Display Contents of [DB Options] Menu

Items	Description
Enroll Signature	Opens [Enroll Signature] Menu.
Delete Signature	Opens [Delete Signature] Menu.

3.4.10.8[Enroll Signature] Menu

In [Enroll Signature] Menu, it is possible to set it concerning DB.

TABLE 3.51 Display Contents of [Enroll Signature] Menu

Items	Description
Enroll Signature using File	Selects the DB file.
File name	Displays the file name of selected DB.
Signature GUID	Sets the GUID. 00000000-0000-0000-0000-000000000000
Commit Changes and Exit	Saves the file and exits from this menu. When the file is not a certificate of the X509 standard, and when the file extension is not [cer/der/crt], the error message is displayed. Error Message : " ERROR: Unsupported file type!" **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the file saving and exits from this menu.

3.4.10.9[Delete Signature] Menu

In [Delete Signature] Menu, it is possible to set it concerning DB.

TABLE 3.52 Display Contents of [Delete Signature] Menu

Items	Description
Signature GUID of DB	DB is deleted when selecting it in space. ・ [ ] ・ [X] DB of a system initial value is reregistered when rebooting a system with there no DB.

3.4.10.10 [DBX Options] Menu

In [DBX Options] Menu, it is possible to set it concerning DBX.

TABLE 3.53 Display Contents of [DBX Options] Menu

Items	Description
Enroll Signature	Opens [Enroll Signature] Menu.
Delete Signature	Opens [Delete Signature] Menu.

3.4.10.11 [Enroll Signature] Menu

In [Enroll Signature] Menu, it is possible to set it concerning DBX.

TABLE 3.54 Display Contents of [Enroll Signature] Menu

Items	Description
Enroll Signature using File	Selects the DBX file.
File name	Displays the file name of selected DBX.
Signature GUID	Sets the GUID. 00000000-0000-0000-0000-000000000000
Commit Changes and Exit	Saves the file and exits from this menu. When the file is not a certificate of the X509 standard, and when the file extension is not [cer/der/crt], the error message is displayed. Error Message : " ERROR: Unsupported file type!" **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the file saving and exits from this menu.

3.4.10.12 [Delete Signature] Menu

In [Delete Signature] Menu, it is possible to set it concerning DBX.

TABLE 3.55 Display Contents of [Delete Signature] Menu

Items	Description
Signature GUID of DBX	DBX is deleted when selecting it in space. ・ [ ] ・ [X] DBX of a system initial value is reregistered when rebooting a system with there no DBX.

3.4.10.13 [DBT Options] Menu

This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3.
In [DBT Options] Menu, it is possible to set it concerning DBT.

TABLE 3.56 Display Contents of [DBT Options] Menu

Items	Description
Enroll Signature	Opens [Enroll Signature] Menu.
Delete Signature	Opens [Delete Signature] Menu.

3.4.10.14 [Enroll Signature] Menu

In [Enroll Signature] Menu, it is possible to set it concerning DBT.

TABLE 3.57 Display Contents of [Enroll Signature] Menu

Items	Description
Enroll Signature using File	Selects the DBT file.
File name	Displays the file name of selected DBT.
Signature GUID	Sets the GUID. 00000000-0000-0000-0000-000000000000
Commit Changes and Exit	Saves the file and exits from this menu. When the file is not a certificate of the X509 standard, and when the file extension is not [cer/der/crt], the error message is displayed. Error Message : " ERROR: Unsupported file type!" **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the file saving and exits from this menu.

3.4.10.15 [Delete Signature] Menu

In [Delete Signature] Menu, it is possible to set it concerning DBT.

TABLE 3.58 Display Contents of [Delete Signature] Menu

Items	Description
Signature GUID of DBT	DBT is deleted when selecting it in space. ・ [ ] ・ [X] DBT of a system initial value is reregistered when rebooting a system with there no DBT.

3.4.11 [Address Range Mirroring Configuration] Menu

This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3 firmware.
In [Address Range Mirroring Configuration] menu, settings related to Address Range Mirrring are performed.

TABLE 3.59 Display Contents of [Address Range Mirroring Configuration] Menu

Item	Description
Address Range Mirroring	Selects the method of setting the amount of the mirror memory or the memory ratio of Address Range Mirroring.(*1)(*2)(*7) (*8) ・ OS Request ・ BIOS Menu Setting Default setting is OS Request
Partial Mirror Size on SB#0-SKT#0	Sets the amount of the mirror memory of the memory of SB#0-SKT#0. (*3)(*4)(*5)(*6)(*9) ・ 0-65535 Default setting is 0.
Partial Mirror Size on SB#0 SKT#1	Sets the amount of the mirror memory of the memory of SB#0-SKT#1. (*3)(*4)(*5)(*6) ・ 0-65535 Default setting is 0.
Partial Mirror Size on	Sets the amount of the mirror memory of the memory of SB#1-SKT#0.

SB#1-SKT#0	(*3)(*4)(*5)(*6)(*9) ・ 0-65535 Default setting is 0.
Partial Mirror Size on SB#1-SKT#1	Sets the amount of the mirror memory of the memory of SB#1-SKT#1. (*3)(*4)(*5)(*6) ・ 0-65535 Default setting is 0.
Partial Mirror Size on SB#2-SKT#0	Sets the amount of the mirror memory of the memory of SB#2-SKT#0. (*3)(*4)(*5)(*6)(*9) ・ 0-65535 Default setting is 0.
Partial Mirror Size on SB#2-SKT#1	Sets the amount of the mirror memory of the memory of SB#2-SKT#1. (*3)(*4)(*5)(*6) ・ 0-65535 Default setting is 0.
Partial Mirror Size on SB#3-SKT#0	Sets the amount of the mirror memory of the memory of SB#3-SKT#0. (*3)(*4)(*5)(*6)(*9) ・ 0-65535 Default setting is 0.
Partial Mirror Size on SB#3-SKT#1	Sets the amount of the mirror memory of the memory of SB#3-SKT#1. (*3)(*4)(*5)(*6) ・ 0-65535 Default setting is 0.
Commit Changes and Exit	Saves the changed contents and exits from this menu. **Note** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changed contents and exits from this menu.

*1: It is necessary to set Memory Operation Mode to Address Range Mirroring with MMB Web-UI to use the Address Range Mirroring function. It does not depend on the setting of MMB Web-UI, and this menu is always displayed.

*2: It is necessary to support Address Range Mirroring with OS to use the Address Range Mirroring function. It is necessary to support the function to notify BIOS the amount of the mirror memory or the memory ratio with OS at the setting of "OS Request".

*3: It does not depend on the SB composition of the partition and the number equipped with CPU, and the item of SB#0-CPU#0-SB#3-CPU#1 is always displayed. The setting is actually disregarded about SB/CPU that is not included in the partition, and not installed though can set by the menu.

*4: The size is set in 64MB. (When "4" is set to the amount of the mirror memory, 4*64=256MB becomes the amount of the mirror memory.)

*5: When "BIOS Setting" is selected by "Address Range Mirroring", this item is displayed.

*6: This item does not display in Extended Partition. (When Address Range Mirroring is enabled with Web-UI of MMB, the area that the firmware of the Extended Partition uses is mirrored by fixation.)

*7: When the specification of the memory capacity mirrored in the BIOS menu is specified for "BIOS Menu Setting", the mirrored memory capacity setting from OS is not reflected.

*8: Select "BIOS Menu Setting" in the case of VMware vSphere 6.5 or later.

*9: When SB is Home SB in the partition, the setting is disregarded though it is possible to set from the menu.

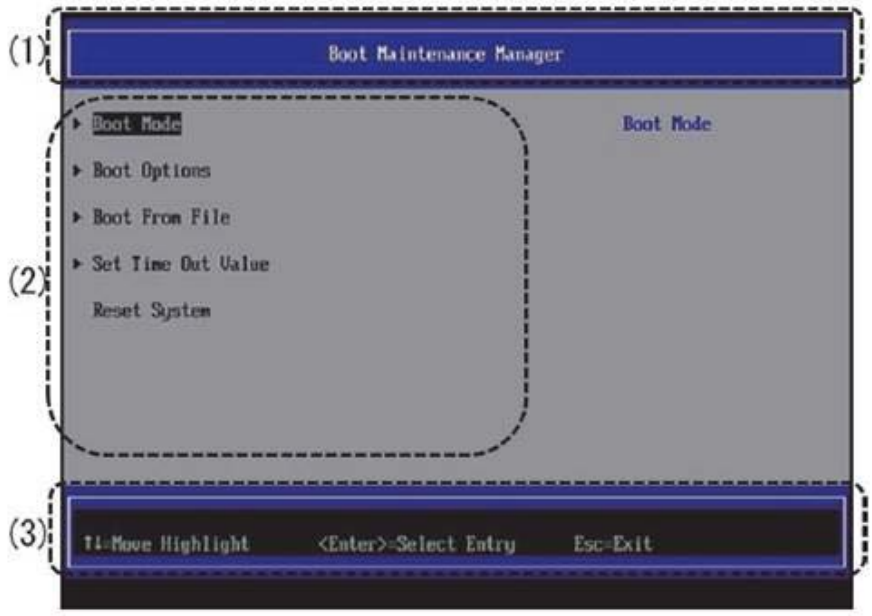
3.5 [Boot maintenance Manager] Menu

Setting of boot mode, addition or removal of boot option, changes in the boot priority level and changes in the driver option are carried out in the [Boot maintenance manager] menu. Each menu can be displayed by placing the cursor on the menus for operation and by pressing the [Enter] key.

Please execute [Reset System] from [Boot Maintenance Manager] after the setting change of BIOS.

Following window is the window immediately after the activation of [Boot maintenance Manager] menu.

FIGURE 3.30 [Boot Maintenance manager] Menu



(1) Page Information Display
Displays as [Boot maintenance Manager]

(2) Menu selection
Displays the menu as shown in “TABLE 3.59 Display Contents of Menu Selection”

TABLE 3.60 Display Contents of Menu Selection

Items	Description
Boot Mode	Displays 3.5.1 [Boot Mode] Menu
Boot Options	Displays 3.5.2 [Boot Options] menu
Boot From File	Displays 3.5.3 [Boot From File] Menu
Set Boot Delay Time	Displays 3.5.5 [Set Boot Delay Time] Menu
Reset System	Resets the setting

3) Operation Help Display
The help for the operations mentioned on this page is shown in “TABLE 3.60 Display Contents of Operation Help Display”.

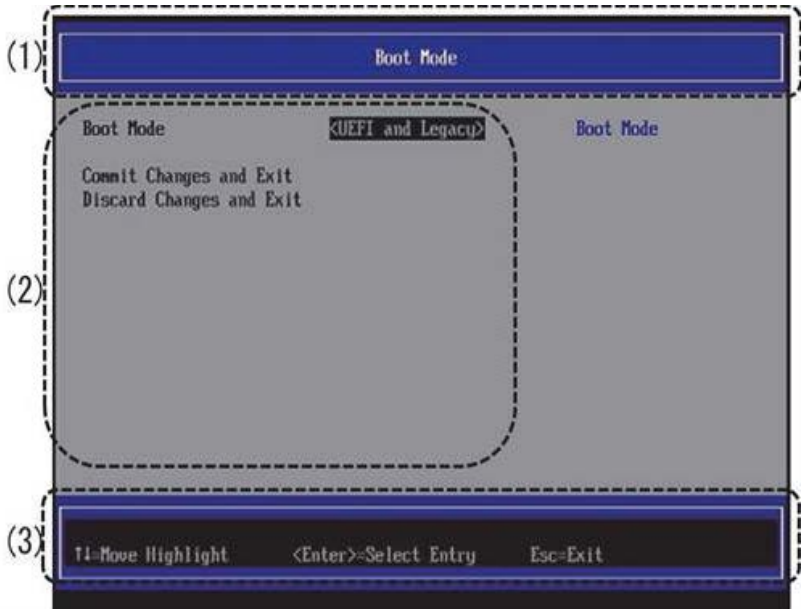
TABLE 3.61 Display Contents of Operation Help Display

Items	Description
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the items.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”.

3.5.1 [Boot Mode] Menu

Boot mode settings are done in the [Boot Mode] menu.

FIGURE 3.31 Example Display of [Boot Mode] Menu



(1) Page Information Display
Displays as [Boot Mode]

(2) Menu Selection
Displays the screen as shown in “Display Contents of the TABLE 3.61 Display Contents of Menu Selection Section”

TABLE 3.62 Display Contents of Menu Selection Section

Item	Display Contents
Boot Mode	Select the Boot Mode ・ UEFI and Legacy: Both the boot options UEFI and Legacy are enabled. ・ Only UEFI: Only the boot option UEFI is enabled. ・ Only Legacy: Only the boot option Legacy is enabled. Default is UEFI and Legacy.
Commit Changes and Exit	Exit from this menu after saving the changes. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Exit from this menu after cancelling the changes.

(3) Operation Help Display
The help for the operations mentioned on this page is shown in “TABLE 3.62 Display contents of operation help display”.

TABLE 3.63 Display contents of operation help display

Items	Description
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the items.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”

3.5.2 [Boot Options] menu

Addition or removal of boot option and changes in the boot priority level can be carried out in the [Boot Options] menu. Each menu can be displayed by placing the cursor on the menus for operation and by pressing the [Enter] key.

Following window is the window at the time of activation of the [Boot Options] menu

FIGURE 3.32 [Boot options] menu

(1) Display of Page information
[Boot Options] are displayed.

(2) Menu Selection
Menu shown in TABLE 3.63 Display contents of Menu selection is displayed.

TABLE 3.64 Display contents of Menu selection

Item	Description
Go Back To Main Page	“3.5 [Boot maintenance Manager] Menu” is displayed.
Add Boot Option	“■[Add Boot Option] Menu” is displayed.
Delete Boot Option	“■[Delete Boot Option] Menu” is displayed.
Change Boot Order	“■[Change Boot Order] Menu” is displayed.
Set Legacy Floppy Drive Order	“■[Set Legacy Floppy Drive Order] Menu” is displayed.
Set Legacy HardDisk Drive Order	“■[Set Legacy HardDisk Drive Order] Menu” is displayed.
Set Legacy CD-ROM Drive Order	“■[Set Legacy CD-ROM Drive Order] Menu” is displayed.
Set Legacy NET Drive Order	“■[Set Legacy NET Drive Order] Menu” is displayed.

(3) Display of operation help
Description of operation key shown in “TABLE 3.64 Display contents of Display of operation help” is displayed.

TABLE 3.65 Display contents of Display of operation help

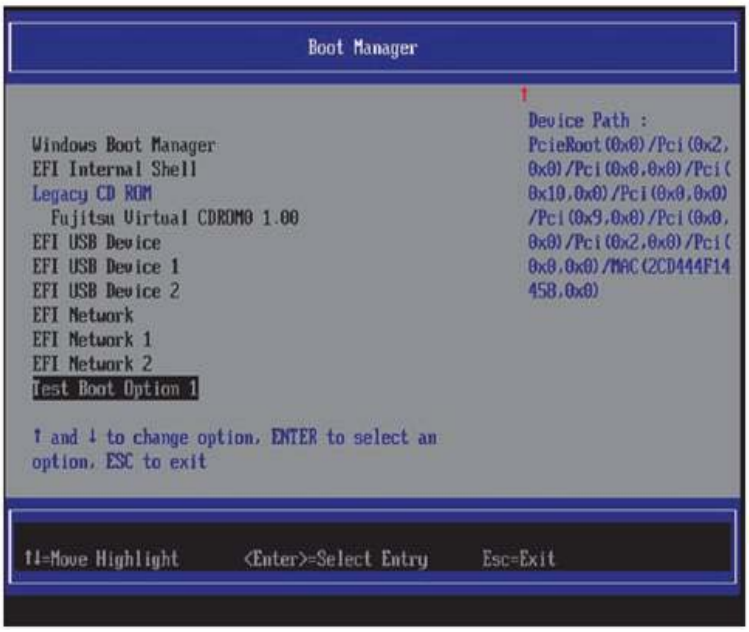
Item	Description
↑↓ =Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item
Esc=Exit	Returns to “3.1 Front page of Boot Manager”.

■ [Add Boot Option] Menu

[Add Boot Option] is used to add new boot option to [Boot Manager]. If Operating System boot loader is added and registered as boot option, as shown in the following figure, boot option registered in [Boot Manager] Menu is displayed.

Newly added and registered boot option is added at the tag end of [Boot Manager] Menu.
Example of addition of Test Boot Option is shown in “FIGURE 3.33 Display Example of [Boot Manager] Menu”.

FIGURE 3.33 Display Example of [Boot Manager] Menu



"FIGURE 3.34 Display Example of [Add Boot Option] Menu" is a window shown immediately after the start-up of [Add Boot Option]. As shown in the figure, the list of device is shown in device path format. (Details of device path are mentioned in "3.6 Device Path")

FIGURE 3.34 Display Example of [Add Boot Option] Menu

(1) Display of Page information
[File Explorer] is displayed.

(2) Menu Selection
A list of storage devices recognized by UEFI is displayed.

(3) Display of Operation help
Description of operation key shown in "TABLE 3.65 Display contents of Display of Operation help" is displayed.

TABLE 3.66 Display contents of Display of Operation help

Item	Description
↑↓=Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item
Esc=Exit	Returns to "3.1 Front page of Boot Manager".

■ **Addition of Boot Option**

The addition of Boot Option is implemented by the following procedure.

1. Place the cursor on the storage device in which the start-up files that are to be added, are stored, from the list of devices shown in “FIGURE 3.35 A list of Devices”,

FIGURE 3.35 A list of Devices

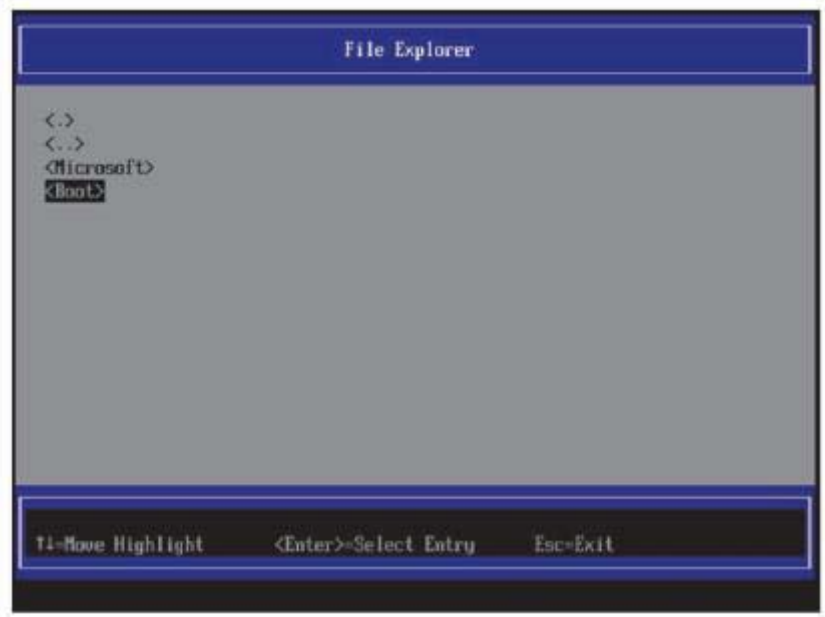
2. Press [Enter] key.
As shown in “FIGURE 3.36 Display example of File Selection Window”, a list of files in the selected storage device, is displayed. The matter enclosed in”< >” is a directory. Following is the display example when the disk installed by Windows Server 2012, is selected.

In case of Windows Server 2012, [¥EFI¥Microsoft¥Boot¥bootx64.efi] file is an Operative system loader.

The following files are OS boot loaders for Red Hat Enterprise Linux.
- In case of Red Hat Enterprise Linux 6
  [¥EFI¥redhat¥grub.efi]
- In case of Red Hat Enterprise Linux 7
  [¥EFI¥redhat¥shim.efi]

In case of SUSE Linux Enterprise Server 12, [¥EFI¥sles¥shim.efi] file is an Operative system loader.

FIGURE 3.36 Display example of File Selection Window



Following is the description of the example of creation of boot option specifying this file

Remark

- Directory structure of the disk installed for Windows Server 2012, Windows Server 2012 R2 or Windows Server 2016.
  The disk installed for Windows Server 2012, Windows Server 2012 R2 or Windows Server 2016 has the following directory structure.

<EFI>
<Microsoft>
<Boot>
Bootx64.efi Operative System Boot Loader

- Directory structure of the disk installed for Red Hat Enterprise Linux 6
  The disk installed for Red Hat Enterprise Linux 6 has the following directory structure.

<EFI>
<redhat>
grub.efi Operative System Boot Loader

- Directory structure of the disk installed for Red Hat Enterprise Linux 7
  The disk installed for Red Hat Enterprise Linux 7 has the following directory structure.

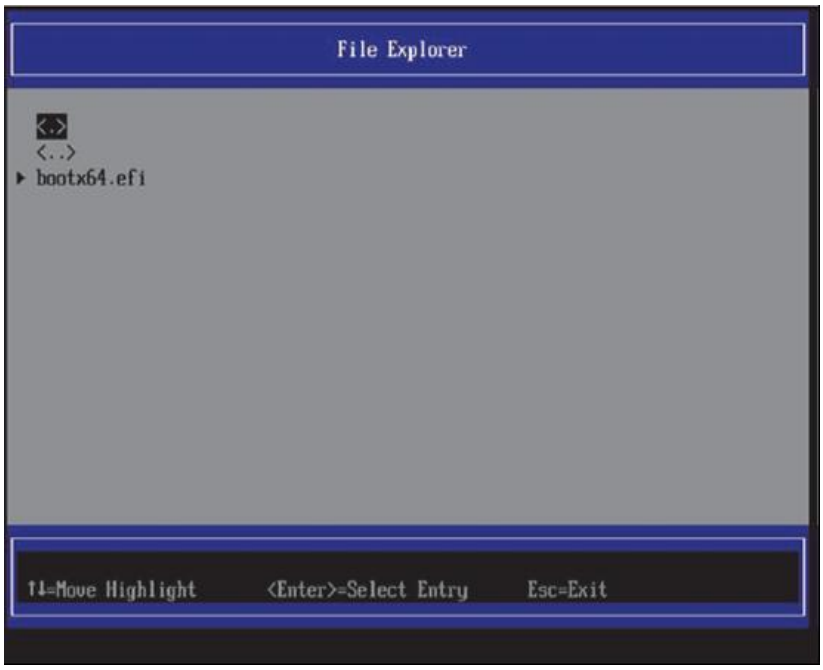
<EFI>
<redhat>
shim.efi Operative System Boot Loader

- Directory structure of the disk installed for SUSE Linux Enterprise Server 12
  The disk installed for SUSE Linux Enterprise Server 12 has the following directory structure.

<EFI>
<sles>
shim.efi Operative System Boot Loader

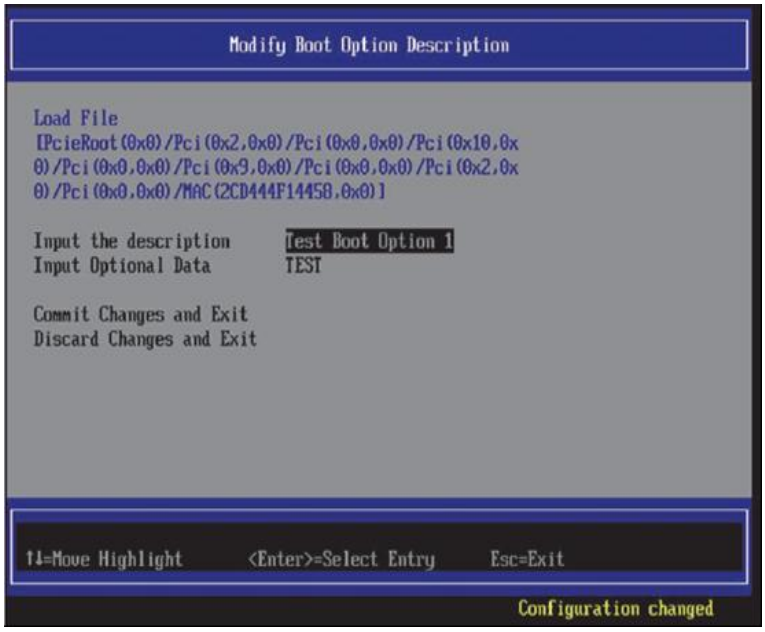
3. Following the directory structure, [bootx64.efi], which is an Operative System boot loader, is displayed as shown in "FIGURE 3.37 Windows Server 2012 Installed Disk Window".

FIGURE 3.37 Windows Server 2012 Installed Disk Window



4. Press [↑] key and [↓] key and select [bootx64.efi] which is an operating system loader registered additionally.
5. Press [Enter] key. Window showing "FIGURE 3.38 Display Example of Boot Option Name Change Window" is displayed.

FIGURE 3.38 Display Example of Boot Option Name Change Window



Set Boot option name and set options when booting.

a. Boot option name setting

Place the cursor on [Input the description], press [Enter] key. Enter name as Pop-up window for input is displayed.

b. Setting options when booting

Place the cursor on [Input Optional Data], press [Enter] key. Enter name as Pop-up window for input is displayed.

For details on the number of characters and types of character that can be entered, see "■Number of Characters and Types of Characters that can be entered"

6. Exit from this menu by following operations.

・ To exit from this menu after saving the changed setting, select [Commit Changes and Exit] and press [Enter] key.

・ To exit from this menu without saving the changed setting, select [Discard Changes and Exit] is and press [Enter] key.

7. Confirm that the boot option is added normally, by using the following procedure of FIGURE 3.39 Display Example of [Boot Manager] Menu.

a. Open the [Boot Manager] menu from Boot Manager front page.

Menu shown in " " is displayed.

b. It is confirmed that the added boot option is displayed at the footer.

FIGURE 3.39 Display Example of [Boot Manager] Menu

■ Number of Characters and Types of Characters that can be entered

Number of Characters and Types of Characters that can be entered in [Add Boot Option] Menu are shown in "TABLE 3.66 Number of Characters and Types of Characters that can be entered".

TABLE 3.67 Number of Characters and Types of Characters that can be entered

Item	Number of Characters	Types of Character
Input the description	6 - 75	0 - 9, A - Z, a - z, ! " # $ % & ' ( ) *+, - . / : ; < = > ? @ [¥] ^ _ ` { | } ~
Input Optional Data	0 - 120	0 - 9, A - Z, a - z, ! " # $ % & ' ( ) *+, - . / : ; < = > ? @ [¥] ^ _ ` { | } ~

Remarks

- Input is not possible if the number of characters exceeds the restricted value. Though the key exceeding the restricted value seems to be input temporarily, it is ignored, and is not reflected on the window.
- Types of characters other than mentioned above cannot be entered. Even if it they are temporarily entered, they are ignored and are not reflected on window.
- When the types of characters in [Input the description] are between 0-5, pop-up window appears containing a message as 'Please enter enough characters Press Enter to continue'.

■ **[Delete Boot option] menu**

[Delete Boot option] menu, deletes the specified boot option from boot order. The following window shows the window display example of [Delete Boot option] menu.

FIGURE 3.40 Display example of [Delete Boot option] menu

(1) Page information display
It is displayed as [Delete Boot Option].

(2) Menu selection
The boot option with a high priority level of automatic boot is displayed in order from top.

(3) Operation help menu
Description of operation key is shown in ‘TABLE 3.67 Display contents of operation help display’.

TABLE 3.68 Display contents of operation help display

Items	Description
↑↓= Move Highlight	Moves cursor in up and down direction.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”.

■ Boot option removal

Removal of boot option is executed according to the following procedure.

1. Place the cursor on the boot option which is to be removed.

2. Press [Space] key. As shown in "FIGURE 3.41 Delete window (1) of boot option", [ ] is changed to [X].

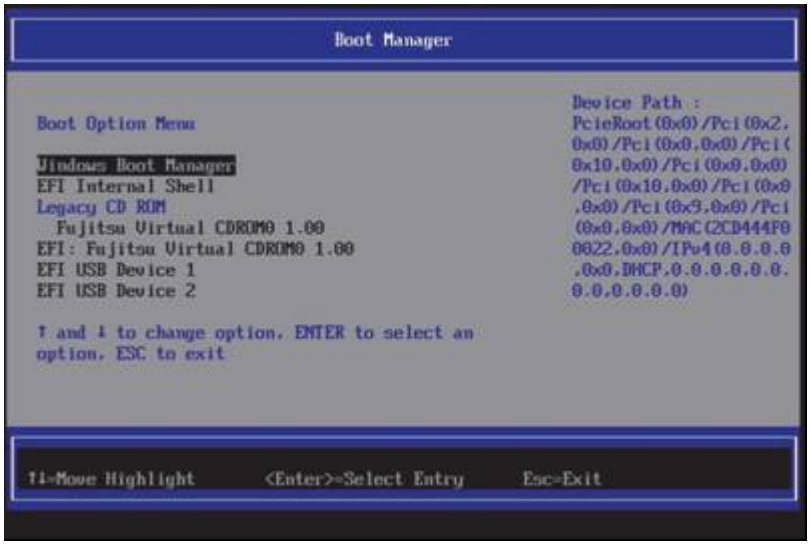
FIGURE 3.41 Delete window (1) of boot option

Remarks
Press [Space] key again when 'delete' is cancelled.
When “Space” key is pressed again, [] changes to [X].

3. To exit from this menu after saving the changed setting, select [Commit Changes and Exit] and press [Enter] key.
To exit from this menu without saving the changed setting, select [Discard Changes and Exit] is and press [Enter] key.

4. Confirm that the boot option is deleted normally by using the following procedure.
a. Open the [Boot Manager] menu from Boot Manager front page.
Menu shown in “FIGURE 3.42 Boot Option Deletion Window (2)” is displayed.
b. It is confirmed that the deleted boot option does not exist.

FIGURE 3.42 Boot Option Deletion Window (2)



■ **[Change Boot Order] Menu**

[Change Boot Order] menu is use to change the boot order.
Following window is displayed immediately after booting [Change Boot Order] menu.

FIGURE 3.43 [Change Boot Order] Menu

(1) Page Information Display
[Change Boot Order] is displayed.

(2) Menu Selection
Items shown in "TABLE 3.68 Display Contents of Menu Selection" are displayed.

TABLE 3.69 Display Contents of Menu Selection

Items	Description
Change the order	Displays boot option. Pop-up window is displayed when this command is executed, wherein the settings of boot order can be changed. As for the legacy boot option, boot option with highest boot priority level of each device is displayed. Legacy device consists of the following four devices. ・ Floppy Device ・ HardDisk Device ・ DVD/CD-ROM Device ・ Network Device Change method is explained in following " ■ Change in Priority Level (Change Boot Order)"
Commit Changes and Exit	Exit from main menu after the changed contents of settings are saved. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Exit from main menu after the changed contents of settings are cancelled.

(3) Operation Help Display
Description of operation key is shown in the "TABLE 3.69 Display Contents of Operation Help Display"

TABLE 3.70 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.1 Front page of Boot Manager' without saving changes of this menu'.

The contents displayed when the Pop-up Window appears are shown in "TABLE 3.70 Display Contents of Operation Help Display when Pop-up Window appears."

TABLE 3.71 Display Contents of Operation Help Display when Pop-up Window appears

Item	Description
+ = Move Selection Up	Raise the boot priority level of .boot option by 1
- + Move Selection Down	Lower the boot priority level of .boot option by 1
<Enter>=Complete Entry	Selects item.
Esc=Exit	Exit from Pop-up Window

■ **Change in Priority Level (Change Boot Order)**

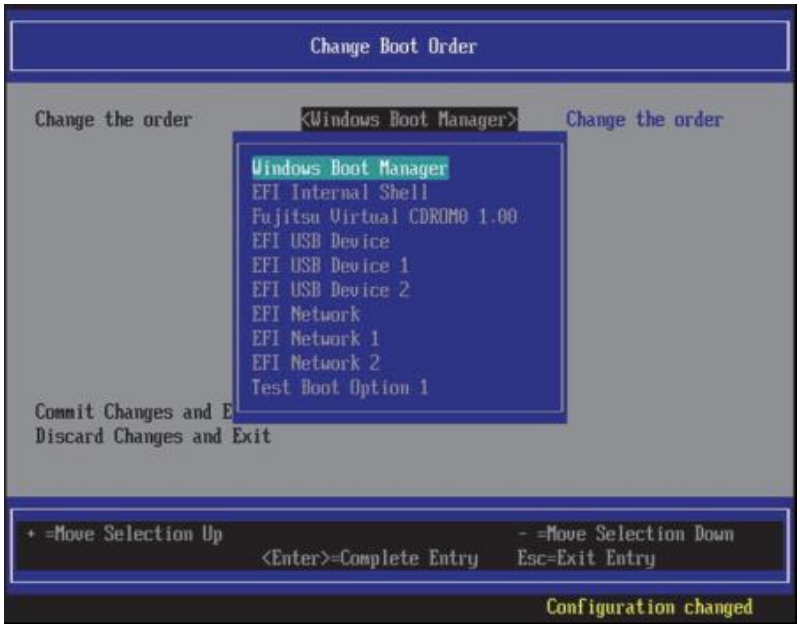
The changes of boot order are executed according to the following procedure.

1. As shown in "FIGURE 3.44 Change Window of Priority Order (Change Boot Order) (1)", place the cursor to boot option displayed as [Change the order].

FIGURE 3.44 Change Window of Priority Order (Change Boot Order) (1)

2. Press [Enter] key. Pop-up window shown in "FIGURE 3.45 Change Window of Priority Order (Change Boot Order) (2)" appears.

FIGURE 3.45 Change Window of Priority Order (Change Boot Order) (2)

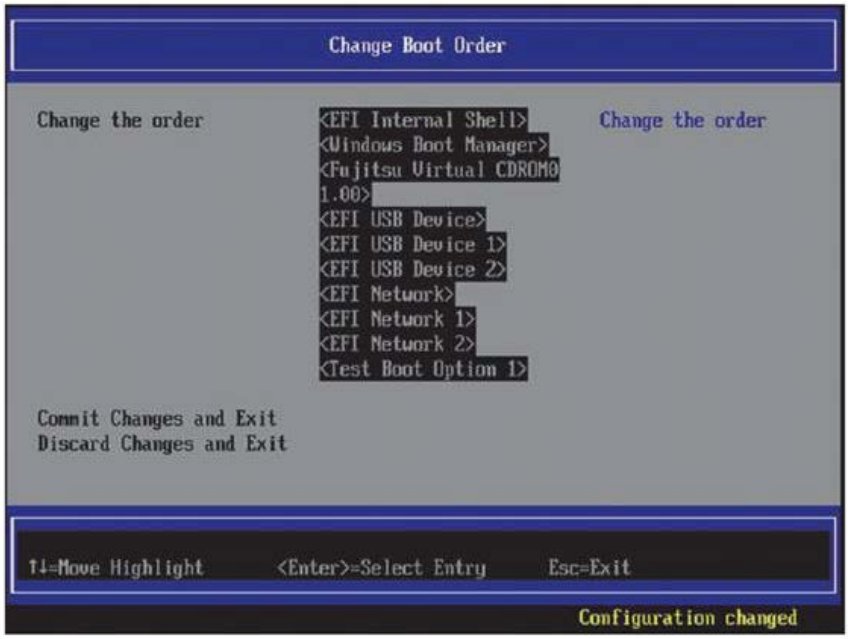


3. Place the cursor to boot option for which order is changed.

4. Change the priority order.
- Press [+] key to raise the priority order.
- Press [-] key to lowered the priority order

5. Exit from Pop-up window after changes is done.
- Press [Enter] key, when you want to exit by saving the changes of configuration
- Press [Esc] key, when you want to exit by discarding the changes of configuration.

FIGURE 3.46 Windows after setting of priority level is changed (Change Boot Order) (3)



6. To exit from the menu after saving the changes, select [Commit Changes and Exit] and then press [Enter] key.
To exit from this menu without saving the changes, select [Discard Changes and Exit] and then press [Enter] key.

■ **[Set Legacy Floppy Drive Order]Menu**

When multiple DVD/CD drive exists, the [Set Legacy DVD/CD - ROM Drive Order] menu sets the priority level of the startup device.

Window at the time of startup of [Set Legacy Floppy Drive Order] menu is as follows.

The information on floppy drive is displayed on the window. Or, when “Disable” is displayed in Floppy Drive # N, the boot function of Floppy Drive #N is Disable is shown.

FIGURE 3.47 Display example of [Set Legacy Floppy Drive Order] menu

(1) Page information display
It is displayed as [Set Legacy Floppy Drive Order].

(2) Menu Selection
Selection menu shown in “TABLE 3.71 Display contents of menu selection” is displayed

TABLE 3.72 Display contents of menu selection

Items	Description
Floppy Drive #N (N: 0, 1…)	Switchover to change the order of Floppy boot. When this item is executed, pop-up window is displayed and the settings can be changed. After this, changing method is described in detail in “■ Change in priority level (Set Legacy Floppy Drive Order)”.
Commit Changes and Exit	Exit from this menu, after saving the set contents. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Exit from this menu, after cancelling the set contents.

(3) Operation help display
The help for operations mentioned on this page is shown in the "TABLE 3.72 Display contents of operation help display".

TABLE 3.73 Display contents of operation help display

Items	Description
↑↓= Move Highlight	Moves cursor in up and down direction.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”.

When pop-up window appears, display contents are shown in “TABLE 3.73 Display Contents of operation help display when pop-up window appears”

TABLE 3.74 Display Contents of operation help display when pop-up window appears

Items	Description
↑↓= Move Highlight	Moves cursor in up and down direction.
<Enter>=Select Entry	Selects item.
Esc=Exit Entry	Closes the pop-up window.

■ Change in priority level (Set Legacy Floppy Drive Order)
Change in boot order is executed according to the following procedure.

1. In window shown in “FIGURE 3.48 Change in priority level (Set Legacy Floppy Drive Order) (1)”, place the cursor on Floppy Drive# N in which device is to be changed. Select Floppy Drive #00 in “FIGURE 3.48 Change in priority level (Set Legacy Floppy Drive Order) (1)”.

FIGURE 3.48 Change in priority level (Set Legacy Floppy Drive Order) (1)

2. Press [Enter] key. Pop-up window appears is shown in “FIGURE 3.49 Change in priority level (Set Legacy Floppy Drive Order) (2)”.

FIGURE 3.49 Change in priority level (Set Legacy Floppy Drive Order) (2)

3. Place the cursor on the boot option that is to be set in Floppy Drive # N. Boot option for Floppy Drive #00 is set in “FIGURE 3.49 Change in priority level (Set Legacy Floppy Drive Order) (2)”.

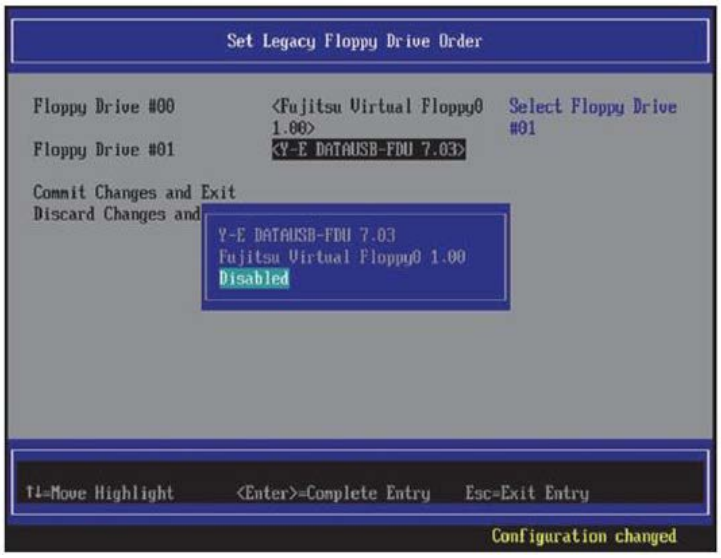
4. Press [Enter] key. Boot option of Floppy Drive #00 is changed from Y-E DATAUSB-FDU 7.03 to Fujitsu Virtual Floppy 01.00 in “FIGURE 3.49 Change in priority level (Set Legacy Floppy Drive Order) (2)”.

“FIGURE 3.50 Change of priority level (Set Legacy Floppy Drive Order) (3)” is a window example when priority level of HDD is changed. When the boot option set in Floppy Drive #N is set in another Floppy Drive #M before setting, boot option set in Floppy Drive #N is set in Floppy Drive#M before changing. In "FIGURE 3.50 Change of priority level (Set Legacy Floppy Drive Order) (3)", Y - E DATAUSB - FDU 7.03 is set in Floppy Drive #01 in which Fujitsu Virtual Floppy0 1.00 is set.

FIGURE 3.50 Change of priority level (Set Legacy Floppy Drive Order) (3)

5. Set Enable/Disable of the Floppy Drive #N.
・Select “Disable” to disable.
・Select the boot option to enable.
“FIGURE 3.51 Change of the priority level (Set Legacy Floppy Drive Order) (4)” is an example of the window in which Floppy Drive # 00 is set to Disable.
Disabled Floppy Drive #N is displayed as “Disable”.

FIGURE 3.51 Change of the priority level (Set Legacy Floppy Drive Order) (4)



6. To exit from this menu by saving changes in the setting, select [Commit Changes and Exit] and press [Enter] key. To exit from this menu without saving changes in the setting, select [Discard Changes and Exit] and press [Enter] key.

■ [Set Legacy Hard Disk Order] Menu

[Set Legacy Hard Disk Order] menu sets the HDD to be activated in the legacy operating system.
The window at the time of activation of [Set Legacy Hard Disk Order] menu is as shown below.

HDD information is displayed in this window. The HardDisk Drive is activated from #00. Moreover, when “Disable” is displayed in #N of the HardDisk Drive, the boot function of HardDisk Drive #N is shown to be Disabled.

FIGURE 3.52 Display Example of [Set Legacy HardDisk Drive Order] Menu

(1) Page Information Display
Displays as [Set Legacy HardDisk Drive Order]

(2) Menu Selection
Displays the items shown in the “TABLE 3.74 Display Contents of Menu Selection”

TABLE 3.75 Display Contents of Menu Selection

Item	Explanation
HardDisk Drive #N (N: 0, 1 …)	Following is displayed. · HDD information confirmed at the time of initialization after the power-on · Disable: Displayed when Disable is selected. Device for which the configuration is changed after initialization is not displayed. Hence the system should be reset after the device configuration changes. Further, the configuration change of the device indicates the case where the following operations are executed. · Swapping of USB devices · Activation of configuration display and update menu of Fibre channel and SAS RAID The change method is explained next in “■ Change of the Priority Level (Set Legacy HardDisk Drive Order)”.
Commit Changes and Exit	Exit from this menu after saving the changes. **Attention** It is necessary to come off the menu by "Commit Changes and Exit"

	when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Exit from this menu after cancelling the changes.

(1) Operation Help Display
Displays the explanation of the operation key shown in “TABLE 3.75 Display Contents of the Operation Help Display”

TABLE 3.76 Display Contents of the Operation Help Display

Item	Explanation
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the items.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”.

“TABLE 3.76 Display Contents of the Operation Help Display when Pop-up Window appears” when pop-up window appears shows the display contents of the Operation Help Display when the pop-up window is appeared.

TABLE 3.77 Display Contents of the Operation Help Display when Pop-up Window appears

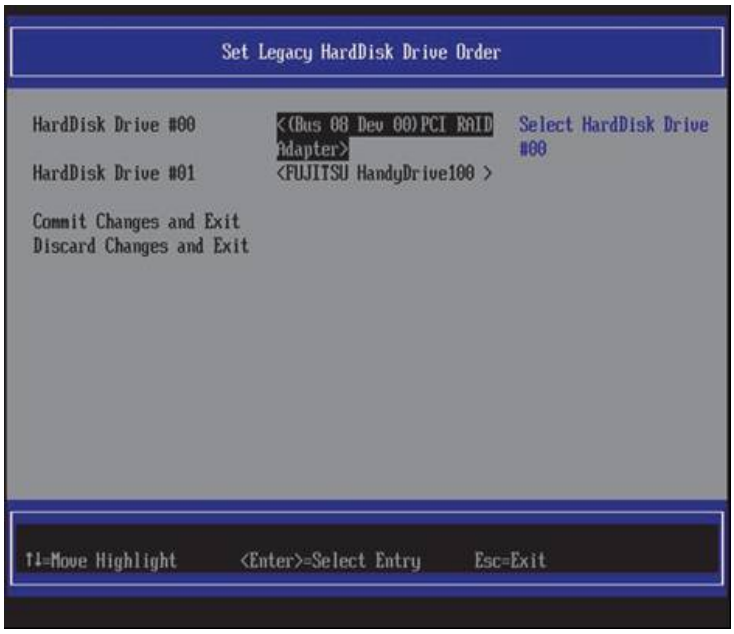
Item	Explanation
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Complete Entry	Selects the items.
Esc=Exit Entry	Closes the pop-up window.

■ Change of the Priority Level (Set Legacy HardDisk Drive Order)

HDD which is targeted for activation is installed in the following sequence.

1. In the window shown in “FIGURE 3.53 Change of the Priority Level (Set Legacy HardDisk Drive Order) (1)”, place the cursor on HardDisk Drive #N which wants to change the device. In the “FIGURE 3.53 Change of the Priority Level (Set Legacy HardDisk Drive Order) (1)” HardDisk Drive #00 is selected.

FIGURE 3.53 Change of the Priority Level (Set Legacy HardDisk Drive Order) (1)



1. Press [Enter] key. A pop-up window shown in “FIGURE 3.54 Change in Priority Level (Set Legacy HardDisk Drive Order) (2)” appears.

FIGURE 3.54 Change in Priority Level (Set Legacy HardDisk Drive Order) (2)

3. The cursor is placed on the boot option which is to be set in HardDisk Drive #N.
In the “FIGURE 3.54 Change in Priority Level (Set Legacy HardDisk Drive Order) (2)”, the boot option is set for HardDisk Drive #00.

4. [Enter] key is pressed. In “FIGURE 3.54 Change in Priority Level (Set Legacy HardDisk Drive Order) (2)”, the boot option of HardDisk Drive #00is changed from (Bus 08 Dev 00)
PCI RAID Adapter to Fujitsu HandyDrive100.

“FIGURE 3.55 Change in Priority Level (Set Legacy HardDisk Drive Order) (3)” is an example of window when the priority level of HDD is substituted.
When the boot option set in HardDisk Drive Order #N is set in another HardDisk Drive Order #M before setting, the boot option which had been set in HardDisk Drive Order #N before making changes, is set in HardDisk Drive Order #M. In "FIGURE 3.55 Change in Priority Level (Set Legacy HardDisk Drive Order) (3)", (Bus 08 Dev 00) PCIRAID Adapter is set to HardDisk Drive Order#01 in which Fujitsu HandyDrive100 is set.

FIGURE 3.55 Change in Priority Level (Set Legacy HardDisk Drive Order) (3)

5. Enable/Disable of HardDisk Drive #N is set.
- Select “Disable” to make Disable.
- Select boot option to make Enable.

“FIGURE 3.56 Change in Priority Level (Set Legacy HardDisk Drive Order) (4)” is an example of window on which the HardDisk Drive #00 is set to Disable.
The Disabled HardDisk Drive #N is displayed as “Disable”.

FIGURE 3.56 Change in Priority Level (Set Legacy HardDisk Drive Order) (4)

6. Select [Commit Changes and Exit] and press [Enter] key to exit from the menu by saving the set changes. Select [Discard Changes and Exit] and press [Enter] key to exit from the menu without saving the set changes.

■ **[Set Legacy CD-ROM Drive Order] Menu**

When DVD/CD drives exist in multiple numbers, the [Set Legacy CD-ROM Drive Order] menu sets the priority level of the startup device.

The window at the time of starting menu [Set Legacy CD - ROM Drive Order] is indicated below.

The information on the DVD/CD drive is displayed on the window. Moreover, if “Disable” is displayed in ATAPI CDROM Drive# N the boot function of ATAPI CDROM Drive #N is Disable.

FIGURE 3.57 Example of Displayed [Set Legacy CD-ROM Drive Order] Menu

(1) Page Information Display

Displayed as [Set Legacy CD-ROM Drive Order]

(2) Menu Selection

The items indicated in “TABLE 3.77 Displayed Contents of Menu Selection” are displayed.

TABLE 3.78 Displayed Contents of Menu Selection

Items	Description
ATAPI CDROM Drive #N (N:0, 1, ...)	Moves to order change of DVD/CD boot. If the item is executed, the pop up window is displayed and then, the setting can be changed. The change method is explained in detailed by subsequent “■Change in priority level (Set Legacy CD - ROM Drive Order)” after this. Furthermore,
Commit Changes and Exit	After saving the contents for which the setting is changed, exit from the menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	After cancelling the contents for which the setting is changed, exit from the menu.

(3) Operation Help Display

Description of Operating Keys is shown in the "TABLE 3.78 Display Contents of Operation Help Display"

TABLE 3.79 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.1 Front page of Boot Manager'.

The contents displayed when the Pop-up Window appears are shown in "TABLE 3.79 Display Contents of Operation Help Display when Pop-up Window appears."

TABLE 3.80 Display Contents of Operation Help Display when Pop-up Window appears

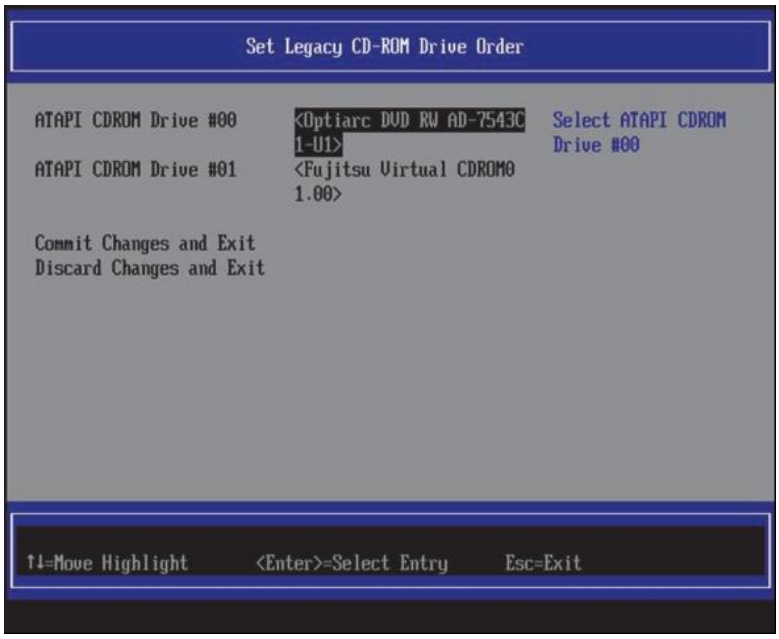
Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to '3.1 Front page of Boot Manager'.

■ **Change in Priority Level (Set Legacy CD-ROM Drive Order)**

The changes of boot order are executed according to the following procedure.

1. On the window, as shown in "FIGURE 3.58 Change in priority level (Set Legacy CD-ROM Drive Order (1)", place the cursor on ATAPI CDROM Drive# N for which device can be changed. Select ATAPI CDROM Drive#00 on "FIGURE 3.58 Change in priority level (Set Legacy CD-ROM Drive Order (1)".

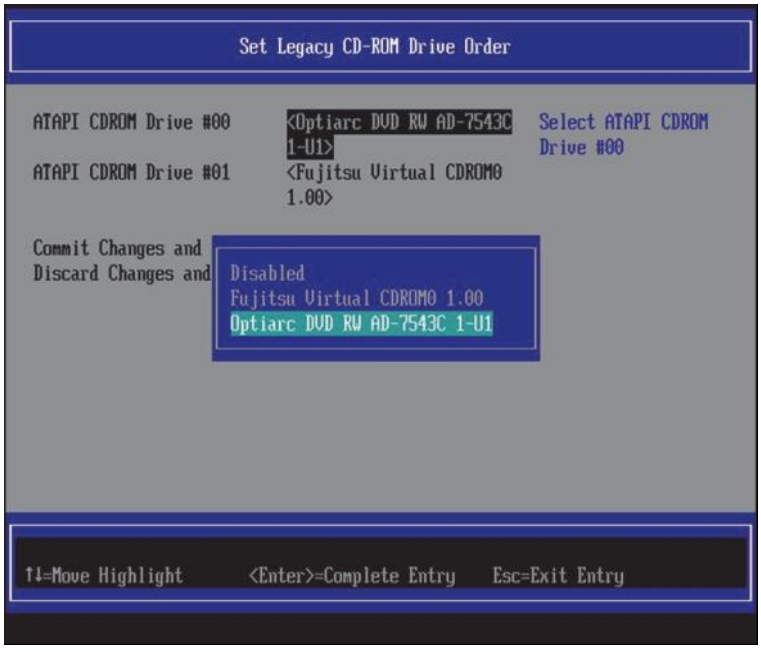
FIGURE 3.58 Change in priority level (Set Legacy CD-ROM Drive Order (1)



2. Press [Enter] key

Pop-window showed in "FIGURE 3.59 Change in priority level (Set Legacy CD-ROM Drive Order (2)" is displayed.

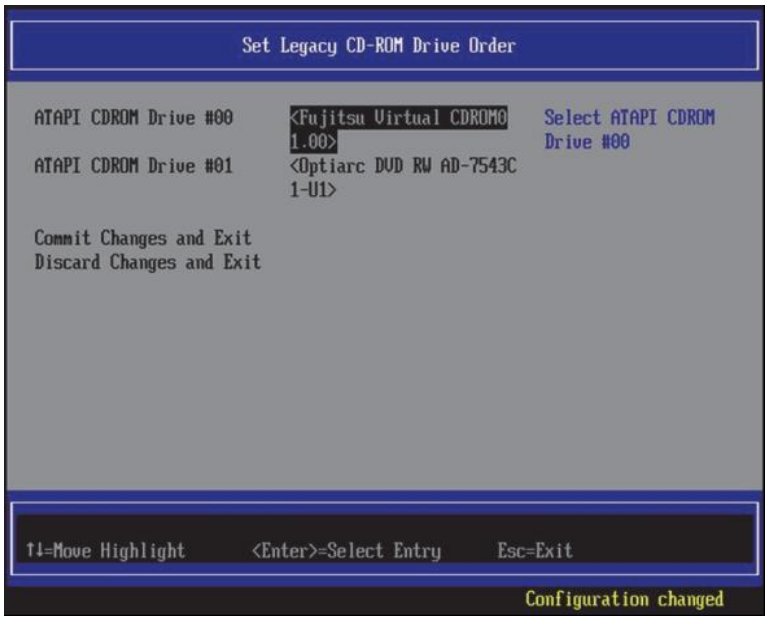
FIGURE 3.59 Change in priority level (Set Legacy CD-ROM Drive Order (2)



3. Place the curser on the boot option which is to be set in the ATAPI CDROM Drive #N. In the “FIGURE 3.59 Change in priority level (Set Legacy CD-ROM Drive Order (2)”, boot option with respect to ATAPI CDROM #00 is set.
4. Press [Enter] key and in the “FIGURE 3.59 Change in priority level (Set Legacy CD-ROM Drive Order (2)”, change the boot option of ATAPI CDROM Drive #00, from Optiarc DVD RW AD -7543C1-U1 to Fujitsu Virtual CDROM01.00.

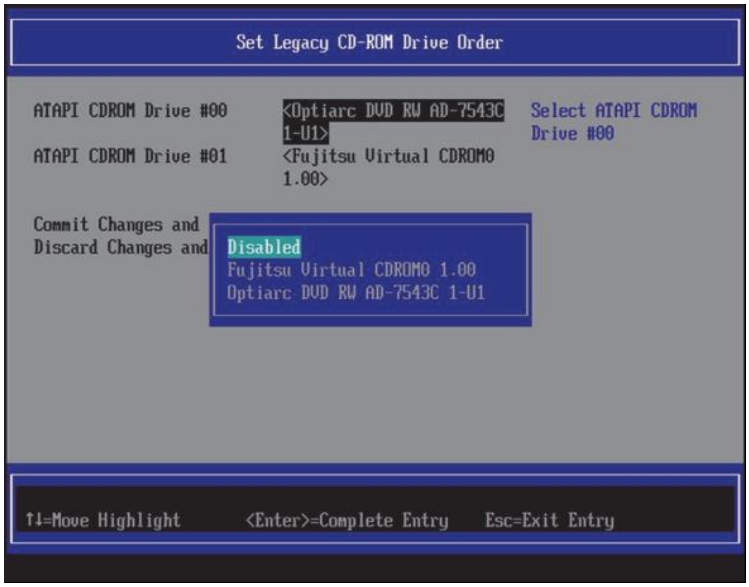
“FIGURE 3.60 Change in priority level (Set Legacy CD-ROM Drive Order) (3)”, is an example of the window when the priority level of the DVD/CD is interchanged. When the boot option set in the ATAPI CDROM Drive Order #N is set in the other HardDisk Drive Order #M before setting, boot option set in the ATAPI CDROM Drive Order #N before change is set in the ATAPI CDROM Drive Order #M.
In the “FIGURE 3.60 Change in priority level (Set Legacy CD-ROM Drive Order) (3)”, Optiarc DVD RW AD-7543C1-U1is set in the ATAPI CDROM Drive Order #01wherein Fujitsu Virtual CDROM01.00 is set.

FIGURE 3.60 Change in priority level (Set Legacy CD-ROM Drive Order) (3)



5. Set Enable/Disable of ATAPI CDROM Drive #N
・Select “Disable”, if you want to disable the drive.
・Select the boot option, if you want to enable the drive.
“FIGURE 3.61 Change in priority level (Set Legacy CD-ROM Drive Order) (4)”, is an example of the window when the ATAPI CDROM Drive #00 is set to Disable.
Disabled ATAPI CDROM Drive #N is displayed as “Disable”.

FIGURE 3.61 Change in priority level (Set Legacy CD-ROM Drive Order) (4)

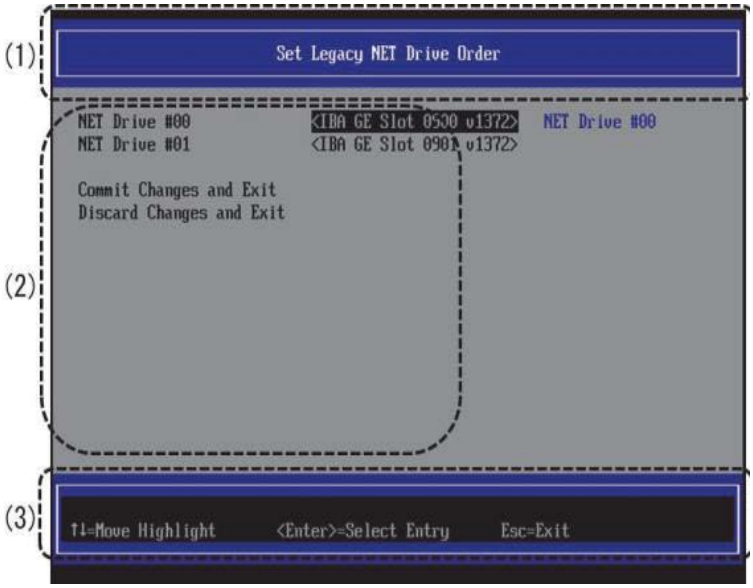


6. When you want to exit from the menu by the saving the setting changes, select “Commit Changes and Exit” and press [Enter] key.
When you want to exit from the menu without saving the setting changes, select “Discard Changes and Exit” and press [Enter] key.

■ [Set Legacy NET Drive Order] menu

[Set Legacy Net Drive Order" menu sets the priority level of the "Boot device" when multiple network ports exist.
Window at the time of booting the [Set Legacy NET Drive Order] menu is shown below.
Information of network port is displayed on the window. Moreover, when "Disable" is displayed for the NET Drive #N, it indicates that, booting function of NET Drive #N is disable.

FIGURE 3.62 Display example of the [Set Legacy NET Drive Order] menu



(1) Page information display
Displayed as [Set Legacy NET Drive Order]

(2) Menu selection
Items shown in "TABLE 3.80 Display contents of menu selection" are displayed.

TABLE 3.81 Display contents of menu selection

Items	Description
NET Drive #N (N: 0, 1…)	Transited to order change of the NET boot. When this item is executed, pop-up window is displayed. Change method is explained in detail in the "■ Change in priority order (Set Legacy NET Drive Order)" which is described afterwards.
Commit Changes and Exit	Comes out from the menu after saving the setting changed contents. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Comes out from the menu after cancelling the setting changed contents.

(3) Operation help display
Explanation of the operation key's shown in "TABLE 3.81 Display content of Operation Help Display" is displayed.

TABLE 3.82 Display content of Operation Help Display

Item	Explanation
↑↓= Move Highlight	Moves the cursor in up and down directions.
<Enter>=Select Entry	Selects the item.
Esc=Exit	Returns to “3.1 Front page of Boot Manager”.

“TABLE 3.82 Display Content of Operation Help Display When Pop up Window Appears.” shows the display contents when the pop-up window appears.

TABLE 3.83 Display Content of Operation Help Display When Pop up Window Appears

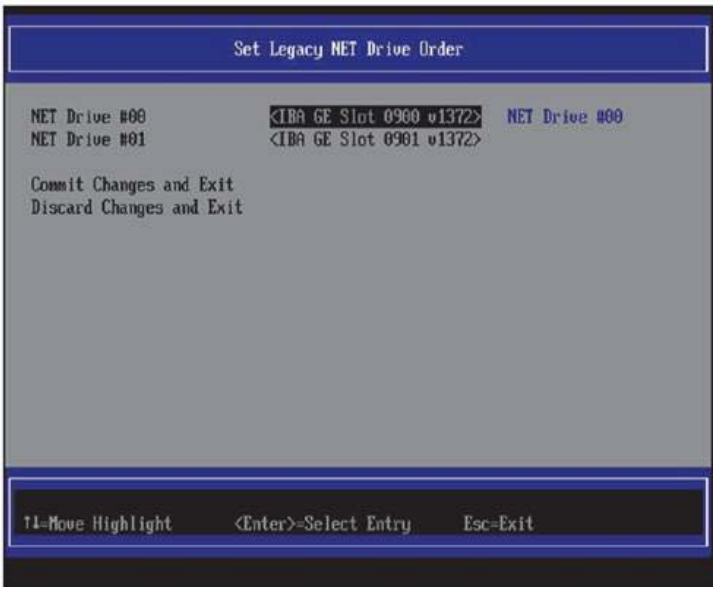
Item	Explanation
↑↓= Move Highlight	Moves the cursor in up and down directions.
<Enter>=Complete Entry	Selects the item.
Esc=Exit Entry	Close the pop up window.

■ **Change of priority level (Set Legacy NET Drive Order)**

Boot order is changed in the following sequence.

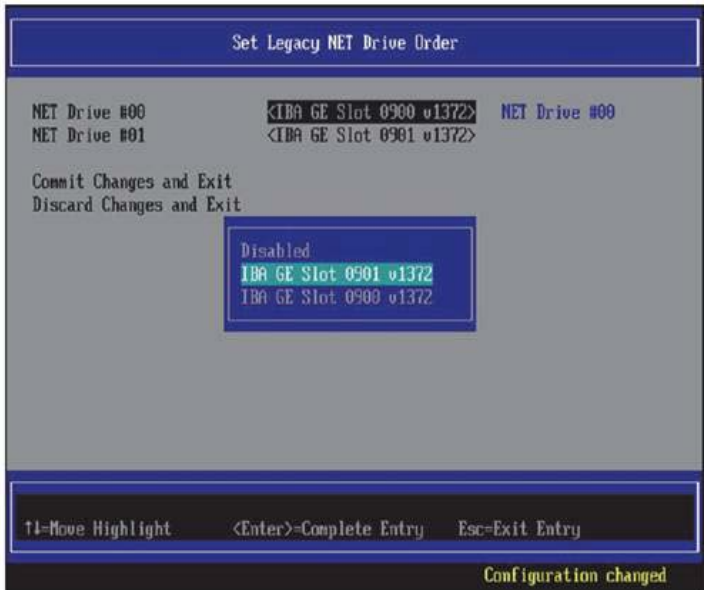
1. Place the cursor on NET Drive #N which wants to change the device on the screen shown in "FIGURE 3.63 Change (Set Legacy NET Drive Order) (1) of priority level". In "FIGURE 3.63 Change (Set Legacy NET Drive Order) (1) of priority level", NET Drive #00 has been selected.

FIGURE 3.63 Change (Set Legacy NET Drive Order) (1) of priority level



2. Press the [Enter] key.
A pop up window shown in "FIGURE 3.64 Change of Priority Level (Set Legacy NET Drive Order) (2)" appears.

FIGURE 3.64 Change of Priority Level (Set Legacy NET Drive Order) (2)

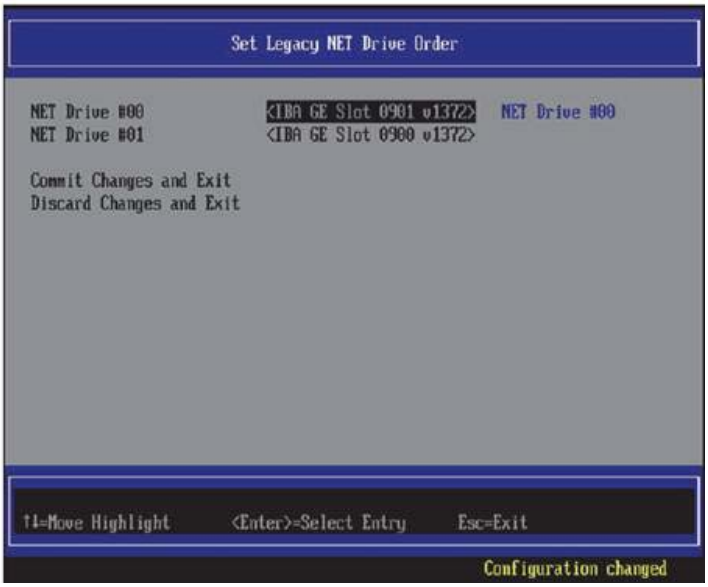


3. Place the cursor on the boot option which is to be set in NET Drive #N. In “FIGURE 3.64 Change of Priority Level (Set Legacy NET Drive Order) (2)”, the boot option is set in NET Drive #00.

4. Press the [Enter] key. In “FIGURE 3.64 Change of Priority Level (Set Legacy NET Drive Order) (2)”, the boot option of NET Drive #00 is changed from IBA GE Slot 0900 v1372 to IBA GE Slot 0901 v1372.

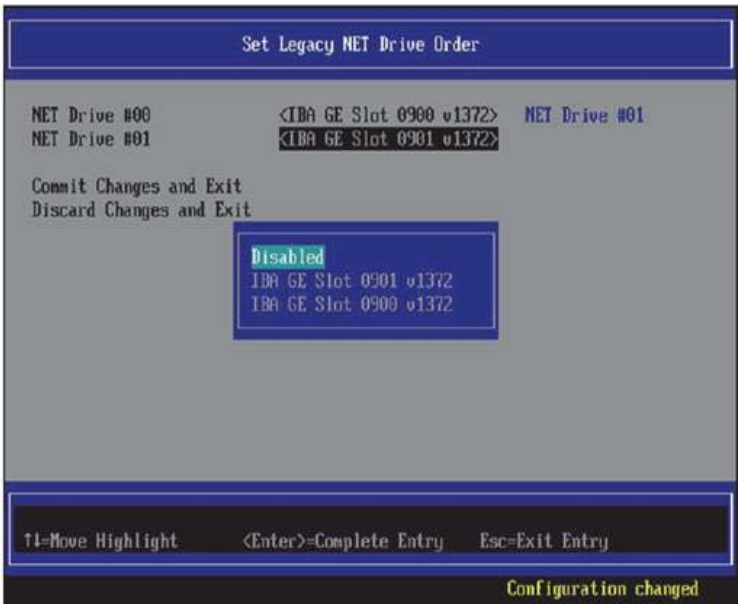
“FIGURE 3.65 Change of Priority Level (Set Legacy NET Drive Order) (3)” is an example of the window when the priority level of network port is changed. When the boot option set in NET Drive #N is set in another NET Drive #M before setting, the boot option which had been set in NET Drive #N before changes, is set in NET Drive #M. In “FIGURE 3.65 Change of Priority Level (Set Legacy NET Drive Order) (3)”, IBA GE Slot 0900 v1372 is set in NET Drive #01 in which IBA GE Slot 0901 v1372 was set.

FIGURE 3.65 Change of Priority Level (Set Legacy NET Drive Order) (3)



5. Set Enable/Disable of NET Drive #N.
• Select “Disable” to disable.
• Select boot option to enable.
“FIGURE 3.66 Change of Priority Level (Set Legacy NET Drive Order) (4)” is an example of window in which the NET Drive#01 is set to Disable.
The Disabled NET Drive #N is displayed as “Disable”.

FIGURE 3.66 Change of Priority Level (Set Legacy NET Drive Order) (4)



6. Select [Commit Changes and Exit] and press [Enter] key to exit from this menu by saving the set changes.
Select [Discard Changes and Exit] and press [Enter] key to exit from this menu without saving the set changes.

3.5.3 [Boot From File] Menu

The [Boot From File] menu is used to boot immediately by specifying the boot loader file of operating system in the storage device which is recognized by UEFI.

The following window is window immediately after the activation of the [Boot From File] menu. A list of storage devices recognized by UEFI is displayed.

FIGURE 3.67 Display Example of [Boot From File] Menu

(1) Page Information Display
[File Explorer] is displayed.

(2) Menu Selection
Storage device list, by which UEFI is recognized, is displayed.

(3) Operation helps Display
Description of operation key is shown in “TABLE 3.83 Display Contents of Operation Help Display”

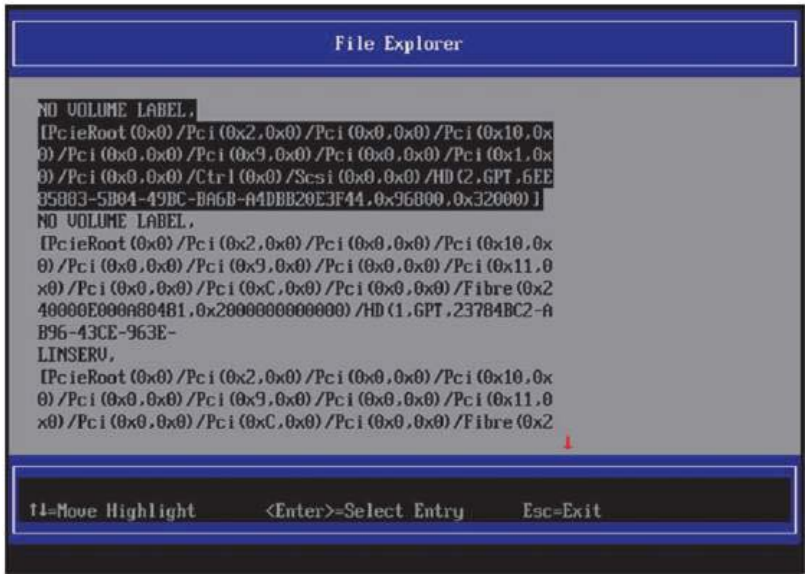
TABLE 3.84 Display Contents of Operation Help Display

Items	Description
↑↓ =Move Highlight	Moves the cursor up and down.
<Enter>=Select Entry	Selects the items.
Esc=Exit	Returns to “3.1 Front page of Boot Manager” .

■ Specification of Boot File (Boot from File)

1. Place the cursor to storage device which stores the Operating System Boot Loader File to be booted from the device list window shown in “TABLE 3.83 Display Contents of Operation Help Display”

FIGURE 3.68 Specifications of Boot File (1)



2. Press [Enter] key.

As shown in “FIGURE 3.69 Specifications of Boot File (2)”, file list of storage device appears.

Contents enclosed in [< >] is a directory. Following figure is a display example when the disk installed by Window Server 2012 is selected.

FIGURE 3.69 Specifications of Boot File (2)

3. Operating System Loader File to be booted appears as shown in “FIGURE 3.70 Specifications of Boot File (3)” by following the directory structure.

FIGURE 3.70 Specifications of Boot File (3)

4. Press [↑] key or [↓] key and select Operating System Loader File to be booted.

5. Press [Enter] key.
File is loading and Operating System is activated.

3.5.4 [Boot From DVD/CD] Menu

When this menu is selected, it operates as follows.

- It starts from the medium inserted in DVD/CD Drive connected with the system. At this time, it does not start from Hard Disk Drive and Net Drive connected with the system.
- This menu is for the start of the medium for maintenance.
- When DVD/CD Drive is not connected or the medium has not been inserted, the following messages are displayed.

FIGURE 3.71 [Boot From DVD/CD] Message

It is started from the medium of DVD/CD Drive again by connecting DVD/CD Drive while displaying the above-mentioned message, inserting the medium, and inputting the key.

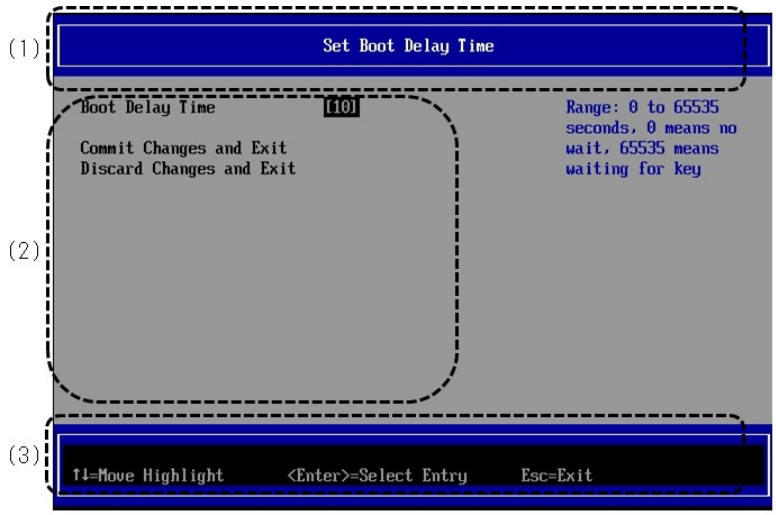
3.5.5 [Set Boot Delay Time] Menu

[Set Boot Delay Time] Menu sets the standby time from the completion time of UEFI diagnosed process till the Operating System process transfer time, in seconds. Default setting is 10 Seconds. The time set in this menu is the standby time of key input. In the standby time of key input, as shown in "FIGURE 3.72 Logo Window]", the Logo Window appears. Except [Enter] key, if other key is input during the standby time of key input, then it transited to Boot Manager Front Page. Moreover, if [Enter] key is input, it immediately transit to Operating System activation process.

FIGURE 3.72 Logo Window

Following window is a display example of [Set Boot Delay Time] Menu.

FIGURE 3.73 Display Example of [Set Boot Delay Time] Menu



(1) Page Information Display
[Set Boot Delay Time] is displayed.

(2) Menu Selection
Displayed selection menu is shown in “TABLE 3.84 Display Content of Menu Selection Help Display”

TABLE 3.85 Display Content of Menu Selection Help Display

Items	Description
Boot Delay Time	Sets the time out time of Logo Window. Unit is seconds ・ 0~65535 Default time is 10 Seconds
Commit Changes and Exit	Exit from main menu after the changed contents of configuration are saved. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Exit from main menu after the changed contents of configuration are cancelled.

(3) Operation Help Display
Describe of operation key is shown in "TABLE 3.85 Display Contents of Operation Help Display".

TABLE 3.86 Display Contents of Operation Help Display

Item	Description
↑↓= Move Highlight	Moves cursor up and down.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to ‘3.1 Front page of Boot Manager’

The contents displayed when the Pop-up Window appears are shown in “TABLE 3.86 Content of Operation Helps Display when Pop -up Window appears.”

TABLE 3.87 Content of Operation Helps Display when Pop -up Window appears

Item	Description
0123456789 are valid inputs	“Timeout” settings are valid only for numerical keys.
<Enter>=Select Entry	Selects item.
Esc=Exit	Returns to ‘3.1 Front page of Boot Manager’

3.6 Device Path

Device path shows the physical connection of device and also shows the relation of connection from PCI Route Bridge.

3.6.1 Parameter of Device Path

Each parameter of displayed device path is shown in the “TABLE 3.87 Parameter of Device Path”.

TABLE 3.88 Parameter of Device Path

Display	Description
Acpi (HID, UID)	ACPI device path HID is an abbreviation of Hardware ID. An ID by which ACPI specifications are conformed is given below. UID is an abbreviation of Unique ID.(Can be omitted)
Pci(Device, Function)	PCI Device Device is the device number of PCI device. 0-31 is shown with hexadecimal. Function is the function number of PCI device. It is shows with 0-7 digits.
Scsi(PUN, LUN)	Scsi Controller PUN is an abbreviation of Physical Unit Number. It means SCSI ID. 0-65535 is shown with hexadecimal. LUN is an abbreviation of Logical Unit Number. 0-65535 is shown with hexadecimal.
Fibre(WWN, LUN)	Fibre Controller WWN is an abbreviation of World Wide Name. It shows with numeric of 64 bit. LUN is an abbreviation of Logical Unit Number. It shows with numeric of 64 bit.
MAC(MacAddr, IfType)	Network MacAddr is an abbreviation of Mac Address. If Type is an abbreviation of Interface Type. 0-255 is shown with hexadecimal.
HD(Partition, Type, Signature, Start, Size)	Hard Drive Partition shows the partition number. Type shows Partition Type. (Can be omitted). Type is given below. GPT: Abbreviation of GUID Partition Table. MBR: Abbreviation of Master Boot Record. Signature consists of the meaning of Partition Type as shown below GPT: Shows GUID MBR: Numeric value. Start shows the starting position of partition. It shows with numeric of 64 bit. Size shows the Partition Size. It shows with numeric of 64 bit.
CDROM(Entry, Start, Size)	CD/DVD Media Entry shows the boot entry number. (Can be omitted).It is usually shown with 0. Start shows the starting sector of boot entry. It shows with numeric of 64 bit. Size shows Partition Size. It shows with numbers of 64 bit.
USB(Port, Interface)	USB Port shows the port number of USB. 0-255 is shown with hexadecimal. Interface shows interface number. 0-255 is shown with hexadecimal.
Ctrl(Controller)	Controller Controller consists of the integers.

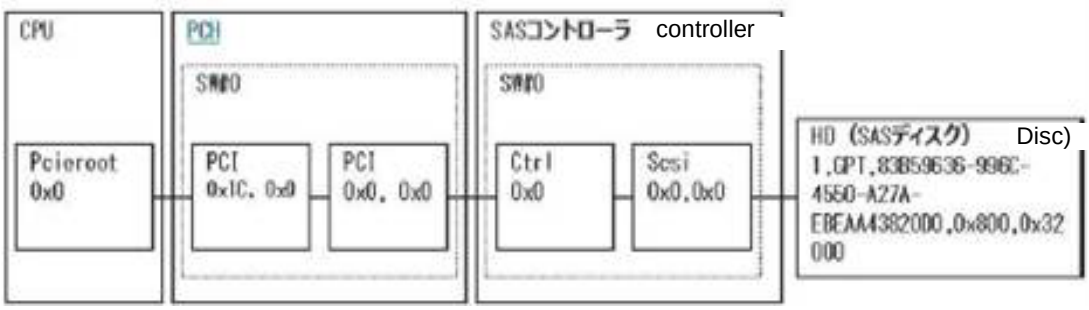
3.6.2 Identification of Device Path

Description regarding the identification method of SAS disk built in SB, SAS disk built in DU, disk from Fibre card and device path of GigaLAN is shown below.

- **SAS Disk built in SB**

Specific method of SAS disk built in SB is described as an example.
Relation of connection from CPU to SAS disk built in SB is shown in "FIGURE 3.74 Specification of SAS disk built in SB" shows the device Node.

FIGURE 3.74 Specification of SAS disk built in SB

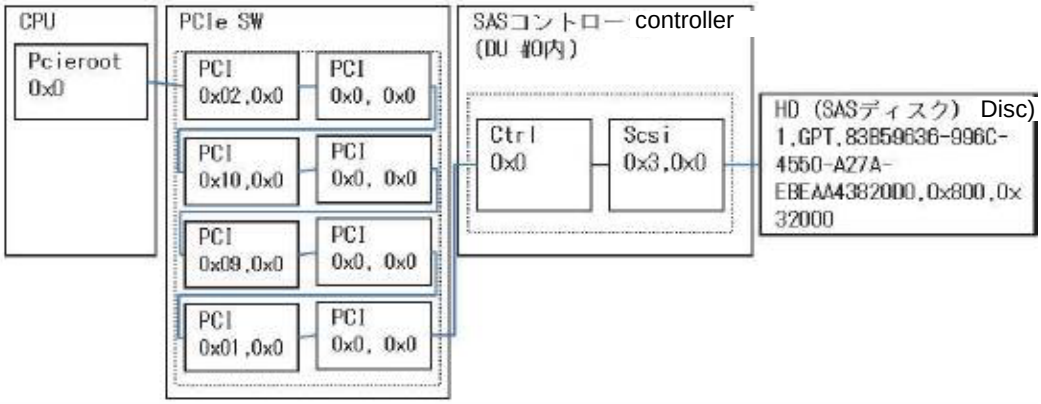


Device Path is as follows.
PcieRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/Ctrl(0x0)/Scsi(0x0,0x0)/HD(1,GPT,
83B59636 - 996C - 4550 - A27A - EBEAA43820D0, 0x800, 0x32000)

- **SAS Disk built in DU**

Specific method of SAS disk built in DU#0 is described as an example.

FIGURE 3.75 Specification of SAS Disk built in DU#0

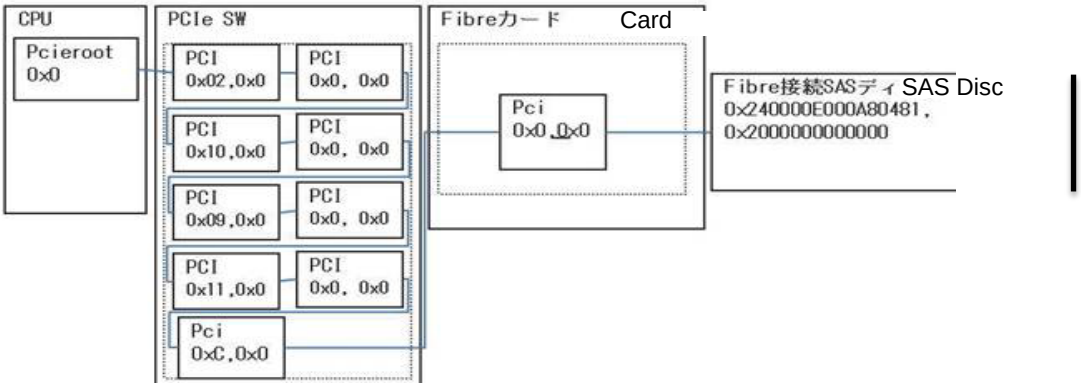


Device path of SAS device is as follows.
Pcieroot(0x0)/PCI(0x02,0x0)/PCI(0x0,0x0)/PCI(0x10,0x0)/PCI(0x0,0x0)/PCI(0x09,0x0)/PCI(0x0,0x0)/PCI(0x01,0x0)/PCI(0x0,0x0)/Ctrl(0x0,0x0)/Scsi(0x3,0x0)/PCI(0x0,0x0)/HD(1,GPT,83B59636 - 996C - 4550 - A27A - EBEAA43820D0,0x800,0x32000)

- **Disk Specification from Fibre Card**

Disk specific method from Fibre connection when Fibre Card is inserted to PCIe of IOU is described as an example.

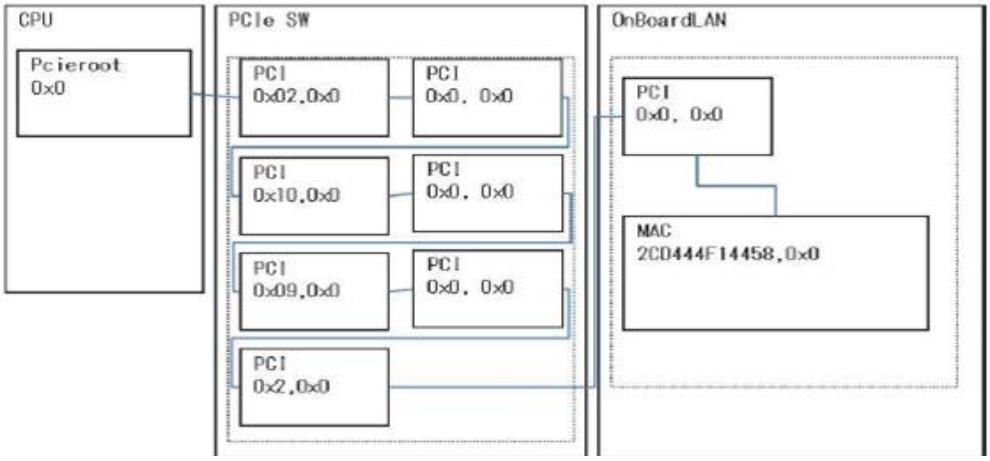
FIGURE 3.76 Specification of Disk from Fibre Card



- **GigaLAN**

Specific method of GigaLAN built in IOU is described as an example.

FIGURE 3.77 Specification of GigaLAN



Device path of GigaLAN is as follows.
Pcieroot(0x0)/PCI(0x02,0x0)/PCI(0x0,0x0)/PCI(0x10,0x0)/PCI(0x0,0x0)/PCI(0x09,0x0)/PCI(0

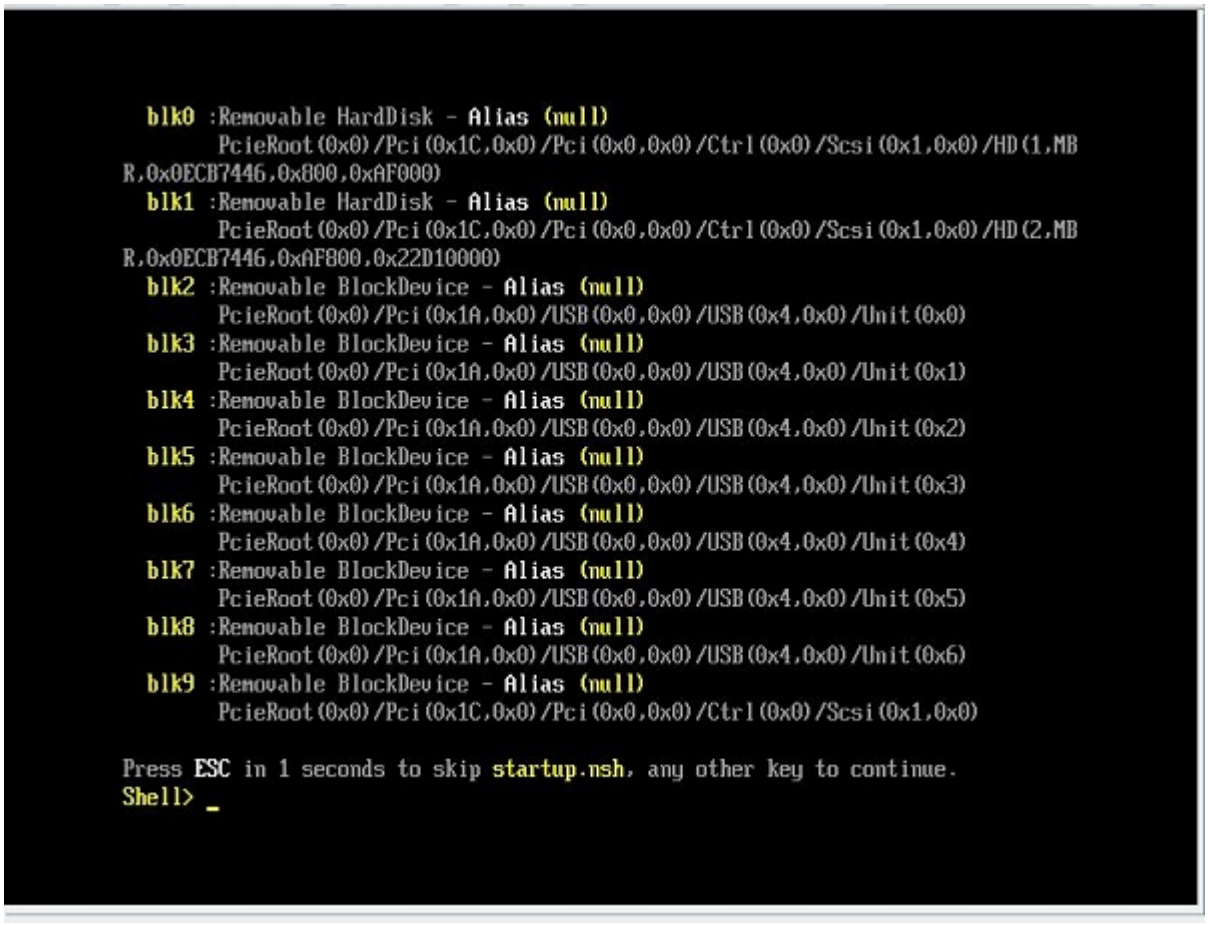
CHAPTER 4 UEFI Command Operations

This chapter describes the operations of UEFI commands.

4.1 Automatic startup file

The UEFI of the PRIMEQUEST 2000 series supports the UEFI shell function. Users can use the UEFI shell toexecute commands from the UEFI console. FIGURE 4.1 Sample screenshot of the UEFI shell immediately after it starts shows a screenshot of when the UEFI shell starts.

FIGURE 4.1 Sample screenshot of the UEFI shell immediately after it starts



4.1.1 Automatic startup file

Immediately after starting, the UEFI shell checks for the startup.nsh file in the defined execution path.If the file exists, the shell executes the commands specified in the file.
Then, it waits for command input from theconsole. This situation does not always require the startup.nsh file.

Remarks

The execution path is the directory path specified in the shell environment path variable. You can display and change this directory path by using the set command.

4.1.2 UEFI shell command syntax

You can view and display the shell environment variables by using the set command.

To access an environment variable value as an argument for a shell command, enclose the variable name in percent signs “%”, as shown below.

%myvariable%

The shell has a special variable called lasterror. This variable retains the value returned by the last executed shell command.

The file name argument in shell commands uses the following characters as wildcards: “*”, “?”, “[“, and “]”.

TABLE 4.1 Wildcard characters in the UEFI shell

Character string	Meaning
*	Matches 0 or more characters in the file name.
?	Matches exactly 1 character in the file name.
[Character string]	Matches any of the characters between the brackets [ ]. An example is [azA-Z].

4.1.3 Output redirection

UEFI shell command output can be redirected to a file. The syntax to do so is as follows.

```
Command > unicode_output_file_pathname
Command >a ascii_output_file_pathname
Command 1> unicode_output_file_pathname
Command 1>a ascii_output_file_pathname
Command 2> unicode_output_file_pathname
Command 2>a ascii_output_file_pathname
Command >> unicode_output_file_pathname
Command >>a ascii_output_file_pathname
Command 1>> unicode_output_file_pathname
Command 1>>a ascii_output_file_pathname
```

TABLE 4.2 Output redirection lists the types of output redirection and append.

TABLE 4.2 Output redirection

Character string	Meaning
>	Redirects the standard output to a Unicode file.
>a	Redirects the standard output to an ASCII file.
1>	Redirects the standard output to a Unicode file.
1>a	Redirects the standard output to an ASCII file.
2>	Redirects the standard error output to a Unicode file.
2>a	Redirects the standard error output to an ASCII file.
>>	Appends the standard output to a Unicode file.
>>a	Appends the standard output to an ASCII file.
1>>	Appends the standard output to a Unicode file.
1>>a	Appends the standard output to an ASCII file.

Remarks

You can redirect the standard output or standard error output to the same file. Note that the standard output or standard error output cannot be redirected to multiple files at the same time.

4.1.4 UEFI shell command list

TABLE 4.3 UEFI shell commands lists the UEFI shell commands supported by the UEFI of the PRIMEQUEST 2000 series.

TABLE 4.3 UEFI shell commands

No.	Command name	Description
1	cd	Displays and changes the current directory.
2	connect	Binds the UEFI driver to a device and starts the driver.
3	cp	Copies one or more files or directories to another location.
4	date	Displays and sets the current system date.
5	disconnect	Disconnects one or more drivers from a device.
6	drvcfg	Executes the driver configuration protocol. *1
7	echo	Displays messages and enables or disables command echo.
8	edit	Used to edit an ASCII or Unicode file in full screen mode.
9	exit	Exits the UEFI shell.
10	help	Displays the command list or command help.
11	ls	Displays the files and subdirectories in a directory.
12	map	Displays and defines a mapping.
13	mkdir	Creates one or more directories.
14	mount	Mounts a file system on a block device.
15	mv	Moves one or more files.
16	pci	Displays a PCI device or a PCI configuration space.
17	reconnect	Reconnects one or more drivers.
18	reset	Resets the system.
19	rm	Deletes one or more files or directories.
20	set	Displays, creates, changes, or deletes a UEFI environment variable.
21	time	Displays the current time. Also, it sets the system time.
22	type	Displays the contents of a file.
23	ver	Displays the volume information for a file system.
24	vol	Displays the volume information for a file system.

*1 : Execute "Connect -r" command before executing drvcfg command.

CHAPTER 5 Dynamic Reconfiguration Operation

This chapter describes the DR command and the Hot plug collaboration function.

5.1 DR Command

This chapter describes the CLI (command line interface) provided by the DR command.
The root permission is necessary for executing.

5.1.1 dr command (common part)

5.1.1.1 Synopsis

```
/opt/FJSVdr-util/sbin/dr [--version] [--help] COMMAND [ARGS]
```

5.1.1.2 Description

This is basic command to DR operation. The subcommand is taken in the argument.
It returns when the command is completed.

5.1.1.3 Options

Options	Meaning
--version	Print the version number of DR command
--help	Print the synopsis and a list of subcommands.
COMMAND	Specify subcommand
ARGS	Specify arguments of subcommand

5.1.1.4 Exit status

Exit status	Meaning
0	Successful program completion
1	Unsuccessful program completion
128+signul number <s>	Terminated abnormally because the signal of signal number <s> was received

5.1.2 Device hot-add/hot-remove operation (add/rm subcommand)

5.1.2.1 Synopsis

```
/opt/FJSVdr-util/sbin/dr [--help] <add | rm>  Device
```

5.1.2.2 Description

This is the subcommand for hot-add/hot-remove IOU or PCI Express card.

5.1.2.3 Options

Arguments	Meaning
Device	Target device. e.g. IOUx, PCIex “x“ represents the slot number. Only one target can be specified at a time.
--help	Print the synopsis of add/rm subcommand

5.1.2.4 Example

e.g. when you hot-add IOU3

```
# /opt/FJSVdr-util/sbin/dr add IOU3
#
```

5.1.3 Show slot status (slot subcommand)

5.1.3.1 Synopsis

```
/opt/FJSVdr-util/sbin/dr stat DeviceType
```

5.1.3.2 Description

This is the subcommand for displaying hot plug slot status of IOU or PCI Express card.
The number displayed after the output device represents the slot number.

The meaning of the state of IOU type is as follows:

- empty : IOU is not assigned to the partition (OS)
- offline : IOU is assigned to the partition, but the slot power is OFF. (IOU is disabled)
- online : IOU is assigned to the partition and the slot power is ON. (IOU is enabled)

The meaning of the state of pcie type is as follows:

- empty : There's no PCI Express card on the slot
- offline : PCI Express card is on the slot, but the slot power is OFF. (PCIe is disabled)
- online : PCI Express card is on the slot, and the slot power is ON. (PCIe is enabled)

5.1.3.3 Options

Arguments	Meaning
Device Type	Target device type. e.g. IOU, pcie Only one target can be specified at a time.
--help	Print the synopsis of stat subcommand

5.1.3.4 Example

e.g. When you hot-add PCI card to slot number 20 of PCI slot

```
# /opt/FJSVdr-util/sbin/dr stat pcie
pcie20: online
pcie21: offline
pcie22: empty
```

5.1.4 Show resources on device (show subcommand)

5.1.4.1 Synopsis

```
/opt/FJSVdr-util/sbin/dr show Device [--possible]
```

5.1.4.2 Description

This is the subcommand for displaying resources on the device.

- When specified device is IOU, All I/O resources (PCI) on IOU are displayed
- When specified device is pcie, the name of PCI Express device is displayed

5.1.4.3 Options

Arguments	Meaning
Device	Target device. e.g. IOUx, pciex "x" represents the slot number. Only one target can be specified at a time.
--help	Print the synopsis of show subcommand

5.1.4.4 Example

e.g. When you want to display I/O resources on IOU1:

```
# /opt/FJSVdr-util/sbin/dr show IOU1
04:00.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
05:09.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
06:00.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
07:01.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
07:02.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
07:08.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
07:09.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
07:10.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
07:11.0 PCI bridge: PLX Technology, Inc. Device 8748 (rev ba)
09:00.0 Ethernet controller: Intel Corporation I350 Gigabit Network Connection (rev 01)
09:00.1 Ethernet controller: Intel Corporation I350 Gigabit Network Connection (rev 01)
0c:00.0 Ethernet controller: Intel Corporation I350 Gigabit Network Connection (rev 01)
0c:00.1 Ethernet controller: Intel Corporation I350 Gigabit Network Connection (rev 01)
0f:00.0 Fibre Channel: Emulex Corporation Saturn-X: LightPulse Fibre Channel Host Adapter (rev 03)
0f:00.1 Fibre Channel: Emulex Corporation Saturn-X: LightPulse Fibre Channel Host Adapter (rev 03)
```

5.1.5 Information gathering (dr report subcommand)

5.1.5.1 Synopsis

```
/opt/FJSVdr-util/sbin/dr [--help] report
```

5.1.5.2 Description

This is the subcommand for gathering information for investigation.

5.1.5.3 Options

Argument	Meaning
--help	Print the synopsis of report subcommand

5.1.5.4 Example

e.g.

```
# /opt/FJSVdr-util/sbin/dr report
Create report file at /tmp/drreport-localhost-20130101-123456.tar.bz2
#
```

5.2 Hot plug collaboration function

5.2.1 Description of collaboration function

The resources (CPU and memory and IO resource) of SB or IOU increases or decreased by the DR operation. If external software depends on quantities or location of these resources, they are affected by DR operation. For this case, if the desired programs (called “collaboration program“) of external programs are registered in specific directories, the desired programs are automatically executed in hot plug collaboration function at SB/IOU hot plug.

5.2.2 Collaboration program execution timing

Hot plug collaboration function executes collaboration programs by the following hot plug events:

- SB hot add
  - Before enabling CPU and memory resources on a hot added SB (simply called “before addition of SB“)
  - After enabling CPU and memory resources on a hot added SB (simply called “after addition of SB“)
  - At the time that CPU and memory resources on a added SB fails to be enabled (simply called “at the addition of SB failure time”)
- SB hot remove
  - Before disabling CPU and memory resources on a hot removed SB (simply called “before deletion of SB“)
  - After deleting an SB from a partition (simply called “after deletion of SB“)
  - At the time that an SB failed to be deleted from a partition (simply called “at the deletion of SB failure time)
- IOU hot add
  - Before enabling PCI devices on a hot added IOU (simply called “before addition of IOU“)
  - After enabling PCI devices on a hot added IOU (simply called “after addition of IOU“)
  - At the time that PCI devices on a hot added IOU fails to enable (simply called “at the addition of IOU failure time”)
- IOU hot remove
  - Before disabling PCI devices on a hot removed IOU (simply called “before deletion of IOU“)
  - After turning off an IOU (simply called “after deletion of IOU“)
  - At the time that an IOU failed to be turned off (simply called “at the deletion of IOU failure time”)

At each execution time, the hot plug collaboration function sequentially executes the collaboration program stored in the specified directory.

The collaboration programs that are executed before addition of SB, after addition of SB, before deletion of SB, after deletion of SB, before addition of IOU, after addition of IOU, before deletion of IOU and after deletion of IOU are executed in ascending order of program file names.

The collaboration program that are executed at the SB addition failure time, at the SB deletion failure time, at the IOU addition failure time and at the IOU deletion failure time are executed in descending order of program file names.

For the directory that stored collaboration program, see Section 5.2.4 "Directory that stored collaboration program”. For naming rule of collaboration program, see Section 5.2.5 “Naming convention of collaboration program”.

5.2.3 Timeout of collaboration program

Hot plug collaboration function does not know details of collaboration programs. Thus hot plug collaboration function sequentially execute collaboration programs for preventing depletion of resources. A collaboration program may terminate abnormally by some reasons. Thus when collaboration program does not finish in constant waiting time, hot plug collaboration function handles it as follows:

1) Send SIGTERM signal to collaboration program
2) Send SIGKILL signal to collaboration program when a collaboration program does not finish even if waiting for one minute after SIGTERM is sent

This waiting time can be modified by configuration file. The assignable value is shown below. The default value is five minutes.

Set value	Action
5-1024	Wait for the completion of a collaboration program at specified time. The unit of value is the minute.
0	Wait for the completion of a collaboration program unlimitedly
-1 or less	The value is out of assignable value. Wait for the completion of a collaboration program at 5 minutes as default.
1-4	The value is out of assignable value. Wait for the completion of a collaboration program at 5 minutes as default.
1025 or more	The value is out of assignable value. Wait for the completion of a collaboration program at 5 minutes as default.

Specify 0 to waiting time, when collaboration program must be completed to continue DR. But DR function stops until the collaboration program is completed.

5.2.4 Directory that stored collaboration program

The collaboration program must be stored in the following directory.

```
/opt/FJSVdr-util/user_command
```

The configuration file of the collaboration program must be stored in the following directory.

```
/opt/FJSVdr-util/etc
```

Note that creating new directory under the above directories is not allowed.

5.2.5 Naming convention of collaboration program

Naming convention of collaboration program is shown below.

```
nn-XXXXX
```

- nn

  "nn" must be a two-digital number (one-byte characters) ranging from 10 to 90

  Hot plug collaboration function executes the collaboration programs in ascending order of their collaboration program name. To execute a collaboration program earlier than the other collaboration programs by installed other packages, assign the collaboration programs with lower numbers than those assigned to the collaboration programs installed by the other packages. To execute a collaboration program later than the other collaboration programs by installed other packages, assign the collaboration programs with higher numbers than those assigned to the collaboration programs installed by the other packages.

- XXXXX

  "XXXXX" represents a collaboration program identifier which constructed by alpha-numeral and hyphen (one-byte characters)

  The recommended identifier for a collaboration program is a name from which the contents of the program can easily be inferred. To avoid duplicative collaboration program name, head of identifier should have the package name.

Note: "-" between "nn" and "XXXX" must not be omitted

Naming convention of configuration file of collaboration program is shown below:

```
XXXXX.conf
```

- XXXXX

  "XXXXX" is character string which specified as collaboration program identifier.
  "nn-" of collaboration program name must be omitted.

An example of a collaboration program name is shown below.

e.g. Package name is FJSVxxx and collaboration program are get-cpu-info and get-node-info

```
[collaboratino program name]
10-FJSVxxx-get-cpu-info
20-FJSVxxx-get-node-info

[configuration file of collaboration program]
FJSVxxx-get-cpu-info.conf
FJSVxxx-get-node-info.conf
```

5.2.6 Method of describing configuration file of collaboration program

How to write a configuration file of a collaboration program is as follows:

```
<Setting itme> = <Setting value>
```

Setting item	Setting value
verbose	set of verbose mode true or false When true is set to verbose item, collaboration program is executed called with "-v" argument which indicates verbose mode Default value is false
timeout	timeout period of collaboration program For assignable value, please refer to "5.2.3 Timeout of collaboration program".

If a collaboration program is executed in verbose mode, standard output and standard error output of the collaboration program is output to a special log file. Other outputs of collaboration program which executed in non-verbose mode are output to system log as well as log of DR command. For the log of collaborate program, refer to the following "5.2.10 Output of collaboration program".

Configuration file of collaboration program is not indispensable. If configuration file does not exist, hot plug collaboration function executes collaboration programs by using the default value.

Note:

- Blank line and the line that starts by # in the configuration file is ignored.
- You can use Japanese after #, but in this case character code of Japanese must use UTF-8 form.
- Write one setting item by one line.
- You can insert the blank before or after the setting item, blank and the setting value.

An example of a configuration file is shown below.
e.g. When collaboration program named nn-FJSVxxxx-get-info executes in verbose mode and timeout period is 10 minutes.

```
# FJSVxxx-get-cpu-info


verbose = true
timeout = 10
```

5.2.7 Permission required for collaboration program

P command is executed with the root permission. And because hot plug collaboration function is executed as one function of the DR command, the collaboration programs must be assigned the execution attribute of the root permission. Collaboration programs without the execution attribute of the root permission are not executed.

5.2.8 Argument passed to collaboration program

When executing a collaboration program, hot plug collaboration function passed hot plug event timing to the collaboration program as option. Result of hot plug and hot added/removed resources are passed to the collaboration program as option, when the collaboration program is executed at the addition/deletion of SB/IOU failure time.

The list of the arguments passed to a collaboration program is shown below.

Options	Arguments	Meaning
p	hot plugged device SBx IOUy	Specifies the hot plugged device. “x“ and “y“ are set to either -1 or 0-3.
e	hot plug eventl timing ADD_PRE ADD_POST RM_PRE RM_POST	Specifies the hot plug event timing. ADD_PRE : before dynamic addition ADD_POST : after dynamic addition RM_PRE: before dynamic deletion RM_POST : after dynamic deletion
r	result of hot plug SUCCESS FAILURE	Specifies the result of hot plug When the hot plug event timing is only ADD_POST or RM_POST, this option is specified.
v	none	Specifies the verbose mode. Collaboration program can use it for trigger of debug messages.
c	CPU number	Specifies the hot added/removed CPU number list from now. When hot plugged device is SBx and hot plug event timing is ADD_PRE or RM_PRE, this option is specified. Example of specified CPU number list is shown below. The CPU number list is a list delimited by the comma. When this list is delimited by the hyphen, it means all ranges of the first and last number are included. None means there is no CPU. 1-10 2,3 1-10,12-19 None
m	amount of memory	Specifies the hot added/removed amount of memory from now. When hot plugged device is SBx and hot plug event timing is ADD_PRE or RM_PRE, this option is specified. Unit of amount of memory is kilo byte. Example of specified amount of memory is shown below. 8388608

Options	Arguments	Meaning
n	NUMA Node number	Specifies the hot added/removed NUMA node number list from now. When hot plugged device is SBx and hot plug event timing is ADD_PRE or RM_PRE, this option is specified. Example of specified NUMA node number list is shown below. The NUMA node number list is a list delimited by the comma. When this list is delimited by the hyphen, it means all ranges of the first and last number are included. None means there is no NUMA node. 2,3 4 5-7 None
d	PCI address	Specifies the “bus number: device number: function number (PCI address)“ of hot removed PCI device except for PCI bridge from now. When hot plugged device is IOUx and hot plug event timing is RM_PRE, this option is specified. Example of specified PCI address is shown below. 01:23.4 01:23.4,56:78:9,ab:cd.e Refer to the output of the lspci command for the example of the PCI address.。

Example of specified options by the hot plug collaboration function is shown below.

```
/path/to/program1 -p SB1 -e ADD_PRE -c 10-19 -m 12345678  –n 2-3
/path/to/program2 -e ADD_POST –r SUCCESS -p SB2
/path/to/program3 -v -p IOU1 -e RM_PRE -d 00:01.2,03:04.5
/path/to/program4 -e RM_POST –v –p IOU2 –r FAILURE
```

5.2.9 Exit status of collaboration program

When collaboration program terminates normally and DR function can be continued, the collaboration program must return 0. When collaboration program terminates abnormally and DR function cannot be continued, the collaboration program must return non 0.

Hot plug collaboration function checks the return value of the collaboration program. If return value is not 0, hot plug collaboration function stops at the time.

5.2.10 Output of collaboration program

Standard output (stdout) and standard error output (stderr) from collaboration program output to system log. But, when collaboration program executes in verbose mode, stdout and stderr output to a file in the following directory. In this case file name becomes “collaboration program name.log“. And the output does not output to system log.

```
/opt/FJSVdr-util/var/log
```

Form of the outputs is as follows:

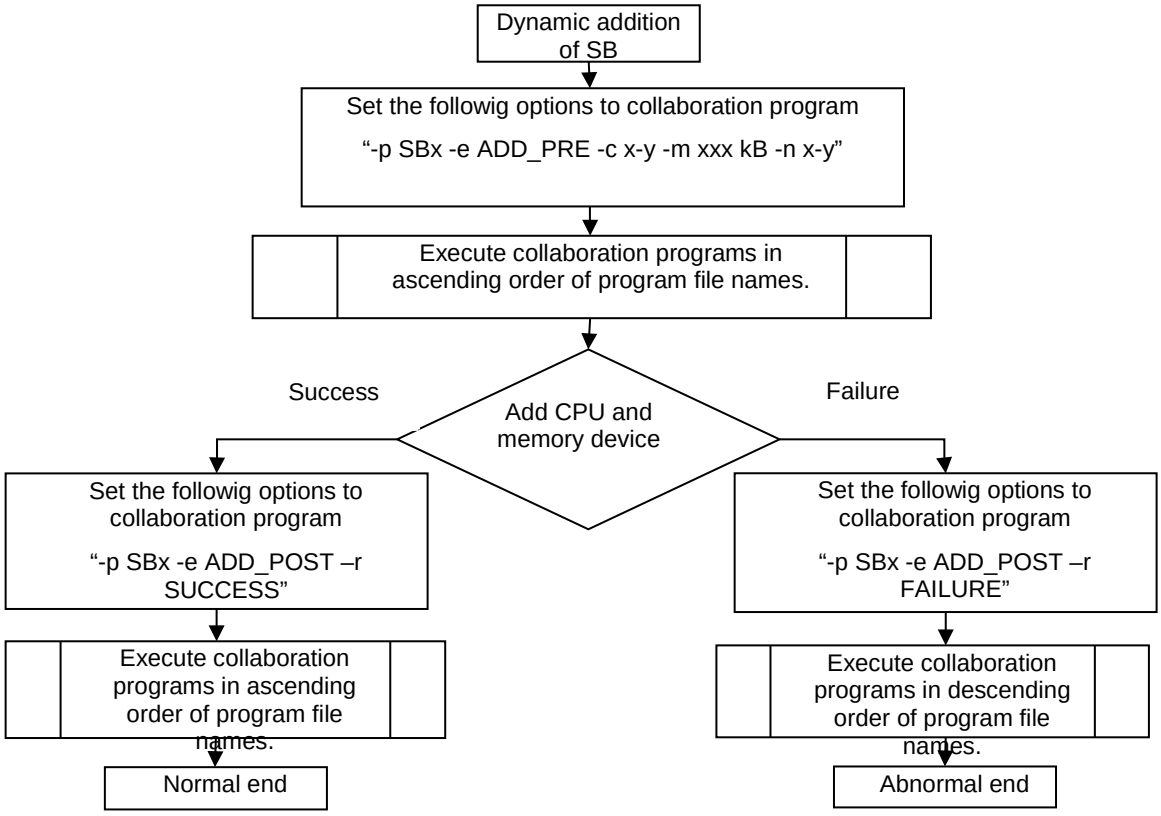
```
<time> : dr-util : <collaboration program name> : <INFO | ERR> : <output of collaboration program>
```

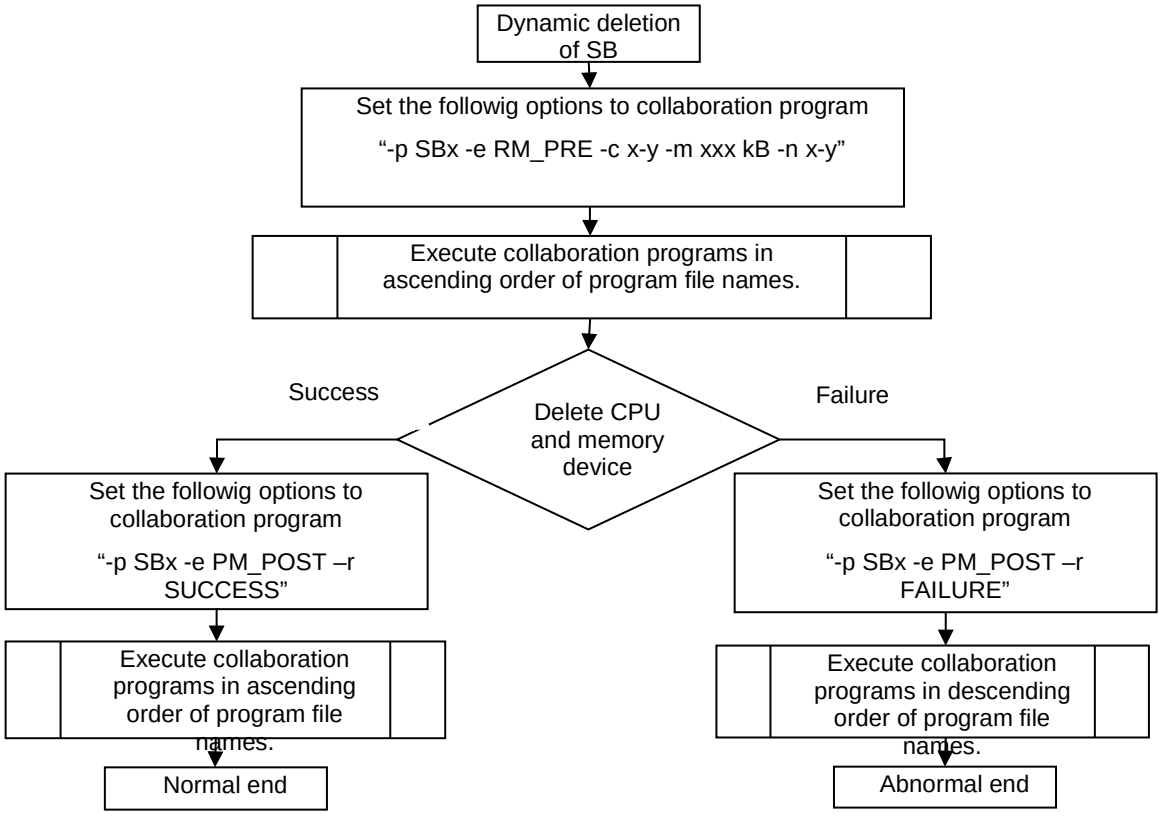
Example of output is shown below.

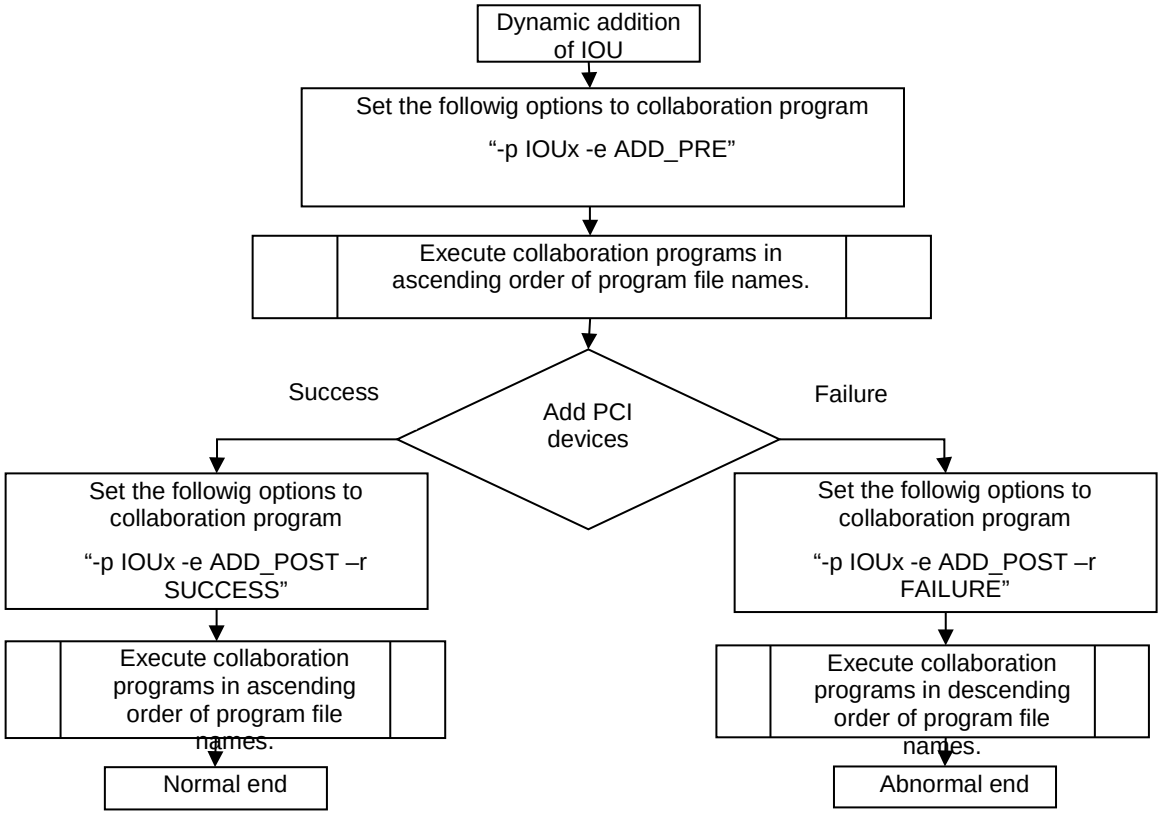
e.g. When standard error output and standard output of 10-FJSVxxx-get-cup-info output to system log

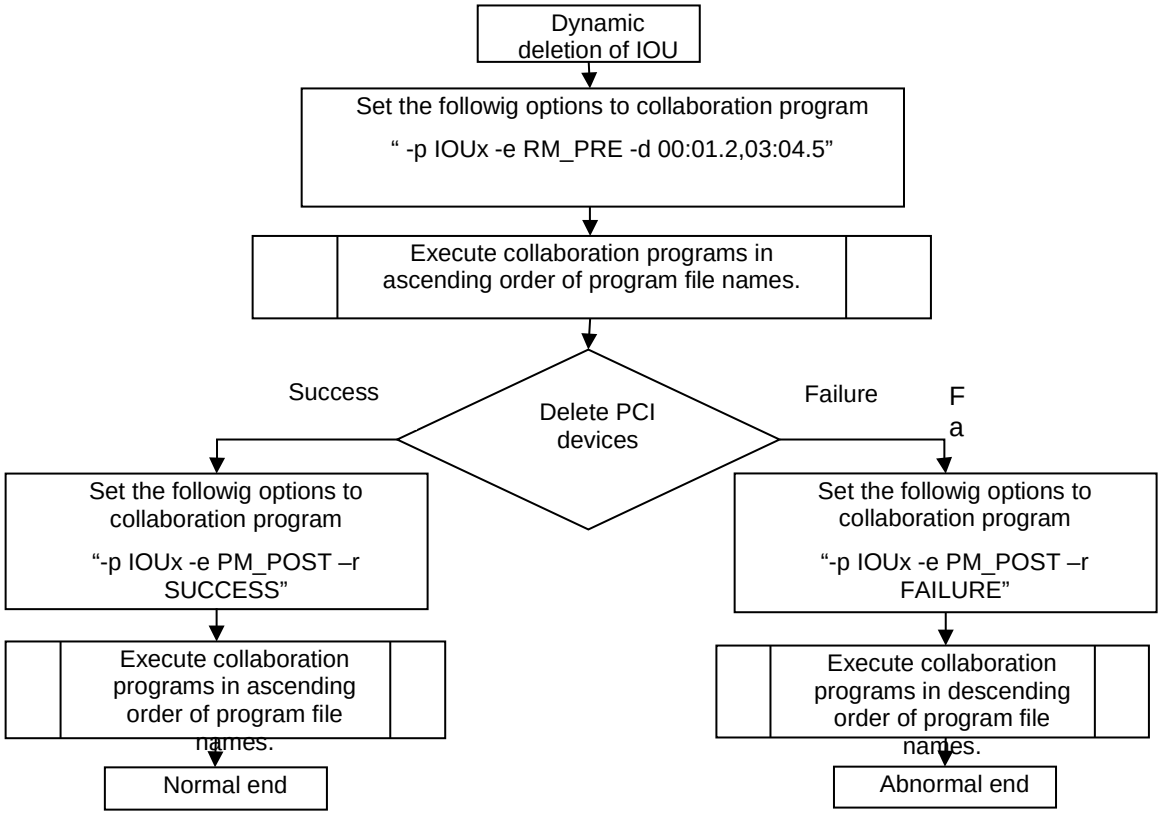
```
Jul 12 22:05:00 dr-util : 10-FJSVxxx-get-cpu-info : ERR : Invalid Option
Jul 12 22:06:00 dr-util : 15-FJSVxxx-get-mem-info : INFO : Good news, memory will be added 1 YB :)
```

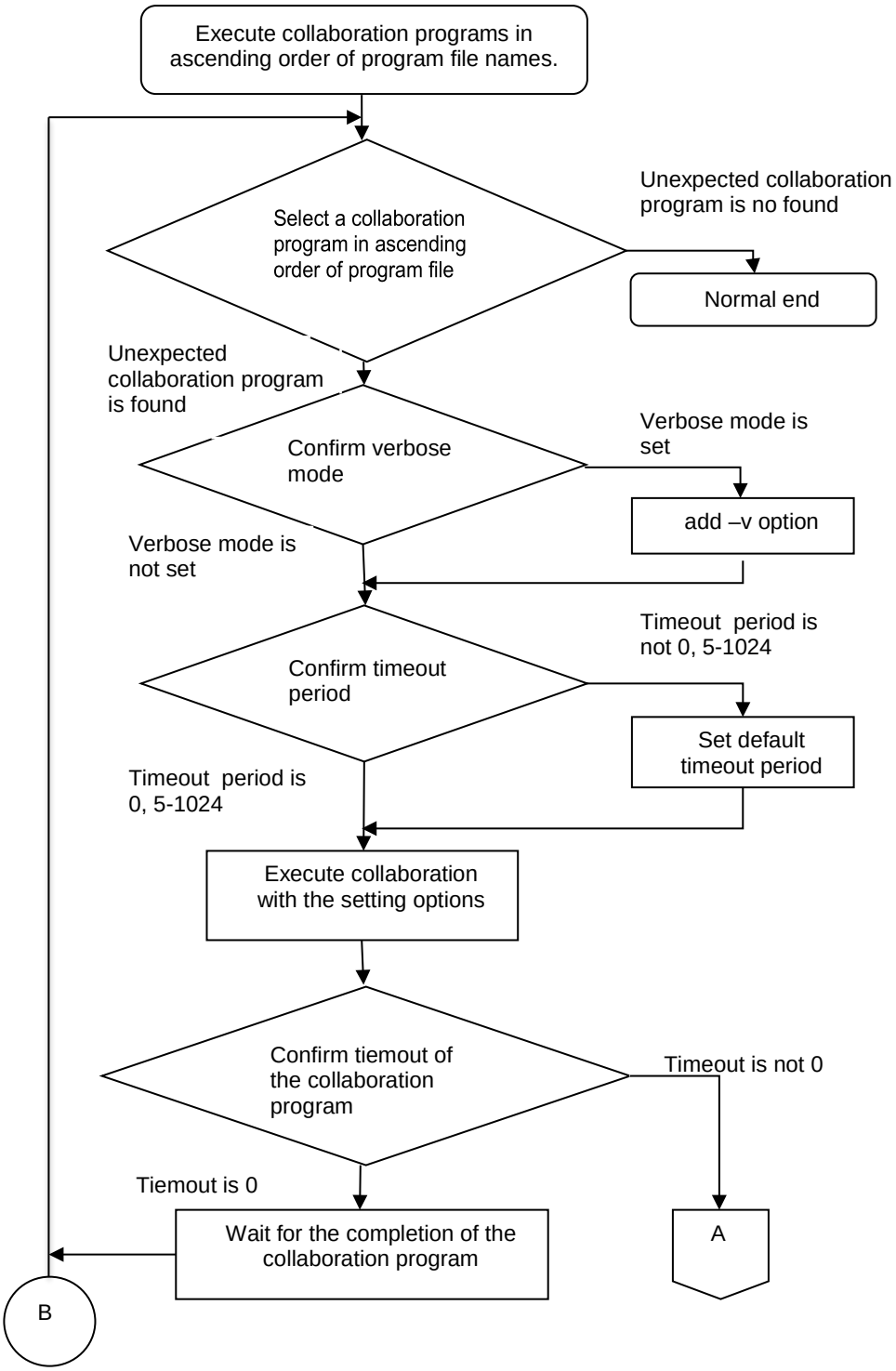
5.2.11 Flow of collaboration program execution

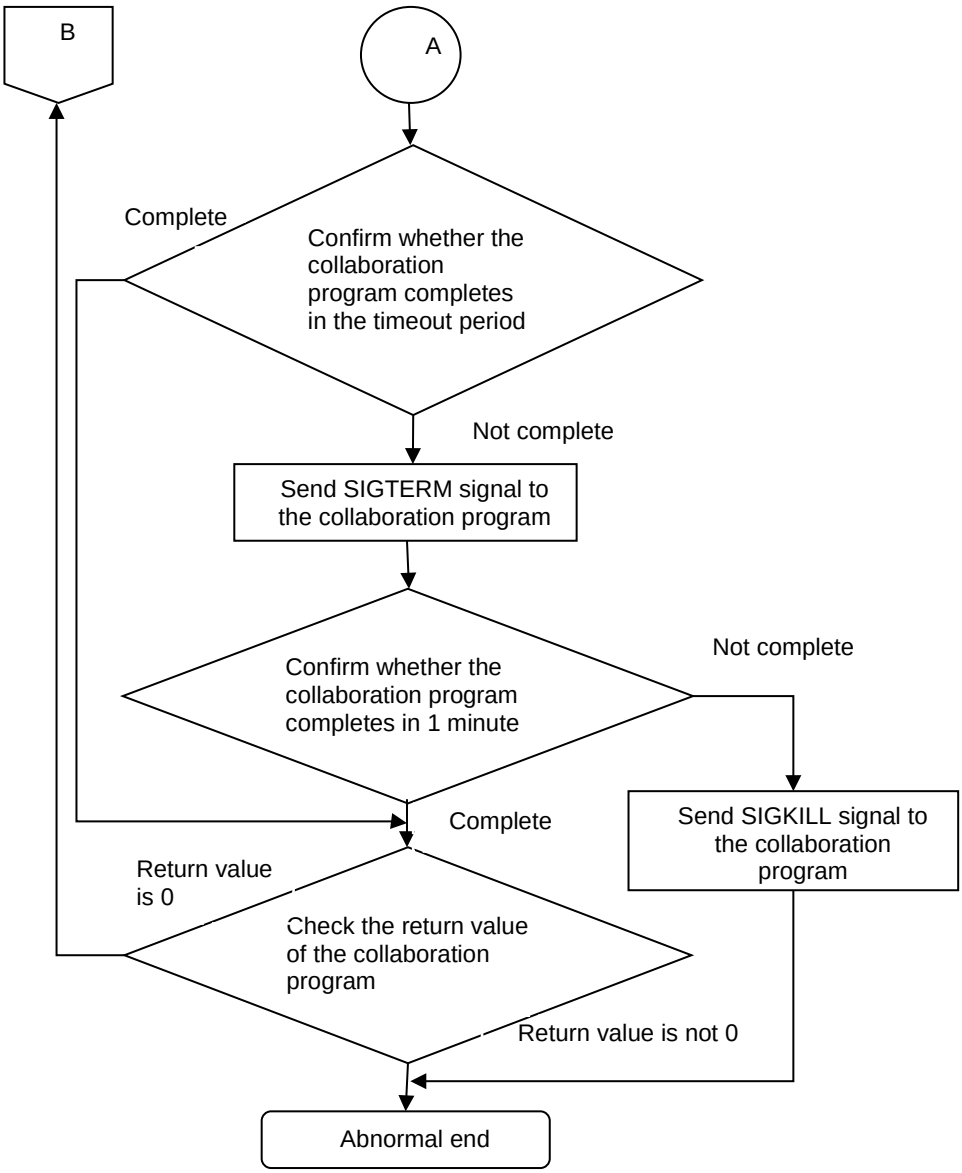

Dynamic addition of SB
Set the followig options to collaboration program
“-p SBx -e ADD_PRE -c x-y -m xxx kB -n x-y”
Execute collaboration programs in ascending order of program file names.
Add CPU and memory device
Success
Failure
Set the followig options to collaboration program
“-p SBx -e ADD_POST –r SUCCESS”
Set the followig options to collaboration program
“-p SBx -e ADD_POST –r FAILURE”
Execute collaboration programs in ascending order of program file names.
Execute collaboration programs in descending order of program file names.
Normal end
Abnormal end


Dynamic deletion of SB
Set the followig options to collaboration program
“-p SBx -e RM_PRE -c x-y -m xxx kB -n x-y”
Execute collaboration programs in ascending order of program file names.
Delete CPU and memory device
Success
Failure
Set the followig options to collaboration program
“-p SBx -e PM_POST –r SUCCESS”
Set the followig options to collaboration program
“-p SBx -e PM_POST –r FAILURE”
Execute collaboration programs in ascending order of program file names.
Execute collaboration programs in descending order of program file names.
Normal end
Abnormal end


Dynamic addition of IOU
Set the followig options to collaboration program
“-p IOUx -e ADD_PRE”
Execute collaboration programs in ascending order of program file names.
Add PCI devices
Success
Failure
Set the followig options to collaboration program
“-p IOUx -e ADD_POST –r SUCCESS”
Execute collaboration programs in ascending order of program file names.
Normal end
Set the followig options to collaboration program
“-p IOUx -e ADD_POST –r FAILURE”
Execute collaboration programs in descending order of program file names.
Abnormal end


Dynamic deletion of IOU
Set the followig options to collaboration program
“ -p IOUx -e RM_PRE -d 00:01.2,03:04.5”
Execute collaboration programs in ascending order of program file names.
Delete PCI devices
Success
Failure
F
a
Set the followig options to collaboration program
“-p IOUx -e PM_POST –r SUCCESS”
Execute collaboration programs in ascending order of program file names.
Normal end
Set the followig options to collaboration program
“-p IOUx -e PM_POST –r FAILURE”
Execute collaboration programs in descending order of program file names.
Abnormal end


Execute collaboration programs in ascending order of program file names.
Select a collaboration program in ascending order of program file
Unexpected collaboration program is no found
Normal end
Unexpected collaboration program is found
Confirm verbose mode
Verbose mode is set
add –v option
Verbose mode is not set
Confirm timeout period
Timeout period is not 0, 5-1024
Set default timeout period
Timeout period is 0, 5-1024
Execute collaboration with the setting options
Confirm tiemout of the collaboration program
Timeout is not 0
Tiemout is 0
Wait for the completion of the collaboration program
A
B


B
A
Complete
Confirm whether the collaboration program completes in the timeout period
Not complete
Send SIGTERM signal to the collaboration program
Confirm whether the collaboration program completes in 1 minute
Not complete
Send SIGKILL signal to the collaboration program
Complete
Return value is 0
Check the return value of the collaboration program
Return value is not 0
Abnormal end

CHAPTER 6 Setting of sadump environment

In this chapter, how to configure sadump is explained.
A configuration of sadump is saved to UEFI configuration information. Back up it to restore the configuration. About backing up and restoring UEFI configuration information, refer “8.1.1 Backing up and restoring UEFI configuration information” in “PRIMEQUEST 2000 Series Administration Manual”.

6.1 Sadump Configuration Menu

To configure sadump, select main menu to set up sadump from the [Device Manager] menu. Configure sadump by inputting values in the main menu and submenu which is shown below. The structure of menu is as follows.

When the "PCI ROM Priority" setting of the PCI Subsystem Configuration menu is "EFI Compatible ROM", the Sadump setting menu is displayed.

FIGURE 6.1 Structure of menu for sadump configuration (1)

From [Dump device Manager]

[Create a dump device] Menu

[Select device] Menu

[Select multiple devices] Menu

[Confirmation] Menu

FIGURE 6.2 Structure of menu for sadump configuration (2)

From [Dump device Manager]

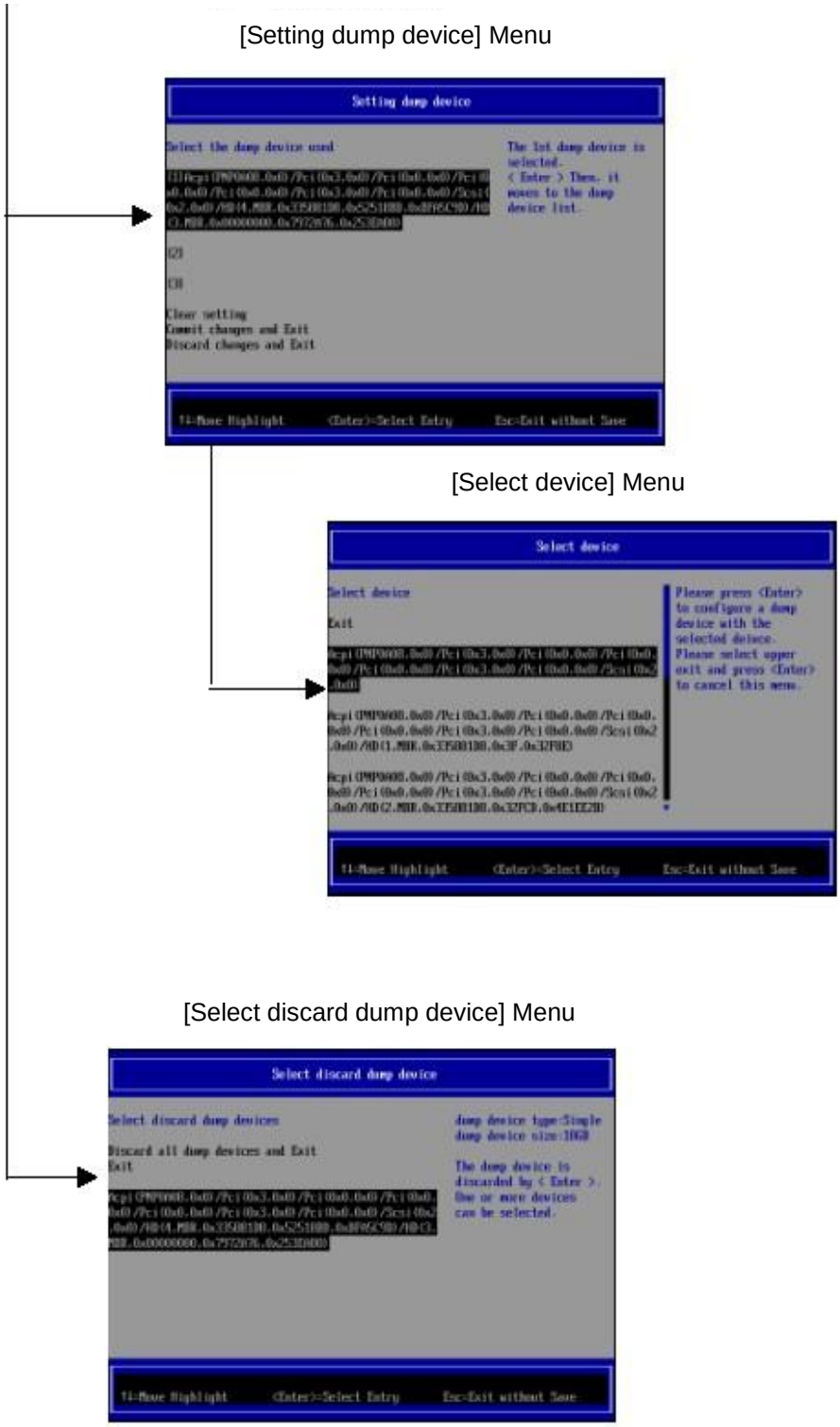
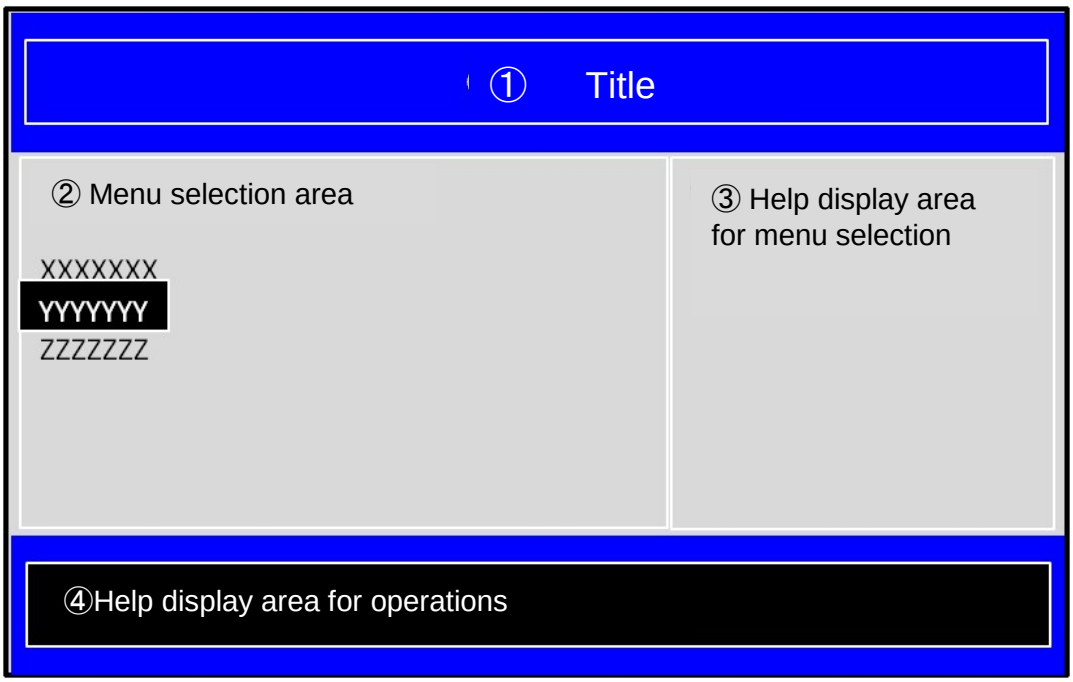


FIGURE 6.3 Structure of menu for sadump configuration (3)

6.1.1 Screen areas

The sadump configuration screen consists of four screen areas as shown below.



No.	Item	Description
1	Title	Displays title of menu.
2	Menu selection area	Displays menu to operate. They can be operated by [Enter] key, etc. Selected item is highlighted.
3	Help display area for menu selection	Displays the detailed explanation about menu selected in menu selection area.
4	Help display area for operations	Displays help information to operate screen.

FIGURE 6.4 Screen areas of sadump configuration

6.2 Main menu

In the [Device Manager] menu, select [Sadump Configuration], and then a main menu is displayed. You can set up sadump or dump device in this menu.

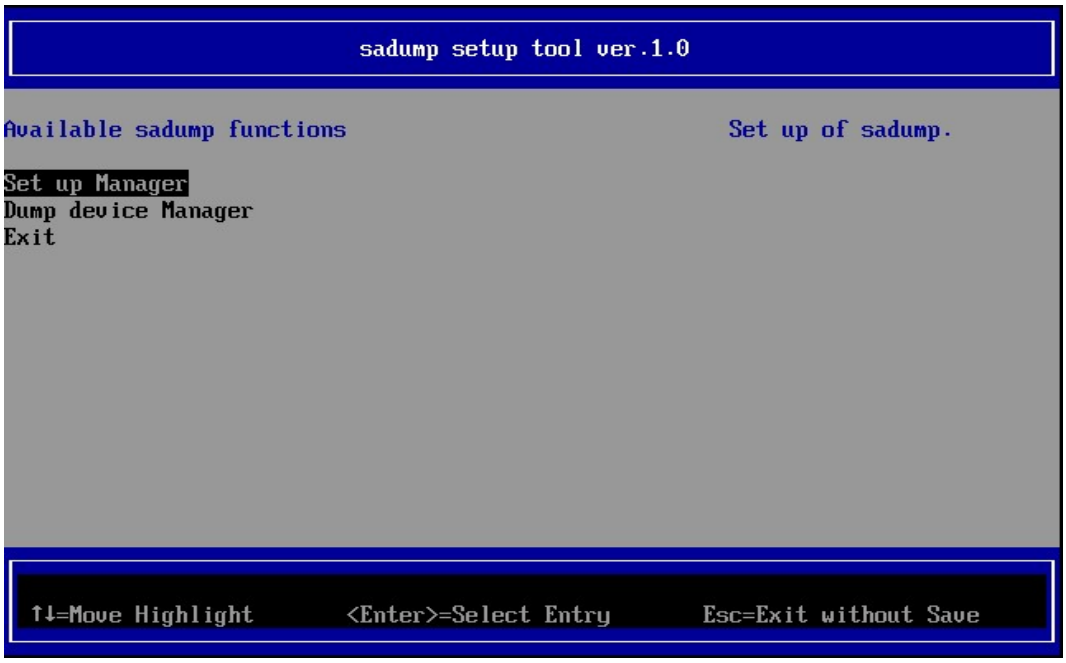


FIGURE 6.5 Main menu

TABLE 6.1 Displayed contents of the menu selection area

Item	Description
Set up Manager	Go to sadump setup menu.
Dump device Manager	Go to dump device maintenance menu.
Exit	Exit this menu

TABLE 6.2 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Moves the cursor up or down
<Enter>=Select Entry	Selects an entry.

Note
Don't operate [F2] key. [Esc] key is displayed on the screen but don't operate it.

6.3 [Set up Manager] Menu

Select the [Set up Manager] menu from the main menu and then sadump setup menu is displayed.

In this menu, items for sadump configuration are listed. The items are displayed as follows in initial state where sadump is not set up.

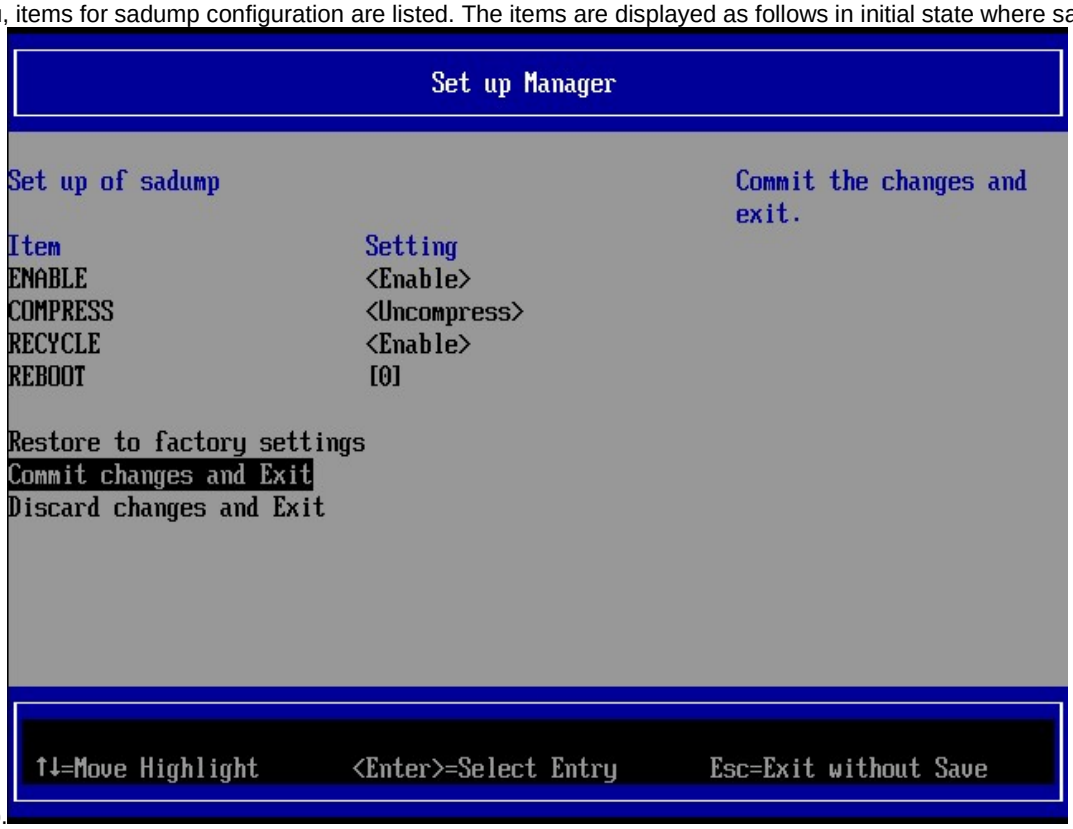


FIGURE 6.6 sadump setup menu

TABLE 6.3 Displayed contents of the menu selection area

Item	Description
sadump	Specifies [Enable] or [Disable] for sadump function. - Enable : Enable sadump - Disable : Disable sadump The default is [Disable].
COMPRESS	Specifies format when sadump writes to dump device. - Uncompress : Data is not compressed
RECYCLE	Specifies [Enable] or [Disable] for dump device reuse. When [Enable] is specified, the oldest dump is overwritten. - Enable : Enable RECYCLE option - Disable : Disable RECYCLE option The default is [Enable].
REBOOT	Specifies behavior of sadump after dumping - 0 : Halt - 1-3600 : Reboots after specified time(second) The default is [0].
SKIPZEROPAGE [This item can be available in the PRIMEQUEST	Specifies [Enable] or [Disable] for Skip Zero Page function. - Enable : Enable - Disable : Disable

2400E3/2800E3/2800B3]	The default is [Disable].
TIMEOUT [This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3]	Specifies time to interrupt the collection of the sadump. - 0 : No interruption - 1-255 : Timeout period (The unit is hour). The default is [0].
Restore to factory settings	Sets all items to default.
Commit Changes and Exit	Saves the changes and exits this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changes and exits this menu.

TABLE 6.4 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Moves the cursor up or down
<Enter>=Select Entry	Selects an entry. In the case of ENABLE, COMPRESS, RECYCLE, selection item is shown as pop-up window. In the case of REBOOT, you can input a value. Specify a value, and commit it by [Enter] key.

Note
Don’t operate [F2] key. [Esc] key is displayed on the screen but don’t operate it.

6.4 [Dump device Manager] Menu

This is displayed when the [Dump device Manager] menu is selected in the main menu.
In this menu, you can create, setup, discard dump device.

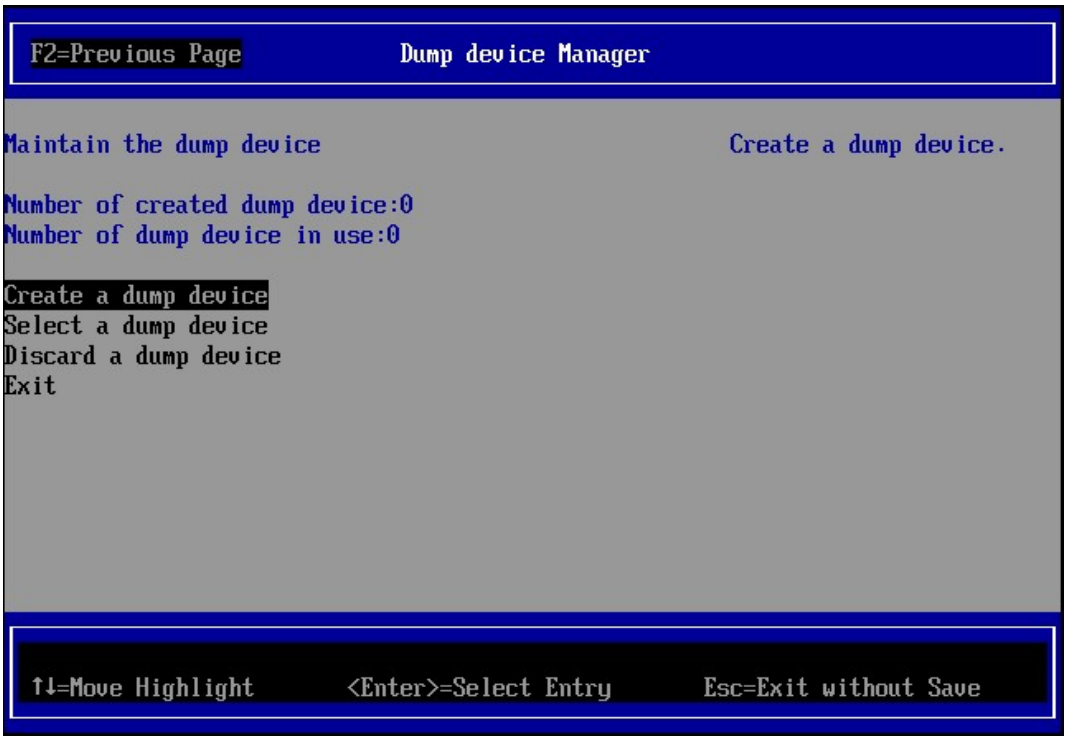


FIGURE 6.7 Dump device maintenance menu

TABLE 6.5 Displayed contents of menu selection area

Item	Description
Display area	Displays the number of dump devices which are already created, and displays the number of dump devices which are already set up.
Create a dump device	Go to dump device create menu.
Select a dump device	Go to dump device setup menu.
Discard a dump device	Go to dump device discard menu.
Exit	Exits this menu

TABLE 6.6 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Moves the cursor up or down
<Enter>=Select Entry	Selects an entry.

Note
Don’t operate [F2] key. [Esc] key is displayed on the screen but don’t operate it.

6.5 [Create a dump device] Menu

This is displayed when the [Create a dump device] menu is selected in the main menu.
Specify operation, creating dump device or selecting created dump device.

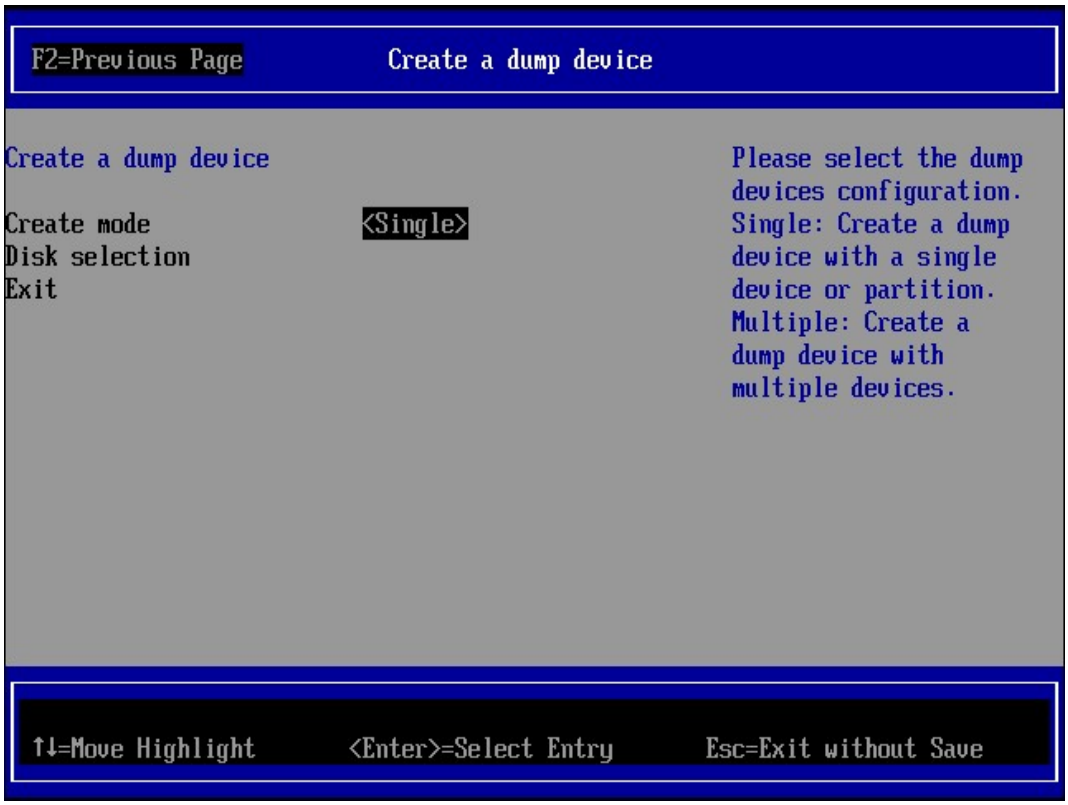


FIGURE 6.8 Dump device create menu

TABLE 6.7 Displayed contents of menu selection area

Item	Description
Create mode	Select create mode of dump device. Single: Create with single disk or single partition. To set up for redundancy, select [Single] and then configure multiple sadump devices. Multiple: Create with multiple disks. Use this when system memory is large and one disk is insufficient. The default is [Single].
Disk selection	Go to dump device select menu
Exit	Exits this menu.

TABLE 6.8 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Moves the cursor up or down
<Enter>=Select Entry	Selects an entry.

Note
Don't operate [F2] key. [Esc] key is displayed on the screen but don't operate it.

6.6 [Select device] Menu

This is displayed when the [Create mode] menu is set to [Single] in the [Create a dump device] menu.
Select disk or disk partition and create dump device.

CAUTION	(Data corruption) Confirm again if correct disk is selected when selecting dump device. If wrong disk is selected, the data the disk has is corrupted.

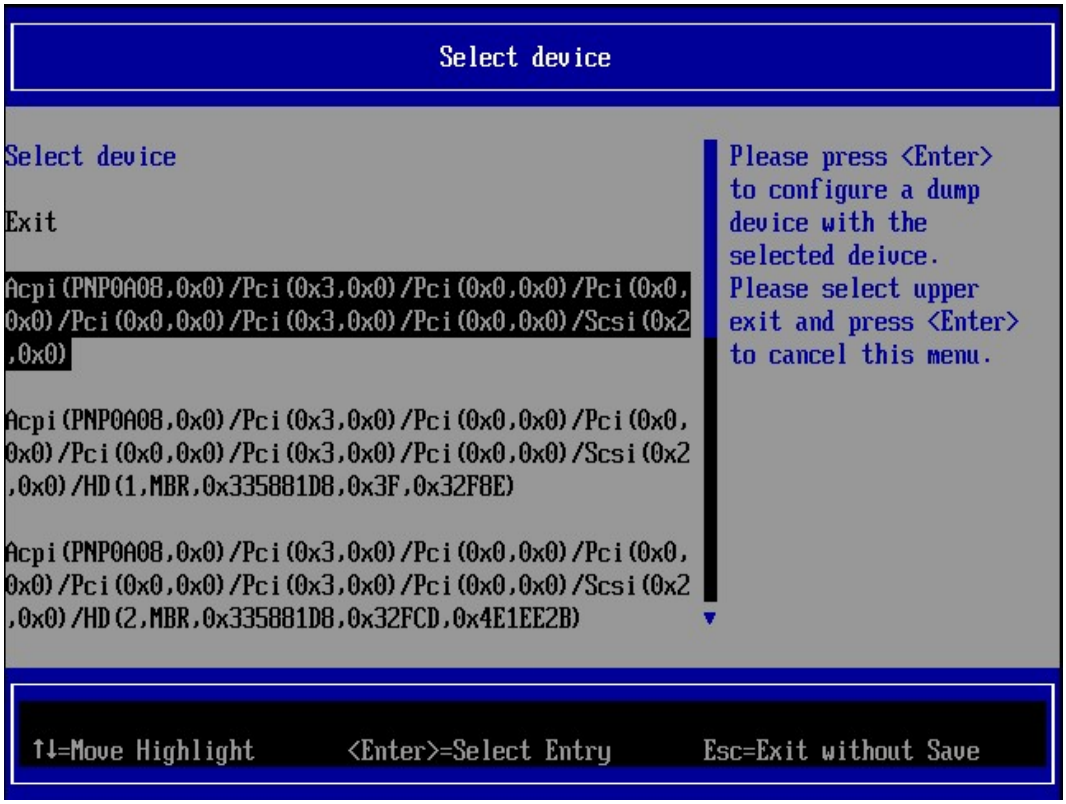


FIGURE 6.9 Dump device select menu

TABLE 6.9 Displayed contents of menu selection area

Item	Description
Exit	Exits this menu
ACPI name of disk/disk partition	Select disk or disk partition to create dump device

Remarks
-Regarding to ACPI name which is used for disk or disk partition, refer”5.7 Device Path”.
-To use devices of ETERNUS as dump device, setting up UEFI deriver is needed beforehand. Refer “PRIMEQUEST 2000 Series SAN Boot Environment Configuration Manual (C122-E206EN)” for details.

TABLE 6.10 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Moves the cursor up or down
<Enter>= Select Entry	Create dump device with selected disk or disk partition, and go to dump device create menu. If [Exit] is selected, go to dump device create menu without creating dump device.

Note

[Esc] key is displayed on the screen but don't operate it.

- A dump device is initialized when it is created. It takes a time to initialize, depends on the size of selected disk or disk partition. In some cases it takes more than several minutes until going to the next screen.

6.7 [Setting dump device] Menu

This is displayed when the [Select a dump device] menu is selected in the [Dump device Manager] menu.
Select dump device for use from created dump device.

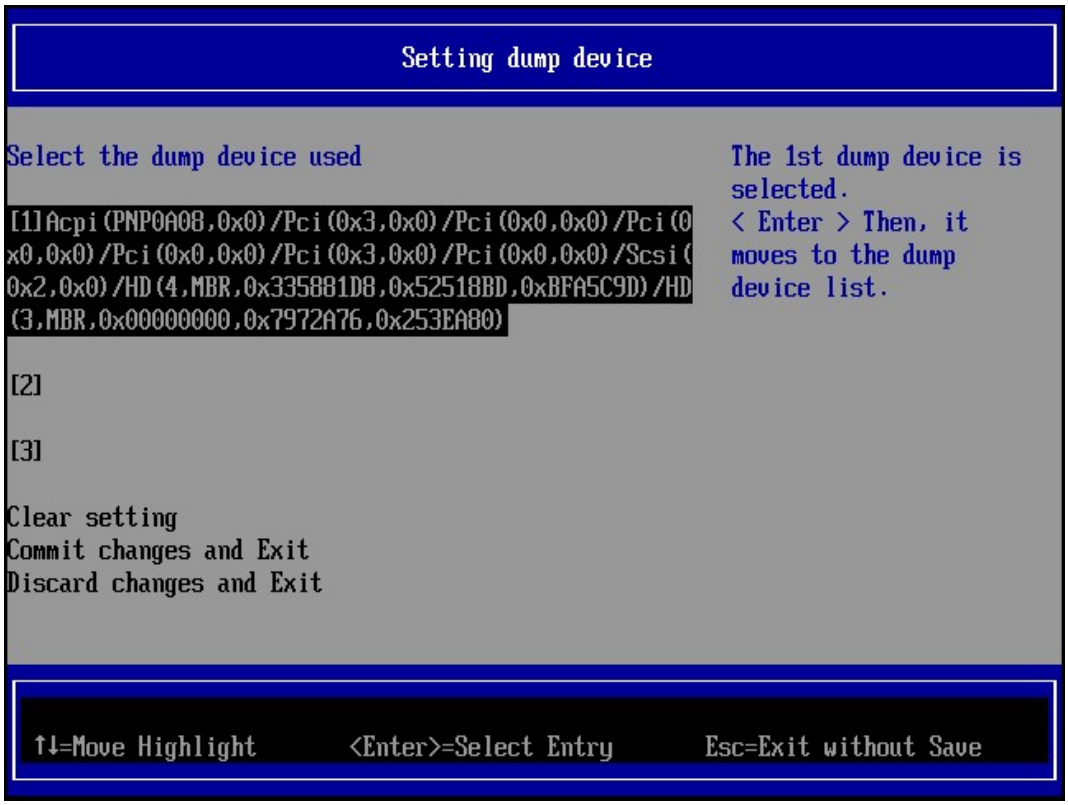


FIGURE 6.10 [Setting dump device] Menu

TABLE 6.11 Displayed contents of the menu selection area

Item	Description
The 1st dump device	Select the 1st dump device. If not selected yet, only [1] is displayed.
The 2nd dump device	Select the 2nd dump device. If not selected yet, only [2] is displayed.
The 3rd dump device	Select the 3rd dump device. If not selected yet, only [3] is displayed.
Clear setting	Clears all the current setting.
Commit Changes and Exit	Saves the changes and exits this menu. **Attention** It is necessary to come off the menu by "Commit Changes and Exit" when the setting is changed. Do not come off the menu by "Esc".
Discard Changes and Exit	Cancels the changes and exits this menu.

TABLE 6.12 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Move the cursor up or down.
<Enter>= Select Entry	If [1], [2] or [3] is selected, move to [Select device]. Otherwise, perform processing corresponding to the selected item.

Note
- Don’t operate [F2] key. [Esc] key is displayed on the screen but don’t operate it.
- If [Commit Changes and Exit] is performed, all the selected devices, including the devices that has already been selected previously, is being checked. If there’s a selected device that is actually not present, the device selection is automatically cleared.

"Clear setting" There are the following points of concern about the behavior when operating it.
- With the second dump device or the third dump device has selected it, and
- When you do "Clear setting" two times or more after it boots up a system

After it executes it "Clear setting", the selection of the dump device might not be cleared and remain as it is. It becomes impossible to operate change of the selection of the dump device and "Clear setting" at the following.

In this case, please let me reboot a system operating "Reset" or "PowerCycle" from WebUI of MMB.
In the dump device setting menu after reactivation, it enters the state that the selection is cleared. And, it comes to be able to operate the dump device selection.

6.8 [Select device] Menu

This is displayed when [1], [2] or [3] is set in the [Setting dump device] menu.
Dump devices on the current system is listed. Select a dump device from a list.
In case of multiple disk configurations, select the 1st dump disk.

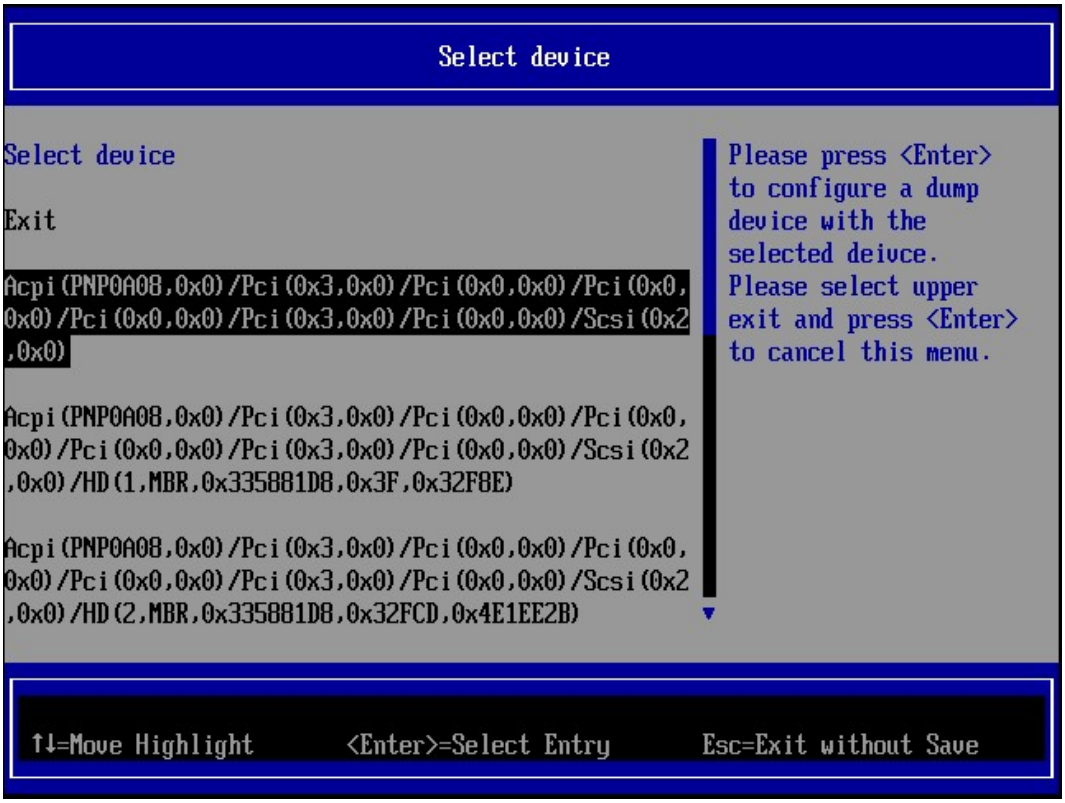


FIGURE 6.11 [Select device] Menu

TABLE 6.13 Displayed contents of menu selection area

Item	Description
ACPI name of dump device	ACPI name of disk/partition is displayed. Selected dump device is highlighted.

TABLE 6.14 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Move the cursor up or down.
<Enter>= Select Entry	Select the dump device on the cursor, and return back to [Setting dump device] menu.

Note
[Esc] key is displayed on the screen but don't operate it.

6.9 [Select discard dump device] Menu

This is displayed when the [Discard a dump device] is selected in the [Dump device Manager] menu.
Discard unnecessary dump device. To discard dump device, select the dump device in the following menu.
In case of multiple disk configuration, select the 1st dump device. Then all the remaining dump devices are automatically discarded.

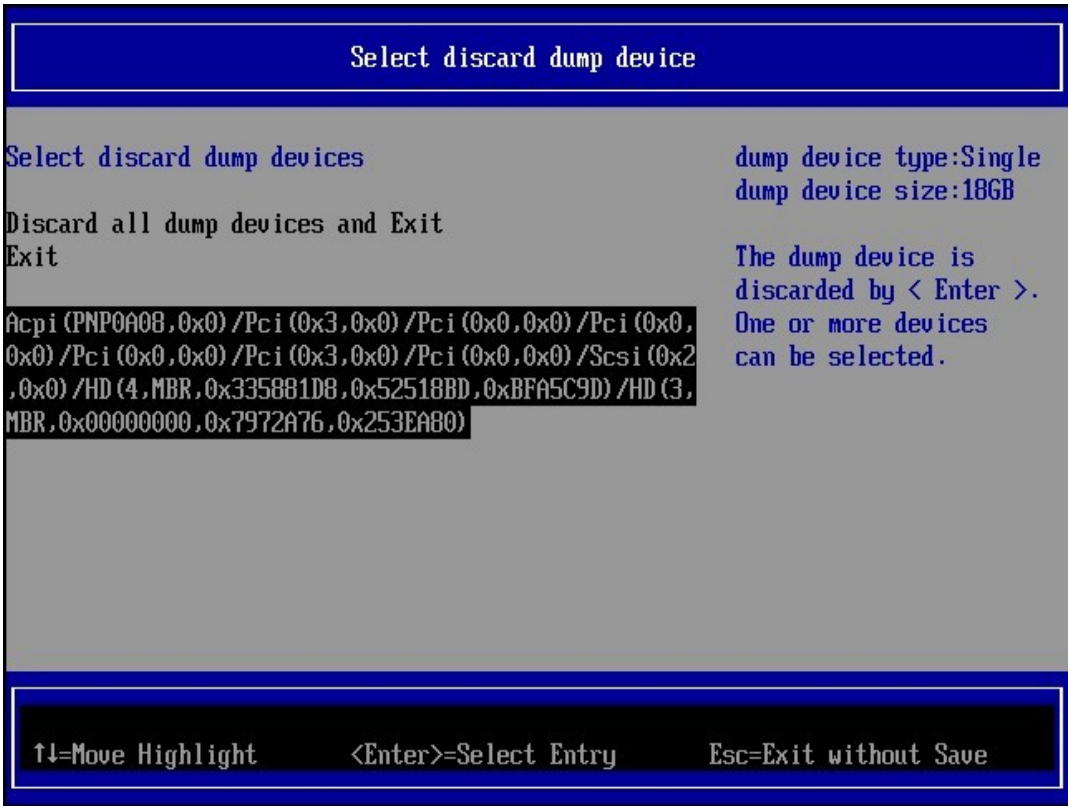


FIGURE 6.12 [Select discard dump device] Menu

TABLE 6.15 Displayed contents of menu selection area

Item	Description
Discard all dump device and Exit	Discards all the dump devices, and then exits this menu.
Exit	Exits this menu without discarding any dump device selected.
ACPI name of dump device	Select a dump device.

TABLE 6.16 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Move the cursor up or down.
<Enter>= Select Entry	If some dump device is selected, discard the selected dump device. Otherwise, perform the selected entry.

Note
Don't operate [F2] key. [Esc] key is displayed on the screen but don't operate it.

6.10 [Select multiple devices] Menu

This is displayed when [Create mode] is set to [Single] in the [Create a dump device] menu.
Select multiple disks for dump devices.

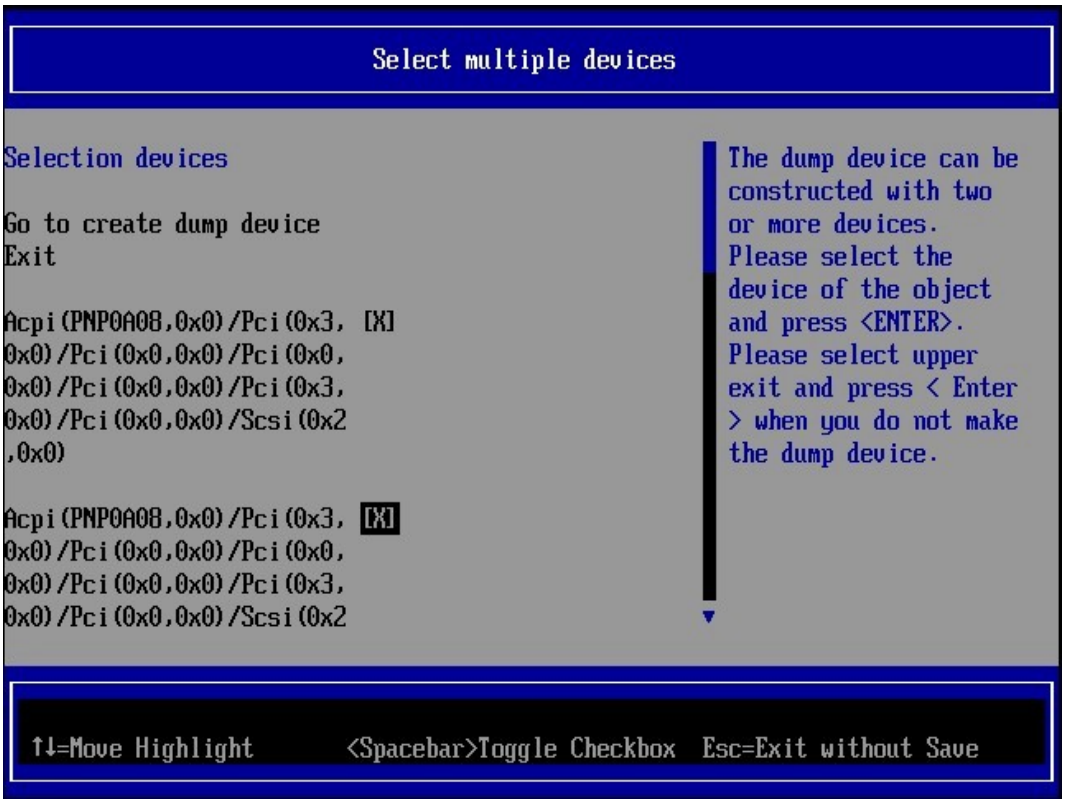


FIGURE 6.13 [Select discard dump device] Menu [Select multiple devices] Menu

TABLE 6.17 Displayed contents of menu selection area

Item	Description
Go to create dump device	Go to [Confirmation] menu.
Exit	Exits this menu without actually creating any dump device.
ACPI name of dump device	ACPI name of the dump device disk is displayed. Select a dump device by [Space] key, then [] on the right-hand of the entry is changed to [X].

Remarks
. Regarding to ACPI name which is used for disk or disk partition, refer “5.7 Device Path”.

TABLE 6.18 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Move the cursor up or down.
<spacebar>= Toggle checkbox	Select a disk. Selected disk is marked with [X]. Operating [Space] key once more, the selection is canceled.

Note
[Esc] key is displayed on screen but don’t operate it.

[Confirmation] Menu
This is displayed when the [Go to create dump device] is selected in the [Select multiple devices] menu
Confirm multiple disks selected for dump devices.

FIGURE 6.14 [Confirmation] Menu

TABLE 6.19 Displayed contents of menu selection area

Item	Description
Create dump device and Exit	Saves the dump device configuration and exits this menu.
Exit	Exits this menu without saving any dump device configuration.
Display area	ACPI name of the disks selected in the [Select multiple devices] menu.

TABLE 6.20 Displayed contents of the help display area for operation

Item	Description
↑↓=Move Highlight	Move the cursor up or down.
<Enter>= Select Entry	Select an entry and perform the corresponding processing.

Note
[Esc] key is displayed on screen but don't operate it.

Appendix A List of Setting Items

The initial values of setting items and values that can be set are listed.

A.1 Setting Items of MMB Web-UI

Initial value and value that can be set of setting items of MMB Web-UI are listed on each window.

A.1.1 Setting items of [System Event Log Filtering Condition] Window
A.1.2 Setting Item of [Operation Log Filtering Condition] Window
A.1.3 Setting Item of [Partition Event Log Filtering Condition] Window
A.1.4 Setting Items of [System Information] Window
A.1.5 Setting items of [System Setup] Window
A.1.6 Setting items of [System Power Control] Window
A.1.7 Setting items of [Power Control] Window
A.1.8 Setting Items of [Schedule Control] Window
A.1.9 Setting Items of [Add Schedule]/ [Edit User] Window
A.1.10 Setting Items of [IPv4 Console Redirection Setup] Window
A.1.11 Setting Items of [IPv6 Console Redirection Setup] Window
A.1.12 Setting Items of [Partition Configuration] Window
A.1.13 Setting Items of [Power Management Setup] Window
A.1.14 Setting Items of [ASR Control] Window
A.1.15 Setting Items of [Console Redirection] Window
A.1.16 Setting Items of [Mode] Window
A.1.17 Setting Items of [Add User]/ [Edit User] Window
A.1.18 Setting Items of [Change Password] Window
A.1.19 Setting Items of [Direcotory Service Configuration] Window
A.1.20 Setting Items of [Date/Time] Window
A.1.21 Setting Items of [IPv4 Interface] Window
A.1.22 Setting Items of [IPv6 Interface] Window
A.1.23 Setting Items of [Management LAN Port Configuration] Window
A.1.24 Setting Items of [Network Protocols] Window
A.1.25 Setting Items of [Refresh Rate] Window
A.1.26 Setting Items of [SNMP Community] Window
A.1.27 Setting Items of [SNMP Trap] Window
A.1.28 Setting Items of [SNMP v3 Configuration] Window
A.1.29 Setting Items of [Create CSR] Window
A.1.30 Setting Items of [Create Selfsigned Certificate] Window
A.1.31 Setting Items of [Edit User] Window
A.1.32 Setting Items of [Add Filter] / [Edit Filter] Window
A.1.33 Setting Items of [Alarm E-Mail] Window
A.1.34 Setting Items of [Alarm E-Mail Filtering Condition] Window

A.1.1 Setting items of [System Event Log Filtering Condition] Window

The following table lists the initial value and value that can be set for setting items of [Operation Log Filtering Condition] Window.

TABLE A.0.1 Setting item of [System Event Log Filtering Condition] Window

Setting Items	Initial Value	Value that can be set	Remarks
Severity	All ON	・ Error ・ Warning ・ Info ・ Monitor (Multiple selection is possible)	Monitor is displayed only when logged in by CE privilege.
Partition	・Except Partition Operator : All ・In case of Partition Operator: Specified. (Select partition targeted for management)	・ All ・ Specified	All and Specified can be switched, and the data selected by the check boxes in Specified is maintained.
Unit	All	・ All ・ Specified	All and Specified can be switched, and the data selected by the check boxes in Specified is maintained.
Source	All	・ All ・ Specified	All and Specified can be switched, and the data selected by the check boxes in Specified is maintained.
Sort by Date/Time	New event first	・ New event first ・ Old event first	
Start Date/Time	First event	・ First event ・ Specified Time	When Specified Time is selected, Start Time can be entered. First event and Specified Time can be switched, and the time data of Specified Time is maintained.
End Date/Time	Last event	・ Last event ・ Specified Time	When Specified Time is selected, End Time can be entered. Last event and Specified Time can be switched, and the time data of Specified Time is maintained.
Number of events to display	100 events	0 or more, integer less than or equal to the denominator in the fraction displayed (Maximum 3000 events).	The denominator of fraction which is displayed is the total number of registered events.

A.1.2 Setting Item of [Operation Log Filtering Condition] Window

The following table lists the initial value and the value that can be set for setting items of [Operation Log Filtering Condition] Window.

TABLE A.0.2 Setting Items of [Operation Log Filtering Condition] Window

Setting Items	Initial Value	Value that can be set	Remarks
Operation	All	・ All ・ Specified	All and Specified can be switched, and the data selected by the check boxes in Specified is maintained.
Sort by Date/Time	New event first	・ New event first ・ Old event first	
Start Date/Time	First event	・ First event ・ Specified Time	When Specified Time is selected, Start Time can be entered. Switch First event and Specified time and maintain Time Data of Specified Time.
End Date/Time	Last event	・ Last event ・ Specified Time	When Specified Time is selected, End Time can be entered. Switch Last event and Specified time and maintain Time Data of Specified Time side.
Number of events to display	100 events	0 or more, integer less than or equal to the denominator in the fraction displayed (Maximum 1000 events).	The denominator of fraction which is displayed is a total number of registered events.

A.1.3 Setting Item of [Partition Event Log Filtering Condition] Window

The following table lists the initial value and the value that can be set for setting items of [Partition Event Log Filtering Condition] Window.

TABLE A.0.3 Setting Items of [Partition Event Log Filtering Condition] Window

Setting Items	Initial Value	Value that can be set	Remarks
Partition	・ Except Partition Operator : All ・ In case of Partition Operator: Specified. (Select partition targeted for management)	・ All ・ Specified	All and Specified can be switched, and the data selected by the check boxes in Specified is maintained.
Number of events to display	100 events	0 or more, integer less than or equal to the denominator in the fraction displayed (Maximum 1000 events).	The denominator of fraction which is displayed is a total number of registered events.

A.1.4 Setting Items of [System Information] Window

The following table lists the initial value and the value that can be set for setting items of [System Information] Window.

TABLE A.0.4 Setting Items of [System Information] Window

Setting items	Initial value	Value that can be set	Remarks
System Name	“PRIMEQUEST” ＋ Product Serial Number	Maximum 64 characters can be entered [0-9], [a-z], [A-Z],! " # $ % & ' ( ) = - ^ ~ ¥ @ ´ [ ] { } : ; * + ? < > . / _ |	It is also used as System Name of SNMP
Asset Tag	None	Maximum 32 characters can be entered (Only administrator privilege)	

A.1.5 Setting items of [System Setup] Window

The following table lists the initial value and the value that can be set of setting items of [System Setup] Window.

TABLE A.0.5 Setting items of [System Setup] Window

Setting Items	Initial Value	Value that can be set	Remarks
Power Feed Mode	Single	・ Single ・ Dual	
Power Restoration Policy	Restore	・ Always off ・ Always on ・ Restore ・ Schedule Sync	
Partition Power On Delay	0 Seconds	0 ~ 9999 Seconds	
Altitude	Altitude < 1000 m	・ Altitude < 1000 m ・ 1000 m <= Altitude < 1500 m ・ 1500 m <= Altitude < 2000 m ・ 2000 m <= Altitude	Setting error for Altitude value can be ±100 m.
PSU Redundancy Mode	Non-Redundant (When Power Feed Mode is single)	・ Redundant ・ Non-redundant	When Power Feed Mode is Dual, fix with Redundant
Reserved SB Force Power Off Wait	10 Minutes	0~99Minutes	
System Power Save Control	Disable	・ Enable ・ Disable	Can be set only when PSU_P 200V is used
System Power Saving Threshold	8640W	3200W ~ 8640W	Grayed out when [System Power Save Control] is [Disable]

A.1.6 Setting items of [System Power Control] Window

The following table lists the initial value and the value that can be set for setting items of [System Power Control] Window.

TABLE A.0.6 Setting Items of [System Power Control] Window

Setting Items	Initial Value	Value that can be set	Remarks
System Power Control	None	・ Power On all partition(s) ・ Power Off all partition(s) (all partitions(s) will be automatically shutdown) ・ Force Power Off	

A.1.7 Setting items of [Power Control] Window

The following table lists the initial value and the value that can be set for the setting items of [Power Control] Window.

TABLE A.0.7 Setting Items of [Power Control] Window

Setting items	Initial value	Value that can be set	Remarks
Power Control	None	・ Power On ・ Power Off ・ Power Cycle ・ Reset ・ NMI ・ Force Power Off ・ sadump ・ (Not Specified)	**When Power Status is only "Standby", "Power On" can be selected.** **When Power Status is only "On", the selections other than "Power On" are possible.**
Force Power Off Delay	Off	Time (1~9Minutes) can be specified in case of ON	
Boot Selector	No Override	・ No Override ・ Force boot into EFI Boot Manager ・ Force PXE/iSCSI ・ Force boot from DVD	

A.1.8 Setting Items of [Schedule Control] Window

The following table lists the initial value and the value that can be set for the setting items of [Schedule Control] Window.

TABLE A.0.8 Setting Items of [Schedule Control] Window

Setting items	Initial value	Value that can be set	Remarks
Schedule Control	Off	・ On ・ Off	

A.1.9 Setting Items of [Add Schedule]/ [Edit User] Window

The following table lists the initial value and the value that can be set for the setting items of [Add Schedule]/ [Edit User] Window.

TABLE A.0.9 Setting Items of [Add Schedule]/ [Edit User] Window

Setting items	Initial value	Value that can be set	Remarks
Partition	The partition defined with smallest number	0 - 11 Partition	**The defined partition can be selected in the form of "# n: *the partition name*".**
Type	Not selected	・ Daily ・ Weekly ・ Monthly ・ Special	
Pattern	Weekly: Not selected Monthly: From 1 to 1 Special: Jan/1	・ Weekly: Sun, Mon, Tue, Wed, Thu, Fri, Sat ・ Monthly: 1~ 31 ・ Special: Jan/1~Dec/31	
Term	・ Daily: From: Jan/1 To: Jan/1 ・ Weekly: From: Jan To: Jan ・ Monthly: From: Jan To: Jan	・ Daily: Jan/1~Dec/31 ・ Weekly: Jan~ Dec ・ Monthly: Jan~ Dec	
On Time	Hour: 0 Min: 0	Hour: Specified as 24 hours Time : Specified in units of 10 minutes	
Off Time	Hour: 0 Min: 0	Hour: Specified as 24 hours Time : Specified in units of 10 minutes	

A.1.10 Setting Items of [IPv4 Console Redirection Setup] Window

The following table lists the initial value and the value that can be set for the setting items of [IPv4 Console Redirection Setup] Window.

TABLE A.0.10 Setting Items of [IPv4 Console Redirection Setup] Window

Setting items	Initial value	Value that can be set	Remarks
IP Address	0.0.0.0	0-255, 0-255, 0-255, 0-255	IP Address must be in the same network segment as the MMB virtual management IP address.
Subnet Mask	255.255.255.255	0-255, 0-255, 0-255, 0-255	
Video Redirection	Disable	・ Enable ・ Disable	
Virtual Media	Disable	・ Enable ・ Disable	

A.1.11 Setting Items of [IPv6 Console Redirection Setup] Window

The following table lists the initial value and the value that can be set for the setting items of [IPv6 Console Redirection Setup] Window.

TABLE A.0.11 Setting Items of [IPv6 Console Redirection Setup] Window

Setting items	Initial value	Setting value	Remarks
IP Address	None	0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
Prefix Length	None	1~128	
Video Redirection	Disable	・ Enable ・ Disable	
Virtual Media	Disable	・ Enable ・ Disable	

A.1.12 Setting Items of [Partition Configuration] Window

The following table lists the initial value and the value that can be set for the setting items of [Partition Configuration] Window.

TABLE A.0.12 Setting Items of [Partition Configuration] Window

Setting items	Initial value	Value that can be set	Remarks
Partition Name	None	Maximum 16 characters can be entered. Alphanumeric characters, single byte space, #, _,-	

A.1.13 Setting Items of [Power Management Setup] Window

The following table lists the initial value and the value that can be set for the setting items of [Power Management Setup] Window.

TABLE A.0.13 Setting Items of [Power Management Setup] Window

Setting items	Initial value	Setting value	Remarks
Power Save Control	Disable	・ Enable ・ Disable	Grayed out when [System Power Save Control] of the [System Setup] Window is [Disable].
Power Save Grace Period	5 Minutes	0~99 Minutes	Grayed out when [Power Save Control] of the Partition is [Disable]
Action reaching Power Save	Partition Power Off	・ Continue ・ Partition Power Off ・ Partition Force Power Off	Grayed out when [Power Save Control] of the Partition is [Disable]

A.1.14 Setting Items of [ASR Control] Window

The following table lists the initial value and the value that can be set for the setting items of [ASR Control] Window.

TABLE A.0.14 Setting Items of [ASR Control] Window

Setting items	Initial value	Value that can be set	Remarks
ASR			
Number of Restart Tries	5 Times	1~10 Times 0: No retry	
Action after exceeding Restart tries	Stop rebooting and Power Off	・ Stop rebooting and Power Off ・ Stop rebooting ・ Diagnostic Interrupt assert	
Boot Watchdog			
Boot Watchdog	Disable	・ Enable ・ Disable	
Timeout time(seconds)	6000s	1s~6000s	
Action when watchdog expires	Continue	・ Continue ・ Reset ・ Power Cycle	
Software Watchdog			
Software Watchdog	Disable	・ Enable ・ Disable	
Timeout time(seconds)	300s	1s~6000s	
Action when watchdog expires	Continue	・ Continue ・ Reset ・ Power Cycle ・ NMI	

A.1.15 Setting Items of [Console Redirection] Window

The following table lists the initial value and the value that can be set for the setting items of [Console Redirection] Window.

TABLE A.0.15 Setting Items of [Console Redirection] Window

Setting items	Initial value	Value that can be set	Remarks
Operation	None	・ Video Redirection	Can be selected only when [Video Redirection] is [Enable] on [Console Redirection Setup] Window.

A.1.16 Setting Items of [Mode] Window

The following table lists the initial value and the value that can be set for the setting items of [Mode] Window.

TABLE A.0.16 Setting Items of [Mode] Window

Setting items	Initial value	Value that can be set	Remarks
Extended Partitioning Mode (setting)	Disable	・ Enable ・ Disable	This item can be available in the PRIMEQUEST 2400E3/2800E3/2400E2/ 2800E2/2400E/2800E model
Memory Operation Mode (setting)	Normal Mode	・ Performance Mode ・ Normal Mode ・ Partial Mirror Mode ・ Full Mirror Mode ・ Spare Mode ・ Address Range Mirror Mode	Address Range Mirror Mode : This item can be available in the PRIMEQUEST 2400E3/2800E3/
Memory Mirror RAS Mode (setting)	Mirror Keep Mode	・ Mirror Keep Mode ・ Capacity Keep Mode	
PCI Address Mode (setting)	PCI Segment Mode	・ PCI Bus Mode ・ PCI Segment Mode	
Dynamic Reconfiguration (setting)	Disable	・ Enable ・ Disable	
On board LAN Mode (setting)	Enabled(WOL disabled)	・ Enabled(WOL enabled) ・ Enabled(WOL disabled) ・ Disabled	

A.1.17 Setting Items of [Add User]/ [Edit User] Window

The following table lists the initial value and the value that can be set for the setting items of [Add User]/ [Edit User] Window.

TABLE A.0.17 Setting Items of [Add User]/ [Edit User] Window

Setting items	Initial value	Value that can be set	Remarks
User Name	None	Minimum 3 and Maximum 32 characters can be entered. [0-9], [a-z], [A-Z], “-”, “_”. However, the first character must be [a-z] [A-Z].	
Password	None	More than 8 characters and less than 32 characters. [0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Confirm Password	None	More than 8 characters and less than 32 characters. [0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Privilege	In case of Add User: Admin In case of Edit User: current privilege	・ Admin ・ Operator ・ User ・ CE ・ Partition Operator	
Status	In case of Add User: Enabled In case of Edit User: current status.	・ Enabled ・ Disabled	
Full Name	None	Maximum 32 characters can be entered.	
Operable Partition (for Partition Operator)	None	・ On: Operational ・ Off: Non-operational	Grayed out if privilege is other than partition operator.

A.1.18 Setting Items of [Change Password] Window

The following table lists the initial value and the value that can be set for the setting items of [Change Password] Window.

TABLE A.0.18 Setting Items of [Change Password] Window

Setting items	Initial value	Value that can be set	Remarks
Current Password	None	More than 8 characters and less than 32 characters. [0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Password	None	More than 8 characters and less than 32 characters. [0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Confirm New Password	None	More than 8 characters and less than 32 characters. [0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	

A.1.19 Setting Items of [Direcotory Service Configuration] Window

The following table lists the initial value and the value that can be set for the setting items of [Direcotory Service Configuration] Window.

TABLE A.0.19 Setting Items of [Direcotory Service Configuration] Window

Setting items	Initial value	Value that can be set	Remarks
LDAP	Disable	・ Enable ・ Disable	
LDAP SSL	Disable	・ Enable ・ Disable	
Directory Server Type	Active Directory	・ Active Directory ・ Novell eDirectory ・ OpenLDAP ・ Open DS / Open DJ	
Primary LDAP Server			
LDAP Server	None	The DNS name is assumed to be 64 characters or less.	
LDAP Port	389		
LDAP SSL Port	636		
Backup LDAP Server			
LDAP Server	None	The DNS name is assumed to be 64 characters or less.	
LDAP Port	389		
LDAP SSL Port	636		
Domain Name	None	The DNS name is assumed to be 64 characters or less.	When Directory Server Type is Active Directory, this item can be input.
Base DN	None	The DN is assumed to be 127 characters or less.	When Directory Server Type is Active Directory, this item cannot be input.
Groups Directory as sub-tree from base DN	None	The setting is 64 characters or less.	
User Search Context	None	The setting is 64 characters or less.	When Directory Server Type is Active Directory, this item cannot be input.
LDAP Group Scheme	groupOfNames	The setting is 64 characters or less.	When Directory Server Type is Active Directory, this item cannot be input.
LDAP Member Scheme	member	The setting is 64 characters or less.	When Directory Server Type is Active Directory, this item cannot be input.
LDAP Auth User Name	None	The setting is 64 characters or less.Minimum 3 and Maximum 32 characters can be entered. [0-9], [a-z], [A-Z], “-”, “_”. However, the first character must be [a-z] [A-Z].	When Directory Server Type is Active Directory, this item can be input.
LDAP Auth Password	None	More than 8 characters and less than 32 characters. [0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Confirm Password	None	More than 8 characters and less than 32 characters.	

Setting items	Initial value	Value that can be set	Remarks
		[0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Principal User DN	None	The setting is 64 characters or less.	When Directory Server Type is Active Directory, this item cannot be input.
Append Base DN to Principal User DN	Disable	・ Enable ・ Disable	When Directory Server Type is Active Directory, this item cannot be input.
Bind DN	None		This item is only a display.
Enhanced User Login	Disable	・ Enable ・ Disable	When Directory Server Type is Active Directory, this item cannot be input.
User Login Search Filter	None	The setting is 64 characters or less.	When Directory Server Type is Active Directory, this item cannot be input.

A.1.20 Setting Items of [Date/Time] Window

The following table lists the initial value and the value that can be set for the setting items of [Date/Time] Window.

TABLE A.0.20 Setting Items of [Date/Time] Window

Setting Item	Initial Value	Value that can be set	Remarks
Date	Shows time on the clock of the server.	YYYY-MM-DD ・ YYYY: Year ・ MM: Month ・ DD: Day	It can be set only when NTP is Disabled.
Time	Shows time on the clock of the server.	・Modify the Time is On: Time is set Hour:Minute:Second:24 hours format ・Modify the Time is Off: Time is not set.	It can be set only when NTP is Disabled.
Time Zone	None	Select from pull down menu.	
NTP	Disable	・ Enable ・ Disable	
NTP Time Correction Mode	Step	・ Step ・ Slew	It can be set only when NTP is Enabled.
NTP Server 1	None	In case of IPv4 0-255, 0-255, 0-255, 0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	It can be set only when NTP is Enabled.
NTP Server 2	None	In case of IPv4 0-255, 0-255, 0-255, 0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	It can be set only when NTP is Enabled.
NTP Server 3	None	In case of IPv4 0-255, 0-255, 0-255, 0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	It can be set only when NTP is Enabled.

A.1.21 Setting Items of [IPv4 Interface] Window

The following table lists the initial value and the value that can be set for the setting items of [IPv4 Interface] Window.

TABLE A.0.21 Setting Items of [IPv4 Interface] Window

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
Virtual IP Address	Hostname	"PRIMEQUEST"+Product Serial Number	Sets hostname in FQDN format. [a-z],[A-Z],[0-9],[-] (Hyphen),[.] (Dot)	・The first character should be alphabetic character. ・[-] (Hyphen), [.] (Dot) cannot be used as the first
	IP Address	None	0-255, 0-255, 0-255, 0-255	
	Subnet mask	None	0-255, 0-255, 0-255, 0-255	
	Gateway address	None	0-255, 0-255, 0-255, 0-255	
MMB#0 IP Address	Interface	Disable	・ Enable ・ Disable	
	Hostname (Optional)	None	Sets hostname in FQDN format. [a-z], [A-Z], [0-9], "-" (Hyphen), "."(Dot)	・The First character should be alphabetic character. ・"-" (Hyphen), "." (Dot) cannot be used as the first character and the last character.
	IP Address	None	0-255, 0-255, 0-255, 0-255	
	Subnet Mask	None	0-255, 0-255, 0-255, 0-255	
	Gateway address	None	0-255, 0-255, 0-255, 0-255	
MMB#1 IP Address	Interface	Disable	・ Enable ・ Disable	
	Hostname (Optional)	None	Sets hostname in FQDN format. [a-z], [A-Z], [0-9], "-" (Hyphen), "."(Dot)	・The First character should be alphabetic character. ・"-" (Hyphen), "." (Dot) cannot be used as the first character and the last character.
	IP Address	None	0-255, 0-255, 0-255, 0-255	
	Subnet Mask	None	0-255, 0-255, 0-255, 0-255	
	Gateway address	None	0-255, 0-255, 0-255, 0-255	
DNS (optional)	DNS	Disable	・ Enable ・ Disable	
	DNS Server 1	None	Sets the IP address of primary DNS Server	
	DNS Server 2	None	Sets the IP address of primary DNS Server	
	DNS Server 3	None	Sets the IP address of primary DNS Server	
Management LAN	Dualization	Disable	・ Enable ・ Disable	

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
Maintenance IP Address	Interface	In case of PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2 Enable In case of PRIMEQUEST 2400E/2800E/2800B Disable	・ Enable ・ Disable	
	IP Address	In case of PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2 192.168.1.1 In case of PRIMEQUEST 2400E/2800E/2800B None	0-255, 0-255, 0-255, 0-255	
	Subnet Mask	In case of PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2 255.255.255.0 In case of PRIMEQUEST 2400E/2800E/2800B None	0-255, 0-255, 0-255, 0-255	
	Gateway address	None	0-255, 0-255, 0-255, 0-255	
	SMTP address	None	0-255, 0-255, 0-255, 0-255	
Internal IP Address	Interface	Disable	・ Enable ・ Disable	
	IP Address	None	0-255, 0-255, 0-255, 0-255	
	Subnet Mask	None	0-255, 0-255, 0-255, 0-255	

A.1.22 Setting Items of [IPv6 Interface] Window

The following table lists the initial value and the value that can be set for the setting items of [IPv6 Interface] Window.

TABLE A.0.22 Setting Items of [IPv6 Interface] Window

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
Virtual IP Address	Hostname	"PRIMEQUEST"+ Product Serial Number	Sets hostname in FQDN format. [a-z], [A-Z], [0-9], "-" (Hyphen), "." (Dot)	・The first character must be alphabetic character. ・"-" (Hyphen), "." (Dot) cannot be used as the first character and the last character.
	IP Address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
	Prefix Length	None	1~128	
	Gateway address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
MMB#0 IP Address	Interface	Disable	・Enable ・Disable	
	Hostname (optional)	None	Sets hostname in FQDN format. [a-z],[A-Z],[0-9], "-" (Hyphen), "." (Dot)	・First character must be alphabetic character. ・"-" (Hyphen), "." (Dot) cannot be used as the first character and the last character.
	IP Address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
	Prefix Length	None	1~128	
	Gateway address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
MMB#1 IP Address	Interface	Disable	・ Enable ・ Disable	
	Hostname (optional)	None	Sets hostname in FQDN format. [a-z],[A-Z],[0-9], "-" (Hyphen), "." (Dot)	・First character must be alphabetic character. ・"-" (Hyphen), "." (Dot) cannot be used as the first character and the last character.
	IP Address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
	Prefix Length	None	1~128	
	Gateway address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
DNS (optional)	DNS	Disable	・ Enable ・ Disable	
	DNS Server 1	None	Sets the IP address of primary DNS Server	

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
	DNS Server 2	None	Sets the IP address of primary DNS Server	
	DNS Server 3	None	Sets the IP address of primary DNS Server	
Management LAN	Dualization	Disable	・ Enable ・ Disable	
Maintenance IP Address	Interface	Disable	・ Enable ・ Disable	
	IP Address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
	Prefix Length	None	1~128	
	Gateway address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
	SMTP address	None	0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	

A.1.23 Setting Items of [Management LAN Port Configuration] Window

The following table lists the initial value and the value that can be set for the setting items of [Management LAN Port Configuration] Window.

TABLE A.0.23 Setting Items of [Management LAN Port Configuration] Window

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
Speed/Duplex for MMB#0	User port Maintenance port REMCS port	Auto	・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half	
Speed/Duplex for MMB#1	User port Maintenance port REMCS port	Auto	・ Auto ・ 100M/Full ・ 100M/Half ・ 10M/Full ・ 10M/Half	

A.1.24 Setting Items of [Network Protocols] Window

The following table lists the initial value and the value that can be set for the setting items of [Network Protocols] Window.

TABLE A.0.24 Setting Items of [Network Protocols] Window

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
Web (HTTP/HTTPS)	HTTP	Disable	・ Enable ・ Disable	
	HTTP Port#	8081	80,1024~65535	
	HTTPS	Disable	・ Enable ・ Disable	
	HTTPS Port#	432	432,1024~65535	
	Timeout (sec)	600 seconds	60~9999 seconds 0:No timeout	
Telnet	Telnet	In case of PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2 Enable In case of PRIMEQUEST 2400E/2800E/2800B Disable	・ Enable ・ Disable	
	Telnet Port#	23	23,1024~65535	
	Telnet Timeout (sec)	600 second	60~9999 seconds 0:No timeout	
SSH	SSH	Disable	・ Enable ・ Disable	
	SSH Port#	22	22,1024~65535	
	SSH Timeout (sec)	600 seconds	60~9999 seconds 0:No timeout	
SNMP	SNMP Agent	Disable	・ Enable ・ Disable	
	Agent Port#	161	161,1024~65535	
	SNMP Trap	Disable	・ Enable ・ Disable	
	Trap Port#	162	161,1024~65535	

A.1.25 Setting Items of [Refresh Rate] Window

The following table lists the initial value and the value that can be set for the setting items of [Refresh Rate] Window.

TABLE A.0.25 Setting Items of [Refresh Rate] Window

Setting Item	Initial Value	Value that can be set	Remarks
Refresh Rate	Disable	・ Enable -Seconds:5~999 seconds ・ Disable	

A.1.26 Setting Items of [SNMP Community] Window

The following table lists the initial value and the value that can be set for the setting items of [SNMP Community] Window.

TABLE A.0.26 Setting Items of [SNMP Community] Window

Main Item	Setting Item	Initial Value	Value that can be set	Remarks
System Information	System Location	None	[0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘ ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	・# and half width space cannot be used as the first character. ・Half width space cannot be used as the last character.
	System contact	None	[0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘ ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	・# and half width space cannot be used as the first character. ・Half width space cannot be used as the last character.
Community	Community/ User	None	[0-9], [a-z], [A-Z] Special characters: ! # $ %& ‘ ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	“ #”cannot be used as the first character.
	IP/Address/Mask	None	In case of IPv4 0-255, 0-255, 0-255, 0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
	SNMP Version	1	・ 1 ・ 2 ・ 3	
	Access	Read Only	・ Read Only ・ Read Write	
	Auth	None	・ noauth ・ auth ・ priv	“Auth” becomes possible to set only when 3 is selected as SNMP version. When 1 or 2 has been selected as SNMP version, it becomes "noauth" and equal.

A.1.27 Setting Items of [SNMP Trap] Window

The following table lists the initial value and the value that can be set for the setting items of [SNMP Trap] Window.

TABLE A.0.27 Setting Items of [SNMP Trap] Window

Setting Item	Initial Value	Value that can be set	Remarks
Community/User	None	In case of SNMP v1, v2, sets the SNMP Community string. In case of SNMPv3, specifies the user name.	
IP Address	None	In case of IPv4 0-255, 0-255, 0-255, 0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF,0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
SNMP Version	1	・ 1 ・ 2 ・ 3	
Auth	None	・ noauth ・ auth ・ priv	
Auth Type	None	・ MD5 ・ SHA	
Auth passphrase	None	[0-9], [a-z], [A-Z] Special characters :! # $ %& ‘ ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Priv passphrase	None	[0-9], [a-z], [A-Z] Special characters :! # $ %& ‘ ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	

A.1.28 Setting Items of [SNMP v3 Configuration] Window

The following table lists the initial value and the value that can be set for the setting items of [SNMP v3 Configuration] Window.

TABLE A.0.28 Setting Items of [SNMP v3 Configuration] Window

Setting Item	Initial Value	Value that can be set	Remarks
Engine ID	None	[0-9], [a-z], [A-Z] Special characters: ! " # $ %& ' ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
User Name	None	[0-9], [a-z], [A-Z] Special characters: ! " # $ %& ' ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Auth type	MD5	・ MD5 ・ SHA	
Auth passphrase	None	[0-9], [a-z], [A-Z] Special characters: ! " # $ %& ' ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	
Priv passphrase	None	[0-9], [a-z], [A-Z] Special characters: ! # $ %& ' ( ) = - ^ ~ ¥ @ `[ ] { } : * ; + ? < . > , / _ |	

A.1.29 Setting Items of [Create CSR] Window

The following table lists the initial value and the value that can be set for the setting items of [Create CSR] Window.

TABLE A.0.29 Setting Items of [Create CSR] Window

Setting Item	Initial Value	Value that can be set	Remarks
Key length	1024	・ 1024 ・ 2048	
Country Name	None	ISO Country Code (2 alphabetic characters)	Example :Japan "JP" USA "US"
State or Province Name	None	Maximum 56 characters can be entered.	
Locality Name	None	Maximum 56 characters can be entered.	
Organization Name	None	Maximum 56 characters can be entered.	
Organization Unit Name	None	Maximum 56 characters can be entered.	
Common name	None	Maximum 56 characters can be entered.	
E-Mail Address	None	None E-Mail address. Maximum 40 characters can be entered.	

A.1.30 Setting Items of [Create Selfsigned Certificate] Window

The following table lists the initial value and the value that can be set for the setting items of [Create Selfsigned Certificate] Window.

TABLE A.0.30 Setting Items of [Create Selfsigned Certificate] Window

Setting items	Initial value	Values that can be set	Remarks
Key length	1024	・ 1024 ・ 2048	
Term	None	1~4095 Days	
Country Name	None	Maximum 56 characters can be entered	
State or Province Name	None	Maximum 56 characters can be entered	
Locality Name	None	Maximum 56 characters can be entered	
Organization Name	None	Maximum 56 characters can be entered	
Organization Unit Name	None	Maximum 56 characters can enter	
Common Name	None	Maximum 56 characters can be entered	
E-Mail Address	None	E-Mail Address. Maximum 40 characters can be entered	

A.1.31 Setting Items of [Edit User] Window

The following table lists the initial value and the value that can be set for the setting items of [Edit User] Window.

TABLE A.0.31 Setting Items of [Edit User] Window

Setting Items	Initial value	Values that can be set	Remarks
User Name	None	3 characters or more, less than or equal to 16 characters [0-9],[a-z],[A-Z]	
Password	None	8 characters or more, less than or equal to 16 characters [0-9],[a-z],[A-Z]	
Confirm Password	None	8 characters or more, less than or equal to 16 characters [0-9],[a-z],[A-Z]	
Privilege	In case of Add User: Admin In case of Edit User: Present Privilege	・ Admin ・ Operator ・ User ・ CE ・ No Access	
Status	Disabled	・ Enabled ・ Disabled	

A.1.32 Setting Items of [Add Filter] / [Edit Filter] Window

The following table lists the initial value and the value that can be set for the setting items of [Edit User Add Filter] / [Edit Filter] Window.

TABLE A.0.32 Setting Items of [Add Filter] / [Edit Filter] Window

Setting item	Initial value	Values that can be set	Remarks
Protocol	SSH	・ HTTP ・ HTTPS ・ Telnet ・ SSH ・ SNMP	
Access Control	Disable	・ Enable ・ Disable	
IP Address	None	In case of IPv4 0-255,0-255,0-255,0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	
Subnet Mask/Prefix Length	None	In case of IPv4 0-255,0-255,0-255,0-255 In case of IPv6 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF, 0-FFFF	

A.1.33 Setting Items of [Alarm E-Mail] Window

The following table lists the initial value and the value that can be set for the setting items of [Alarm E-Mail] Window.

TABLE A.0.33 Setting Items of [Alarm E-Mail] Window

Setting Item	Initial value	Values that can be set	Remarks
Alarm E-Mail	Disable	・ Enable ・ Disable	
From	None	E-Mail Address	When [Use envelope “from” address] check box is checked, the address of [From:] is set as the source E-Mail address and the mail are sent. By default the checkbox is off.
To	None	E-Mail Address	When multiple addresses are specified, they are separated by using “,” (Comma).
SMTP Server	None	IP address or FQDN1 of SMTP server	
Subject	None	[0-9],[a-z],[A-Z], Special characters: !,#,”,$,%,&,’,(),*,+,-,.,/,_,~ space	

A.1.34 Setting Items of [Alarm E-Mail Filtering Condition] Window

The following table lists the initial value and the value that can be set for the setting items of [Alarm E-Mail Filtering Condition] Window.

TABLE A.0.34 Setting Items of [Alarm E-Mail Filtering Condition] Window

Setting item	Initial value	Values that can be set	Remarks
Severity	All ON	・ Error ・ Warning ・ Info (Multiple selection is possible)	
Partition	All ON	・ All ・ Specified (Multiple selection is possible)	When specified is selected, the partition to be displayed is set ON.
Unit	All	・ All ・ Specified	When specified is selected, the unit to be displayed is set ON.
Source	All	・ All ・ Specified	When specified is selected, the source to be displayed is set ON.

A.2 Setting Items on UEFI

This list shows the initial value and the values that can be set for Setting Items on UEFI

A.2.1 Setting Items on [LAN Remote Boot Configuration] Window
A.2.2 Setting Items on [CPU Configuration] Window
A.2.3 Setting Items on [PCI Subsystem Configuration] Window
A.2.3.1 Setting Items on [OpROM Scan Configuration] Window
A.2.3.2 Setting Items on [I/O Space Assignment Configuration] Window
A.2.4 Setting Items on [iSCS Configuration] Window
A.2.4.1 Setting Items on [Attempt Configuration] Window
A.2.5 Setting Items on [Memory Configuration] Window
A.2.6 Setting Items on [USB Configuration] Window
A.2.7 Setting Items on [Security Configuration] Window

A.2.1 Setting Items on [LAN Remote Boot Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [LAN Remote Boot Configuration] window.

TABLE A.0.35 Setting Items of [LAN Remote Boot Configuration] Window

Setting item	Initial value	Values that can be set	Remarks
(Network Port information)	Disabled	・ UEFI(PXE/iSCSI) ・ Legacy PXE ・ Legacy ISCSI ・ Disabled	

A.2.2 Setting Items on [CPU Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [CPU Configuration] window.

TABLE A.0.36 Setting Items of [CPU Configuration] Window

Setting item	Initial value	Values that can be set	Remarks
Hyper threading(*1)	Enabled	・ Disable ・ Enable	
Active Processor Cores(*2)	[For PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2] 0 [For PRIMEQUEST 2400E/2800E/2800B] All	・ All ・ 0 ・ 1 ・ 2 ・ 3 ・ 4 ・ 5 ・ 6 ・ 7 ・ 8 ・ 9 ・ 10 ・ 11 ・ 12 ・ 13 ・ 14 ・ 15 ・ 16 ・ 17 ・ 18	
Hardware Prefetcher	Enabled	・ Disable ・ Enable	
Adjacent Cache Line Prefetch	Enabled	・ Disable ・ Enable	
DCU Streamer Prefetcher	Enabled	・ Disable ・ Enable	
DCU Ip Prefetcher	Enabled	・ Disable ・ Enable	
Execute Disable Bit	Enabled	・ Disable ・ Enable	
Intel Virtualization Technology (*3)	Enabled	・ Disable ・ Enable	
Intel(R) VT-d (*3)(*6)	Disabled	・ Disable ・ ・ Enable	
Power Technology (*4)	Energy Efficient	・ Disabled ・ Energy Efficient ・ Custom	
Enhanced SpeedStep (*1)	Enabled	・ Disable ・ Enable	Displayed when “Custom” is selected on “Power Technology”.
Turbo Mode(*1)	Enabled	・ Disable ・ Enable	Displayed when “Custom” is selected on “Power Technology”.
Energy Performance (*1)	Performance	・ Performance ・ Balanced Performance ・ Balanced Energy ・ Energy Efficient	Displayed when “Custom” is selected on “Power Technology”.
P-State Coordination (*1)	HW ALL	・ HW_ALL ・ SW_ALL ・ SW_ANY	Displayed when “Custom” is selected on “Power Technology”.

Setting item	Initial value	Values that can be set	Remarks
Enable CPU HWPM (*1)	Disabled	・ Disabled ・ HWPM NATIVE MODE ・ HWPM OOB MODE	Displays only when [Custom] is selected in [Enhanced Speed Step] and [Enabled] is selected in [Power Technology]. This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3
CPU C1E Support (*1)	Enabled	・ Disabled ・ Enabled	Displayed when “Custom” is selected on “Power Technology”. This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2
CPU C3 Report	Disabled	・ Disable ・ Enable	Displayed when “Custom” is selected on “Power Technology”.
CPU C6 report	Enabled	・ Disable ・ Enable	Displayed when “Custom” is selected on “Power Technology”.
CPU C7 report	Enabled	・ Disable ・ Enable	Displayed when “Custom” is selected on “Power Technology”.
Package C State limit	No Limit	・ C0 ・ C2 ・ C6 ・ C7 ・ No Limit	Displayed when “Custom” is selected on “Power Technology”.
QPI Link Frequency Select (*1)	Auto	・ Auto ・ 9.6GT/s ・ 8.0GT/s ・ 7.2GT/s ・ 6.4GT/s	9.6 GT/s : This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2.
Frequency Floor Override (*1)(*5)	Disabled	・ Disable ・ Enable	This item can be available in the PRIMEQUEST 2400E/2800E/2800B
Uncore Frequency Override(*1)(*5)	Enabled	・ Disable ・ Enabled	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2
Perfmon and DFX devices (*1)	Disabled	・ Disable ・ Enable	
ACPI MSCT	Enabled	・ Disable ・ Enabled	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2
x2APIC Mode (*3)	Enabled In Extended Partitioning: Disabled	・ Disable ・ Enabled	This item can be available in the PRIMEQUEST 2400E2/2800E2/2800B2
EMCA Gen2 (*1)(*7)(*8)(*9)	Enabled	・ Disable ・ Enabled	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.
*2: This item is not displayed in Extended Partitioning.
*3: This item is displayed by fixation in Extended Partitioning.

*4: The submenu displayed when "Custom" is selected is not displayed and becomes fixation set in the place where "Disabled" and "EnergyEfficient" are selected with a physical partition. It is likely to become different from a fixed setting of a physical partition set to succeed a part of setting of a physical partition in the enhancing partition.
*5:There is Uncore Frequency Scaling(UFS) as a succession function of Frequency Floor Override(FFO) since PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2, and the frequency of Uncore is controlled individually with the frequency in CPU core.
*6: This item becomes Enable disregarding a set value at the x2APIC mode.
*7: EMCA Gen2 can be set to Enabled without any relation to whether OS supports EMCA Gen2.
*8 When Extended Partition or Dynamic Reconfiguration is effectively set by setting MMB even if EMCA Gen2 is set to Enabled, the setting of EMCA Gen2 automatically becomes Disabled. It automatically returns to Enabled and it does not exist.
*9 The menu item EMCA Gen2 added with BB15062 of PRIMEQUEST 2400E2/2800E2/2800B2, and default are Enabled.

A.2.3 Setting Items on [PCI Subsystem Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [PCI Subsystem Configuration] window.

TABLE A.0.37 Setting Items of [PCI Subsystem Configuration] Window

Setting item	Initial value	Setting value	Remarks
PCI ROM Priority	EFI Compatible ROM	・ Legacy ROM ・ EFI Compatible ROM	
ASPM Support	Disabled	・ Disabled ・ Auto ・ Limit to L0s	
Number of bus# Padded to slot	1	・ 1 ・ 2 ・ 3	
Above 4G decoding	Disabled	・ Enabled ・ Disabled	
OpROM MMIO Assignment	Enabled	・ Enabled ・ Disabled	
Internal LAN*1	Enabled	・ Enabled ・ Disabled	

*1: This item is not displayed in the Extended Partition. Moreover, it operates by Enabled in the Extended Partition.

A.2.3.1 Setting Items on [OpROM Scan Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [OpROM Scan Configuration] window.

TABLE A.0.38 Setting Items of [OpROM Scan Configuration] Window (1/2)

Setting Item	Initial Value	Setting Value	Remarks
Slot 1 OpROM (DU)	Disabled	・ Enabled ・ Disabled	Settings for DU#0Slot#0
Slot 2 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot#0 of IOU#0
Slot 3OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #1of IOU#0
Slot 4OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #2of IOU#0
Slot 5OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #3of IOU#0
Slot 17 OpROM (DU)	Disabled	・ Enabled ・ Disabled	Settings for DU#0 Slot#1
Slot 18 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #0of IOU#1
Slot 19 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #1of IOU#1
Slot 20 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #2of IOU#1
Slot 21 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #3of IOU#1
Slot 33 OpROM (DU)	Disabled	・ Enabled ・ Disabled	Settings for DU#1 Slot#0
Slot 34 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #0 of IOU#2
Slot 35 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #1of IOU#2
Slot 36 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #2of IOU#2
Slot 37 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #3of IOU#2
Slot 49 OpROM (DU)	Disabled	・ Enabled ・ Disabled	Settings for DU#1Slot#1
Slot 50 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #0of IOU#3
Slot 51 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #1of IOU#3
Slot 52 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #2of IOU#3
Slot 53 OpROM	Disabled	・ Enabled ・ Disabled	Settings for PCI Express slot #3of IOU#3

TABLE A.0.39 Setting Items of [OpROM Scan Configuration] Window (2/2)

Setting Item	Initial Value	Setting Value	Remarks
Slot 65 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #0 of PCI_Box#0
Slot 66 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #1 of PCI_Box#0
Slot 67 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #2 of PCI_Box#0
Slot 68 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #3 of PCI_Box#0
Slot 69 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #4 of PCI_Box#0
Slot 70 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #5 of PCI_Box#0
Slot 71 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #6 of PCI_Box#0
Slot 72 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #7 of PCI_Box#0
Slot 73 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #8 of PCI_Box#0
Slot 74 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #9 of PCI_Box#0
Slot 75 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #10 of PCI_Box#0
Slot 76 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #11 of PCI_Box#0
Slot 81 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #0 of PCI_Box#1
Slot 82 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #1 of PCI_Box#1
Slot 83 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #2 of PCI_Box#1
Slot 84 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #3 of PCI_Box#1
Slot 85 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #4 of PCI_Box#1
Slot 86 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #5 of PCI_Box#1
Slot 87 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #6 of PCI_Box#1
Slot 88 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #7 of PCI_Box#1
Slot 89 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #8 of PCI_Box#1
Slot 90 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #9 of PCI_Box#1
Slot 91 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #10 of PCI_Box#1
Slot 92 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #11 of PCI_Box#1
Slot 97 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #0 of PCI_Box#2
Slot 98 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #1 of PCI_Box#2
Slot 99 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #2 of PCI_Box#2
Slot 100 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #3 of PCI_Box#2

Setting Item	Initial Value	Setting Value	Remarks
Slot 101 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #4 of PCI_Box#2
Slot 102 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #5 of PCI_Box#2
Slot 103 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #6 of PCI_Box#2
Slot 104 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #7 of PCI_Box#2
Slot 105 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #8 of PCI_Box#2
Slot 106 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #9 of PCI_Box#2
Slot 107 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #10 of PCI_Box#2
Slot 108 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #11 of PCI_Box#2
Slot 113 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #0 of PCI_Box#3
Slot 114 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #1 of PCI_Box#3
Slot 115 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #2 of PCI_Box#3
Slot 116 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #3 of PCI_Box#3
Slot 117 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #4 of PCI_Box#3
Slot 118 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #5 of PCI_Box#3
Slot 119 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #6 of PCI_Box#3
Slot 120 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #7 of PCI_Box#3
Slot 121 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #8 of PCI_Box#3
Slot 122 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #9 of PCI_Box#3
Slot 123 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #10 of PCI_Box#3
Slot 124 OpROM	Disabled	· Enabled · Disabled	Settings for PCI Express slot #11 of PCI_Box#3

A.2.3.2 Setting Items on [I/O Space Assignment Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [I/O Space Assignment Configuration] window.

TABLE A.0.40 Setting Items of [I/O Space Assignment Configuration] Window

Setting item	Initial value	Values that can be set	Remarks
Slot#(*1)	Auto	· Force · Auto · Disable	

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.

A.2.4 Setting Items on [iSCS Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [iSCS Configuration] window.

TABLE A.0.41 Setting Items of [iSCS Configuration] Window

Setting Item	Initial Value	Setting Value	Remarks
iSCSI Initiator Name	-	iSCSI Initiator Name	4-223 characters can be entered.

A.2.4.1 Setting Items on [Attempt Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [Attempt *Configuration] window.*

TABLE A.0.42 Setting Items of [Attempt Configuration] Window

Setting Item	Initial Value	Setting Value	Remarks
iSCSI Mode	Disabled	· Enabled for MPIO · Enabled · Disabled	
Internet Protocol	IP4	· IP4 · IP6 · Autoconfigure	
Connection Retry Count	5	· 0~16	
Connection Establishing Timeout	1000		Unit is millisecond.
ISID	Generated from MAC address	Enter last six digits of ISID.	
Enable DHCP	[ ]	· [ ] · [X]	
Initiator IP Address	-	0-255, 0-255, 0-255, 0-255	Displayed only when [DHCP] is [Enable]
Initiator Subnet Mask	-	0-255, 0-255, 0-255, 0-255	Displayed only when [DHCP] is [Enable].
Gateway		0-255, 0-255, 0-255, 0-255	Displayed only when [DHCP] is [Enable].
Get Target info via DHCP	[ ]	· [ ] · [X]	Displayed only when [DHCP] is [Enable].
Target Name	-	4~223 characters can be entered. The types of characters that can be entered are as follows 0-9, A-Z, a-z,! “ # $ % & ‘ ( ) * + ,- . / : ; < = > ? @ [¥] ^ _ ` { | }.	Displayed when [Get Target info via DHCP] is disabled.
Target IP Address	-	0-255, 0-255, 0-255, 0-255	Displayed when [Get Target info via DHCP] is disabled.
Target Port	0	· 0~65535	
Boot LUN	0	· x~xxxx-xxxx-xxxx-xxxx(in Hexadecimal)	
Authentication Type	CHAP	· None · CHAP	
CHAP Type	One way	· One way · Mutual	
CHAP Name	-	125 characters can be entered. The types of characters that can be entered are as follows. 0-9, A-Z, a-z,! “ # $ % & ‘ ( ) * + ,- . / : ; < = > ? @ [¥] ^ _ ` { | }.~	
CHAP Secret	-	12~16 characters can be entered. The types of characters that can be entered are as follows. 0-9, A-Z, a-z,! “ # $ % & ‘ ( ) * + ,- . / : ; < = > ? @ [¥] ^ _ ` { | }.~	

Setting Item	Initial Value	Setting Value	Remarks
Reverse CHAP Name	-	125 characters can be entered. The types of characters that can be entered are as follows. 0-9, A-Z, a-z,! “ # $ % & ‘ ( ) * + ,- . / : ; < = > ? @ [¥] ^ _ ` { | }.~	
Reverse CHAP Secret	-	12~16 characters can be entered. The types of characters that can be entered are as follows. 0-9, A-Z, a-z,! “ # $ % & ‘ ( ) * + ,- . / : ; < = > ? @ [¥] ^ _ ` { | }.~	

A.2.5 Setting Items on [Memory Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [Memory Configuration] window.

TABLE A.0.43 Setting Items of [Memory Configuration] Window

Setting Item	Initial Value	Setting Value	Remarks
DIMM Speed(*1)	Normal Mode	· Performance Mode · Normal Mode	This item is not displayed for PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2.
Patrol scrub(*1)	Disabled	· Disabled · Enabled	
Refresh Rate(*1)	Auto	· Auto · 1x	
Memory Power States (*1)	Default	· Default · Perfomance Mode	
DDR4 Command/Address Parity Check and Retry (*1)	Enabled	· · Disabled · Enabled	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3/ 2400E2/2800E2/2800B2
Address Range Mirroring (*7)	OS Request	· OS Request · BIOS Menu Setting	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*2)(*3)(*8)
Mirror Size on SB#0-SKT#0 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)(*9)
Mirror Size on SB#0-SKT#1 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)
Mirror Size on SB#1-SKT#0 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)(*9)
Mirror Size on SB#1-SKT#1 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)
Mirror Size on SB#2-SKT#0	4	· 0-65535	This item can be available in the PRIMEQUEST

Setting Item	Initial Value	Setting Value	Remarks
(64MB unit) (*7)			2400E3/2800E3/2800B3. (*4)(*5)(*6)(*9)
Mirror Size on SB#2-SKT#1 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)
Mirror Size on SB#3-SKT#0 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)(*9)
Mirror Size on SB#3-SKT#1 (64MB unit) (*7)	4	· 0-65535	This item can be available in the PRIMEQUEST 2400E3/2800E3/2800B3. (*4)(*5)(*6)

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.
*2: It is necessary to set Memory Operation Mode to Address Range Mirroring with MMB Web-UI to use the Address Range Mirroring function. It does not depend on the setting of MMB Web-UI, and this menu is always displayed.
3: It is necessary to support Address Range Mirroring with OS to use the Address Range Mirroring function. It is necessary to support the function to notify BIOS the amount of the mirror memory or the memory ratio with OS at the setting of "OS Request".
*4: It does not depend on the SB composition of the partition and the number equipped with CPU, and the item of SB#0-CPU#0-SB#3-CPU#1 is always displayed. The setting is actually disregarded about SB/CPU that is not included in the partition, and not installed though can set by the menu.
*5: The size is set in 64MB. (When "4" is set to the amount of the mirror memory, 4*64=256MB becomes the amount of the mirror memory.)
*6: When "BIOS Setting" is selected by "Address Range Mirroring", this item is displayed.
*7: This item does not display in Extended Partition. (When Address Range Mirroring is made enable with Web-UI of MMB, the area that the firmware of the Extended Partition uses is mirrored by fixation.)
*8: When the specification of the memory capacity mirrored in the BIOS menu is specified for "BIOS Menu Setting", the mirrored memory capacity setting from OS is not reflected.
*9: When SB is Home SB in the partition, the setting is disregarded though it is possible to set from the menu.

A.2.6 Setting Items on [USB Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [USB Configuration] window.

TABLE A.0.44 Setting Items of [USB Configuration] Window

Setting Item	Initial Value	Setting value	Remarks
Legacy USB Support	Enabled	· Disabled · Enabled · Auto	
Mass Storage Devices:	Auto	· Auto · Floppy · Forced FDD · Hard Disk · CD-ROM	
USB Port disable(*1)	Enabled	· Enable · Disable	

*1: As settings of Physical Partition remain same in Extended Partitioning, settings are only displayed but cannot be changed.

A.2.7 Setting Items on [Security Configuration] Window

Following table lists the initial value and the values that can be set for Setting Items on [Security Configuration] window.

In Extended Partitioning, because TPM cannot be used, this menu is not displayed.

TABLE A.0.45 Setting Items of [Security Configuration] Window

Setting Item	Initial Value	Setting Value	Remarks
TPM Support	Disabled	· Disabled · Enabled	
TPM State	Disabled	· Disabled · Enabled	
Pending TPM operation	None	· None · · Enable Take Ownership · Disable Take Ownership · TPM Clear	

A.3 Setting Items on Video redirection

Following is the list of initial values and the values that can be set for Setting Items on BMC.

A.3.1 Setting Items on [Video] Window
A.3.2 Setting Items on [Keyboard] Window
A.3.3 Setting Items on [Mouse] Window
A.3.4 Setting Items on [Options] Window

A.3.1 Setting Items on [Video] Window

Following table lists the initial values and the values that can be set for Setting Items on [Video] window.

TABLE A.0.46 Setting Items of [Video] Window

Setting Item	Initial Value	Setting Value	Remarks
Low Bandwidth Mode	Normal	· Normal · 8bpp · 8bpp B&W · 16bpp	

A.3.2 Setting Items on [Keyboard] Window

Following table lists the initial values and the values that can be set for Setting Items on [Keyboard] window.

TABLE A.0.47 Setting Items of [Keyboard] Window

Setting Item	Initial Value	Setting Value	Remarks
Host Physical Keyboard	Auto Detect	· Auto Detect · English (United States) · French · German (Germany) · Spanish	
Soft Keyboard		· English (United States) · English (United Kingdom) · Spanish · French · German (Germany) · Italian · Danish · Finnish · German (Switzerland) · Norwegian · Portuguese · Swedish · Hebrew · French (Belgium) · Dutch (Belgium) · Russian (Russia) · Japanese · Turkish-F · Turkish-Q	

A.3.3 Setting Items on [Mouse] Window

Following table lists the initial values and the values that can be set for Setting Items on [Mouse] window.

TABLE A.0.48 Setting Items of [Mouse] Window

Setting Item	Initial Value	Setting Value	Remarks
Mouse Mode	Absolute mouse mode	· Absolute mouse mode · Relative mouse mode · Hide mouse mode	

A.3.4 Setting Items on [Options] Window

Following table lists the initial values and the values that can be set for Setting Items on [Options] window.

TABLE A.0.49 Setting Items of [Options] Window

Setting Item	Initial Value	Setting Value	Remarks
GUI language	EN-English	· DE-Deutsch · EN-English · JA-Japanese	

A.4 Recommended setting of UEFI

When they leave the factory, Fujitsu PRIMEQUEST 2000 Series servers are already configured with BIOS standard settings, which provide an optimal ratio between performance and energy efficiency for the most common application scenarios. And yet there are situations in which it may be necessary to deviate from standard settings and thus configure the server - depending on requirements - for the maximum possible throughput (performance), the minimum possible latency (low latency), or the maximum possible energy saving (energy efficiency).
The following tables list recommendations for BIOS options, which optimize the PRIMEQUEST 2000 Series servers either for best performance, low latency or maximum energy efficiency.
Many of the BIOS options listed here have interdependencies. This can result in certain changes to specific options alone displaying undesirable system behavior and only having the desired effect when further options are also changed at the same time. Before changes are made to the BIOS options contained in the following tables, it is expressly recommended to see the description of PRIMEQUEST 2000 Series Tool Reference section 3.4 [Device Manager] menu. Furthermore, any changes should first be examined in a test environment for the required effect, before transferring them to the production environment.

TABLE A.0.50 Recommended setting of UEFI

UEFI Setup Menu	UEFI Option	Setting(*1)	Performance	Low latency	Energy Efficiency
[Device Manager] Menu > [CPU Configuration] Menu	Hyper-threading (*7)	**Enabled** Disabled	Enabled	Disabled	Enabled
	Active Processor Cores (*8)	**0** - 18 (*2) **All** 1 - 14 (*3)	0 (*2) All (*3)	1 - 18(*2) 1 -14(*3)	0 (*2) All (*3)
	Hardware Prefetcher	**Enabled** Disabled	Enabled	Enabled	Disabled
	Adjacent Cache Line Prefetch	**Enabled** Disabled	Enabled	Enabled	Disabled
	DCU Streamer Prefetcher	**Enabled** Disabled	Enabled	Enabled	Disabled
	DCU Ip Prefetcher	**Enabled** Disabled	Enabled	Enabled	Disabled
	Execute Disable Bit (*4) (*13)	**Enabled** Disabled	Enabled	Enabled	Enabled
	Intel Virtualization Technology (*9)	**Enabled** Disabled	Disabled	Disabled	Disabled
	Intel(R) VT-d (*9)	Enabled **Disabled**	Enabled	Enabled	Disabled
	Power Technology (*10)	Disabled **Energy Efficient** Custom	Custom	Custom	Custom
	Enhanced Speed Step (*5)(*7)	**Enabled** Disabled	Enabled	Enabled	Enabled
	Turbo Mode (*5)(*7)	**Enabled** Disabled	Enabled	Enabled	Enabled
	Energy Performance (*5)(*7)	**Performance** Balanced Performance Balanced Energy Energy Efficient	Performance	Performance	Energy Efficient

UEFI Setup Menu	UEFI Option	Setting(*1)	Performance	Low latency	Energy Efficiency
	P-State Coordination (*5)(*7) (*14)	**HW_ALL** SW_ALL SW_ANY	HW_ALL	HW_ALL	HW_ALL
	Enable CPU HWPM (*7)	**Disabled** HWPM NATIVE MODE HWPM OOB MODE	Disabled	Disabled	Disabled
	CPU C1E Support (*5) (*7)	**Enabled** Disabled	Disabled	Disabled	Enabled
	CPU C3 Report (*5)	Enabled **Disabled**	Disabled	Disabled	Enabled
	CPU C6 Report (*5)	**Enabled** Disabled	Disabled	Disabled	Enabled
	CPU C7 report (*5)	**Enabled** Disabled	Disabled	Disabled	Enabled
	Package C State limit (*5)	C0 C2 C6 C7 **No Limit**	C0	C0	No Limit
	QPI Link Frequency Select (*7)	**Auto** 9.6GT/s 8.0GT/s 7.2GT/s 6.4GT/s(*2) **Auto** 8.0GT/s 7.2GT/s 6.4GT/s(*3)	Auto	Auto	6.4GT/s
	Frequency Floor Override (*3)(*7)	Enabled **Disabled**	Disabled	Enabled	Disabled
	Uncore Frequency Override (*2)(*7) (*11)	Enabled **Disabled**	Disabled	Enabled	Disabled
	Perfmon and DFX devices (*7)	Enabled **Disabled**	Disabled	Disabled	Disabled
	ACPI MSCT (*13)	**Enabled** Disabled	Enabled	Enabled	Enabled
	x2APIC Mode (*13) (*9)	**Enabled** Disabled	Enabled	Enabled	Enabled
	EMCA Gen2 (*2)(*12)(*7)	**Enabled** Disabled	Disabled	Disabled	Enabled
[Device Manager] Menu > [PCI Subsystem	PCI ROM Priority (*13)	Legacy ROM **EFI Compatible ROM**	EFI Compatible ROM	EFI Compatible ROM	EFI Compatible ROM

UEFI Setup Menu	UEFI Option	Setting(*1)	Performance	Low latency	Energy Efficiency
Configuration]Menu	ASPM Support (*6)	**Disabled** Auto Limit to L0s	Disabled	Disabled	Auto
	Number of bus# Padded to slot (*13)	**1** 2 3	1	1	1
	Above 4G decoding (*13)	Enabled **Disabled**	Disabled	Disabled	Disabled
	OpROM MMIO Assignment (*13)	**Enabled** Disabled	Enabled	Enabled	Enabled
[Device Manager] Menu > [Memory Configuration] Menu	DIMM Speed (*3)(*7)	Performance Mode **Normal Mode**	Performance Mode	Performance Mode	Normal Mode
	Patrol Scrub (*7)	Enabled **Disabled**	Disabled	Disabled	Enabled
	Refresh Rate (*7) (*14)	**Auto** 1x	Auto	Auto	Auto
	Memory Power States (*7)	**Default** Performance Mode	Performance Mode	Performance Mode	Default
	DDR4 Command/Address Parity Check and Retry (*14)(*7)	**Enabled** Disabled	Enabled	Enabled	Enabled
[Device Manager] Menu > [USB Configuration]Menu	Legacy USB Support (*13)	Disabled **Enabled** Auto	Enabled	Enabled	Enabled
	USB Port Disable (*7) (*13)	**Enabled** Disabled	Enabled	Enabled	Enabled
	Mass Storage Devices: “Connected Device Name” (*13)	**Auto** Floppy Forced FDD Hard Disk CD-ROM	Auto	Auto	Auto

*1 : The setting shown by the bold-faced type is a setting of default.
*2 : For PRIMEQUEST 2400E3/2800E3/2800B3/2400E2/2800E2/2800B2.
*3 : For PRIMEQUEST 2400E/2800E/2800B.
*4 : Only when OS supports this item, it becomes effective.
*5 : Only when "Custom" is selected by "Power Technology", this item is displayed.
*6 : If PCI Express adaptor or an onboard controller is not supporting ASPM though ASPM is effective, the link does not become effective.
*7 : Because the setting of a Physical Partition is succeeded, this item cannot be set with the Extended Partition.
*8 : This item is not displayed in the Extended Partition.
*9 : This item cannot be set by a fixed display with the Extended Partition.
*10 : The submenu displayed when "Disabled" and "Energy Efficient" are selected in a Physical Partition or "Custom" is selected is not displayed and it becomes fixation set. It is likely to become different from a fixed setting of a Physical Partition set to succeed a part of setting of a Physical Partition in the Extended Partition.
*11 : The frequency of Uncore is controlled besides the frequency in CPU core.

*12 : RAS function decreases though the performance and the response improve by making this item Disabled.
*13 : Because this item is not effective in the performance and the energy efficiency, the Default value becomes a recommended value.
*14 : Because this item is not recommended to change, the Default value becomes a recommended value.

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