

Areas Covered

Before Reading This Manual

This section explains the notes for your safety and conventions used in this manual. Make sure to read this section.

Chapter 1 About Management Blades

This chapter explains the system features and the component names of Management Blades.

Chapter 2 Installing and Removing Management Blades

This chapter explains how to install/remove Management Blades to the chassis and default settings.

Chapter 3 Software

This chapter explains the software that can be used in collaboration with Management Blades.

Chapter 4 Web UI

This chapter explains the Web UI which enables the management and operation of the blade server system in the Management Blade.

Chapter 5 CLI

This chapter explains the command line interface (CLI) which enables the management/operation of the blade server system in the Management Blade.

Chapter 6 Technical Information Knowledgebase

This chapter explains the specifications and operational notes of the Management Blade.

Before Reading This Manual

For Your Safety

This manual contains important information, required to operate this product safely. Thoroughly review the information in this manual before using this product. Especially note the points under "Safety Precautions" provided with the chassis or server blade, and only operate this product with a complete understanding of the material provided. This manual and "Safety Precautions" should be kept in an easy-to-access location for quick reference when using this product.

Data Backup

To protect data stored in this device (including basic software (OS) and application software), perform backup and other necessary operations. Note that data protection is not guaranteed when repairs are performed. It is the customer's responsibility to maintain backup copies in advance. In case of data loss, Fujitsu assumes no liability for data maintenance or restoration and damages that occur as a result of the data loss for any reason, except for items covered under warranty.

High Safety

The Products are designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use, household use, and ordinary industrial use, but are not designed, developed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage, or other loss (hereinafter "High Safety Required Use"), including without limitation, nuclear reaction control in nuclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system. You shall not use this Product without securing the sufficient safety required for the High Safety Required Use. If you wish to use this Product for High Safety Required Use, please consult with our sales representatives in charge before such use.

Contents

This manual supports operation of the PRIMERGY BX600 S2 Blade Server System Unit and BX620 S3 Server Blade. For information on the chassis and server blade not described in this manual, refer to the relevant manuals in the Fujitsu PRIMERGY website (<http://primergy.fujitsu.com>).

Remarks

■ Warning Descriptions

Various symbols are used throughout this manual. These are provided to emphasize important points for your safety and that of others. The following are the symbols and their meanings. It is important to fully understand these symbols before reading this manual.

 WARNING	Ignoring this symbol could be potentially lethal.
 CAUTION	Ignoring this symbol may lead to injury and/or damage to the server or internal options.

The following symbols are used indicate the type of warning or cautions being described.

	The triangle mark emphasizes the urgency of the WARNING and CAUTION. Details are described next to the triangle.
	A barred circle (⊘) warns against certain actions (Do Not). Details are described next to the circle.
	A black circle indicates actions that must be taken. Details are described next to the black circle.

■ Symbols

Symbols used in this manual have the following meanings:

Expressions	Meaning
 IMPORTANT	These sections explain prohibited actions and points to note when using this device. Make sure to read these sections.
 POINT	These sections explain information needed to operate the hardware and software properly. Make sure to read these sections.
→	This mark indicates reference pages or manuals.

■ Key Descriptions / Operations

Keys are described by their representative characters instead of their exact key face appearance, as show below.

E.g.: [Ctrl] key, [Enter] key, [→] key, etc.

The following indicate the pressing of several keys at once:

E.g.: [Ctrl] + [F3] key, [Shift] + [↑] key, etc.

■ Entering Commands (Keys)

Command entries are displayed in the following way:

```
diskcopy a: a:
          ↑ ↑
```

- In the spaces indicated with the "↑" mark, press the [Space] key once.
- When using Windows, commands are not case sensitive.
- CD-ROM drive names are shown as [CD-ROM drive]. Enter your drive name according to your environment.

```
[CD-ROM drive]:\setup.exe
```

■ Screen Shots and Figures

Screen shots and figures are used as visual aids throughout this manual. Windows, screens, and file names may vary depending on the OS, software, or configuration of the server used. Figures in this manual may not show cables that are actually connected for convenience of explanation.

■ Consecutive Operations

Consecutive operations are described by connecting them with arrows "→".

Example: Procedure of clicking the [Start] button, pointing to [Programs], and clicking [Accessories]

↓

Click [Start] → [Programs] → [Accessories].

■ Abbreviations

The following expressions and abbreviations are used throughout this manual.

In this manual information other than the OS being used in also provided.

Product names	Expressions and abbreviations	
PRIMERGY BX600	The server or this server (Indicates the whole blade server system)	
PRIMERGY BX600 Management Blade	Management Blade/ This management blade/ This product	
PRIMERGY BX600 S2 Blade Server System Unit	Chassis	
PRIMERGY BX620 S3 Server Blade	BX620 S3 Server Blade	server blade
PRIMERGY BX600 Switchblade 10+ 3x 10/100/1000TX layer2	Switch Blade	
PRIMERGY BX600 FC Pass-Thru blade	FC Pass-Thru blade	
PRIMERGY BX600 GbE Pass-Thru Blade	GbE Pass-Thru Blade	
Microsoft® Windows Server™ 2003 R2, Standard x64 Edition	Windows	
Microsoft® Windows Server™ 2003 R2, Enterprise x64 Edition		
Microsoft® Windows Server™ 2003, Standard x64 Edition		
Microsoft® Windows Server™ 2003, Enterprise x64 Edition		
Microsoft® Windows Server™ 2003 R2, Standard Edition		
Microsoft® Windows Server™ 2003 R2, Enterprise Edition		
Microsoft® Windows Server™ 2003, Standard Edition		
Microsoft® Windows Server™ 2003, Enterprise Edition		
Microsoft® Windows® 2000 Server		
Microsoft® Windows® 2000 Advanced Server		

■ Management Blade Firmware

The Web UI/CLI screen configuration and parameters of the Management Blade differ depending on the firmware version. When referring to manuals, use the manual version that matches the Management Blade firmware version being used.

This manual describes the Management Blade firmware version V1.62 or later.

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1

Chapter 1

About Management Blades

This chapter explains the system features and the component names of Management Blades.

1.1 Features	10
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1.1 Features

The Management Blade performs various types of monitoring and control of the status of the power supply, temperature and system fan within the chassis. It is also equipped with LAN ports, which makes monitoring/control possible even from a remote location.

■ Management blade features

- Because the Management Blade is equipped with an exclusive CPU, LAN interfaces and serial interfaces it operates regardless of the status (hung status) of each blade.
- Two Management Blades are installed in the chassis by default and the management function is redundant. During redundant operations of the Management Blade, even if a failure occurs the Management Blade can be replaced without turning the power off.
- Management tools are supported in both Web-browser-based and command-line-based formats for easy management of the chassis.
- SNMP is supported. This makes it possible to monitor/control the chassis on a network.

■ Chassis management

- The status of the various blades within the chassis (server blade, Switch Blade, Management Blade), the PSU and the system fan unit can be monitored.
- The display/keyboard/mouse switch function of the server blade installed in the chassis is supported.

■ Blade management

- Power control is performed for the server blade.
- Console redirection is supported (text window only) for server blades and Switch Blades.
- By storing the BIOS settings of the server blade in the Management Blade, the original settings can be restored when the server blade is replaced. Also, stored data can be restored to other server blades within the chassis.
- By storing the setting data of the Switch Blade in the Management Blade, the original settings can be restored when the Switch Blade is replaced.

This product supports the following communication interfaces.

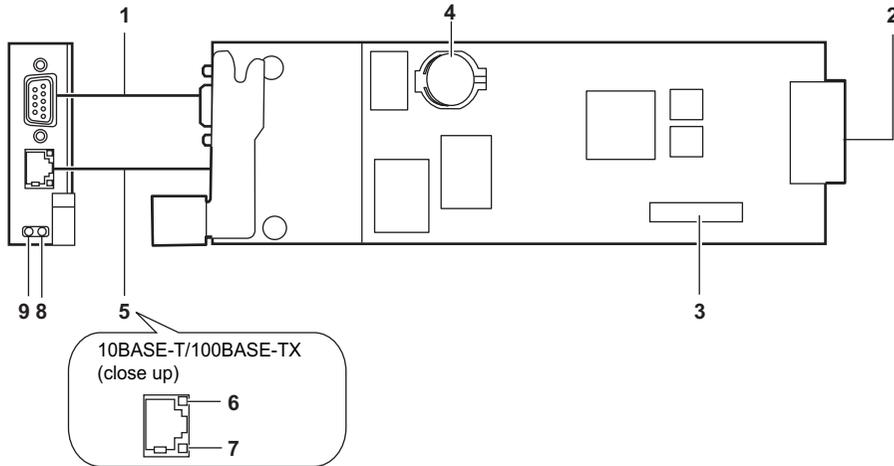
- LAN interface (10BASE-T/100BASE-TX)
- Serial interface

POINT

- ▶ LAN cables are optional. They are not included with this product. Use cables that are category 5 or higher. One RS-232C cross cable comes attached with the chassis.

1.2 Component Names and Functions

This section explains the names and functions of the various parts of this product.



- 1 Serial port (9 pin)**
The RS-232C cross cable (one cable is attached with the chassis) connects the Management Blade to the management terminal.
- 2 Chassis connection connector**
This is a connector used for connecting to the chassis.
- 3 Jumper pins**
- 4 Lithium battery**
- 5 10BASE-T/100BASE-TX connector**
An unshielded twisted pair (UTP) cable is plugged in.
- 6 LAN active LED**
Blinking (Amber): transmitting data
*Blinks uniformly when NIC diagnostic function of the Management Blade is used.
- 7 LAN link LED**
LED ON (Green): link established

- 8 Management Blade master LED**
This lights up when the Management Blade is operating in master mode.

LED status	Management Blade status
ON (Green)	Operating in master mode
OFF	Operating in slave mode

- 9 Management Blade error LED**
This lights or blinks when a Management Blade error occurs as follows.
If this LED lights or blinks, contact an office listed in the "Contact Information" of "Start Guide".

LED status	Management Blade status
ON (Amber)	A Management Blade error has occurred (non redundant Management Blade configuration)
Blinking (Amber)	A Management Blade error has occurred (redundant Management Blade configuration)
OFF	No error detected.

POINT

- ▶ When the Management Blade is restarted or the operation mode is changed, the error LED will light up or blink temporarily but if it turns off after a short while, there is no error.

Chapter 2

Installing and Removing Management Blades

2

This chapter explains how to install/remove Management Blades to the chassis and default settings.

2.1 Before Starting	14
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2.1 Before Starting

Perform the following preparations before installing/ removing a Management Blade to the chassis.

■ Preparations

Before starting prepare the following.

- Management Blade
- PRIMERGY Document & Tool CD
- Management terminal (PC etc.)

POINT

- ▶ It is necessary to have a normal environment in which Web browser and terminal software operates in the management terminal. Also, LAN ports or serial ports are necessary as communication interfaces.

2.2 Installing and Removing

For details about installing/removing Management Blades, refer to "BX600 S2 Blade Server System Unit Hardware Guide".

IMPORTANT

- ▶ For the Management Blades to monitor the chassis constantly, blade system management starts approx. 1 minute after the power cable of the chassis has been plugged in.
- ▶ Always use the same Management Blade firmware version in both Management Blades (excluding firmware being updated).

2.3 Default Settings

Before using the Management Blade, some default settings must be performed.

2.3.1 Management Software

Management Blade supports management tools such as Web UI (web user interface) and CLI (command line interface). Using these management tools, the chassis of the blade server and various blades can be easily managed from the management terminal.

- The Web UI operates/manages using the Web browser via the LAN.
- CLI operates/manages using a command line base on the console menu that uses serial ports or Telnet protocol via LAN.

2.3.2 Communication Interface Settings

Perform the necessary settings from among the following depending on the management tools and method of communication to be used.

- When using Web UI or CLI via Telnet
→ "■ LAN Interface Settings" (pg.16)
- When using CLI via a serial interface
→ "■ Serial Interface Settings" (pg.18)

POINT

- ▶ Access the various management tools using the user name "root", password "root" as set in the default user settings during default settings. Password is case sensitive.

■ LAN Interface Settings

The procedures for settings LAN interface are as follows.

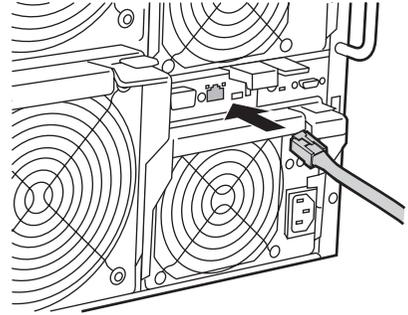
IMPORTANT

- ▶ The LAN interfaces of Management Blade can be set to 10Mbps full duplex/ 10Mbps half duplex/ 100Mbps full duplex/ 100Mbps half duplex/ auto-negotiation. Set the same setting to the connecting hub. If they are connected in different settings, the level of communication efficiency may severely decreased or communication may fail.

1 Connect the management terminal and Management Blade using a LAN cable according to the network to be used.

1. Connect the LAN cable to the Management Blade.

Attach the connector of the LAN cable to the 10BASE-T/100BASE-TX port of the Management Blade.



2. Connect the LAN cable to a hub or router.

Connect the other end of the LAN cable to a hub or router connected to the management terminal.

IMPORTANT

- ▶ The LAN ports of the Management Blade can be set to 10Mbps full duplex/ 10Mbps half duplex/ 100Mbps full duplex/ 100Mbps half duplex/ auto-negotiation. If connected to a port within the same network that has a different speed, the performance of the LAN transfer function will deteriorate. For example, the speed of all the ports is matched to that of the slowest port when using the IGMP function with no hub to perform broadcast or multicast communication.
- ▶ When using a Management Blade with a redundant configuration, connect the LAN cable to both the master and slave Management Blades using a hub etc. If a fatal error occurs in the master Management Blade, because the communication path is automatically changed by a Management Blade that changed from slave to master, management/operation via a LAN interface can be continued without changing the connection (the communication path change takes about 30 seconds). However, if LAN communications are stopped due to NIC failure or LAN cable disconnection in the Management Blade, the Management Blade changeover to master will not occur and management /operation via LAN interface will cease. Even in this case, when managing/operating via LAN interface is required, refer to "● 9. NIC Status Detection (1_3_9)" (→pg.92) and enable the status monitoring function of the LAN interface. By forcibly changing the master, management/operation can continue.

2 Activate the Web browser in the management terminal.

For more details about supported Web browsers, refer to "4.1 Accessing Web Interface" (→pg.26).

3 Access the Web UI of the Management Blade from the Web browser.

Access the Web UI using default value (IP address:192.168.1.1/ subnet mask: 255.255.255.0) if it is the initial setting.

For the access procedures, refer to "4.1 Accessing Web Interface" (→pg.26).

- 4 Perform LAN interface settings by clicking on "System Property" → "LAN Interface" in the setting parameter menu of the displayed Management Blade homepage in this order.

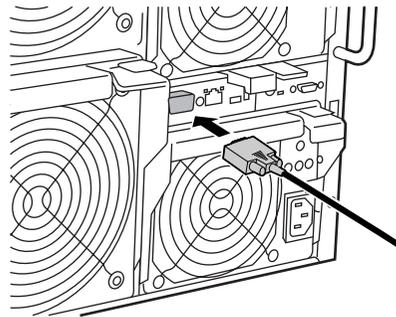
For details about setting methods, refer to "● LAN Interface" (→pg.29).

■ Serial Interface Settings

- 1 Connect the management terminal to the Management Blade using the attached RS-232C cross cable.

1. Connect an RS-232C cross cable to the Management Blade.

Connect the RS-232C cross cable connector to the serial port on the Management Blade operating in master mode.



2. Connect an RS-232C cross cable to the management terminal.

Connect the other end of the cable to the serial port on the management terminal.

IMPORTANT

- ▶ Connect the management terminal to the Management Blade operating in master mode. It is not possible to connect to CLI from the serial port of the Management Blade operating in slave mode. Check the operation mode of the Management Blade in the Management Blade master display LED (→"1.2 Component Names and Functions" (pg.11)).

- 2 Start the terminal software in the management terminal and perform settings to enable Management Blade connection.

For details about setting methods, refer to "5.1.1 Using Serial Interface" (→pg.60).

2.3.3 Management User Settings

A user name "root" and password "root" that have administrator privileges are set by default to the Management Blade.

To ensure the security, make sure to change the password.

■ Changing the password from Web UI

- 1** Access the Web UI from the management terminal.
- 2** Click [System Property] → [User Accounts].
The "User Accounts" page appears.
- 3** Click [root].
The "Account" page of the User name: root appears.
- 4** Enter the following parameter and click [Apply].
 - Password: Enter a new password.
 - Confirm Password: Enter the new password again.

■ Changing the password from CLI

- 1** Log in to the CLI from the management terminal.
- 2** Move in the order of "(1) Management Agent" → "(6) Username And Password".
Select (1), "root".
- 3** In the next screen select (2), "Change Password" and change the password.

```

+-----+
|           Edit Username And Password           page_1_6_2           |
+-----+
(1) Change Username : root
(2) Change Password : ***
(3) User Permission : 255
Enter selection or type (0) to quit:

```

 **POINT**

- ▶ Passwords can be set to a maximum of 16 characters. Passwords are case sensitive.

2.3.4 Blade Server Time Management

It is necessary to perform/check Management Blade time and time zone settings during initial setting. Perform checks/settings in Web UI (→"● System Information" (pg.44)) or CLI (→"■ Management Agent Information (1_1)" (pg.67)).

Note the following when checking/setting.

■ Server blade and Management Blade time synchronization

The time of the server blade installed in the chassis can be synchronized with the time of the Management Blade by enabling "Sync RTC with Mgmt. Blade" using the BIOS setup (Default value is [Enabled]).

Using this function, the time of multiple server blades and Management Blades installed in the chassis can be synchronized.

→ "BX620 S3 Server Blade User's Guide Chapter 8 Hardware Configuration/Utilities"

■ Management Blade time synchronization via the network

- ▶ Disable "Sync RTC with Mgmt. Blade" if you do not wish to perform time synchronization for server blade and Management Blade for reasons such as a precise system time being demanded of the server blade. In this case incorporate a time synchronization system (NTP etc.) via the network in the server blade system design.

Management Blade supports NTP as a time synchronization system via the network. Set in Web UI (→"• NTP" (pg.39)) or CLI (→"● 17. Agent NTP (1_1_17)" (pg.76)). When using this function, complete settings or checking before starting blade server operations or when suspended.

 **IMPORTANT**

- ▶ Do not change NTP settings during blade server operation. Doing so may cause a system failure by the time synchronization of the management and server blades in the OS etc.

2.3.5 Various Setting Values

In order to operate the Management Blade, perform settings in order to they conform with the installation environment on the management tools.

IMPORTANT

- ▶ Store the various setting values set in the Management Blade in the hard copy of screens, take note, or record in the Configuration Sheets. This is necessary when maintaining or restoring settings.

2.3.6 Points to Note During Management Blade Operations

The following are points to notice for Management Blade operations.

■ Management Blade redundancy function

Two Management Blades are installed in this server by default and the management function is redundant.

In a redundant configuration, one Management Blade operates in master mode and the other in slave mode. During normal operations, the Management Blade operating in master mode performs system management and operations. The Management Blade operating in slave mode is continuously monitoring the master.

If an error occurs in the master the slave will detect this and switch with the master enabling management and operations to continue without stopping.

IMPORTANT

- ▶ Always use the same Management Blade firmware version in both Management Blades (excluding firmware being updated).

POINT

- ▶ As long as there is no error in the Management Blade, immediately after the power cable has been connected the Management Blade installed in slot 1 operates as the master.

Chapter 3

Software

3

This chapter explains the software that can be used in collaboration with Management Blades.

3.1 Software 24

3.1 Software

The following software is used with Management Blades.

- **ServerView V3.50 or later**

Blade server system status monitoring and remote operations can be performed from the ServerView management console.

- **RemoteControlService V3.06 or later**

CLI operations can be performed via Telnet.

ServerView management console and RemoteControlService come with the PRIMERGY Document and Tool CD attached to the server blade.

For details about how to install ServerView and RemoteControlService, refer to the "Server Blade User's Guide" and the "ServerView User's Guide".

POINT

- ▶ In order to use ServerView, the following settings must be performed for Management Blade.
 - Connect the management terminal to which ServerView management console has been installed with Management Blade and server blade using the LAN.
 - Set IP address and subnet mask in the LAN interface settings.
 - Perform SNMP settings. Set SNMP to "Enable" and set the SNMP community name to be the same as ServerView.
 - Set the IP address of the management terminal installed in the ServerView management console in "SNMP Trap Destination".
 - Set Management Agent System Name (recommended).
 - "Agent Information" of Web UI (→"● System Information" (pg.44))
 - "9. Agent System Info" of CLI (→"■ Management Agent Information (1_1)" (pg.67))

Chapter 4

Web UI

4

This chapter explains the Web UI which enables the management and operation of the blade server system in the Management Blade.

4.1 Accessing Web Interface	26
4.2 Web UI Menu	27

4.1 Accessing Web Interface

Management Blade supports Web interface (Web UI) and can be accessed from the following Web browsers.

- Internet Explorer (Version 5.0, 5.5, 6.0 or later)
- Netscape (Version 4.75, 4.78, 6.x or later (*))

*: When using the SSL function, Version 7.0 or later is required.

To access Management Blade from Web UI, execute the Web browser and enter the following address in the address bar. Enter the IP address of the Management Blade in <IP address>.

- `http://<IP address >:< Port number (default:80)>` (when HTTP SSL is "disable")
- `https://<IP address >:< Port number (default:443)>` (when HTTP SSL is "enable")

A dialog box will appear. Enter the user name and password to login.

POINT

- ▶ HTTP SSL is set to "Disable" by default.
- ▶ The Web interface can be accessed from the ServerView management console. For details about access methods, refer to "Chapter 3 How to use ServerView" in the "ServerView User's Guide".

4.2 Web UI Menu

4.2.1 Start Screen

Access the start address and enter the user name and password. When they are recognized, the website of the Management Blade will be displayed as the start screen. Web UI settings start from this screen. On the left side of the screen, a menu containing various parameters is displayed like explorer and on the right, the system setting page of the parameter selected in the menu is displayed.



POINT

- ▶ The status of various components is displayed in the system setting page of the home page. Clicking the status displays the details page.

The following link appears in the header area.

Icon	Description
	Click and the relevant frames are reloaded.
	Click and move to the Management Blade home page.

4.2.2 Settings Menu

The system configuration, properties and blades installed in the blade server system are displayed in the settings menu on the left side of the screen. This page is divided into 4 groups, "System Property", "Management Blade", "Switch Blade" and "Server Blade".

■ System Property group

This group is used for system configuration.

→"4.2.4 System Property Group" (pg.32)

● System Event Log

Displays logs and sets the alarm handler.

→"● System Event Log" (pg.32)

- **Event Log**

Displays event logs related to Management Blades and server blades.

- **Alarm Handler**

Sets alarm handler.

● Environment/Maintenance

This controls operations and monitors the status for the devices such as the chassis, fan and PSU.

Also performs reboot settings for Management Blades.

→"● Environment/Maintenance" (pg.34)

- **Firmware Update**

Not normally used.

- **Power Supply**

Displays the status and running time of PSU and also performs the settings for ON/OFF of the main power supply of the chassis and the concurrent ON/OFF settings of the power supply of the server blades.

- **UPS**

Not used.

- **Chassis**

Displays the door status of the chassis, displays and sets temperature of the chassis, and indicates if the maintenance LED is lit.

- **Fans**

Displays and sets the status and running time of the system fan unit and sets the fan test.

- **Reset management Blade**

Reboots the Management Blade.

● LAN Interface

Performs settings for network configuration.

→ "● LAN Interface" (pg.38)

- **Internet Protocol**
Sets the IP address etc.
- **Domain Name Server**
Sets DNS.
- **HTTP**
Sets the port number etc. of the HTTP.
- **Telnet**
Sets the port number etc. of telnet.
- **NTP**
Sets NTP.
- **SSL**
Sets SSL.
- **Duplex Mode**
Sets transfer speed.

● SNMP Interface

Sets information regarding SNMP.

→ "● SNMP Interface" (pg.41)

- **SNMP Communities**
Sets the SNMP community name.
- **SNMP Trap Destination**
Sets the SNMP trap destination.

● Console Redirection

Performs settings related to console redirection.

→ "● Console Redirection" (pg.42)

- **Keyboard/Mouse/Video Switch to Local**
Performs Keyboard/Display/Mouse (KVM) switch settings.
- **IP Filter for Telnet/IP Filter for HTTP/IP Filter for SNMP**
Sets IP filtering.

● Fiber Channel

Displays the status of the fibre channel pass-thru

→ "● Fiber Channel" (pg.43)

● System Information

Sets agent information, time, and the time zone.

→ "● System Information" (pg.44)

● **User Accounts**

Adds new users and changes the password.

→ "● User Accounts" (pg.45)

● **Deployment Table**

Displays and sets the Parameters of various server blades that can be used with Deployment software.

→ "● Deployment Table" (pg.46)

● **PPP and Modem Setting**

This function is not supported.

■ **Management Blade group**

Displays the information of installed Management Blades.

→ "4.2.5 Management Blade Group" (pg.47)

■ **Switch Blade group**

Displays the information and controls the maintenance LED of installed Switch Blades.

→ "4.2.6 Switch Blade Group" (pg.48)

■ **PHY Module group**

Displays the information and controls the maintenance LED of installed GbE Pass-Thru Blade.

→ "4.2.7 PHY Module Group" (pg.49)

■ **Fibre Channel Switch Group**

Displays the information of installed Fibre Channel Switch Blade.

→ "4.2.8 Fibre Channel Switch Group" (pg.50)

■ **Adv.KVM Blade group**

Displays the information and manages the firmware of installed advanced KVM module. Also starts the viewer used for remote access to KVM.

→ "4.2.9 Adv. KVM Blade Group" (pg.51)

■ **Server Blade group**

Displays the information of installed server blades and performs various settings.

→ "4.2.10 Server Blade Group" (pg.52)

4.2.3 System Settings Page

The system settings page displayed in the right of the screen shows the various settings and information of the item selected in the settings menu.

In the system settings page all the page header and footer areas are configured using the same method. The title of the current page appears in the header area.

The following information appears in the footer area.

- Controller time
Check the time and date of the Management Blade.

POINT

- ▶ The time and date displayed is the time and date when the Web page was accessed.

The following link appears in the both the header and footer areas.

Icon	Description
	Clicking displays the help file.
	Clicking moves to the top of the page.
	Clicking moves to the bottom of the page.

■ Basic operations of the system settings page

- After entering characters or values into the boxes, click the [Apply] button etc. and the settings on various pages are enabled (some settings require the reboot of the Management Blade).
- To move to each setting, click the menu.
- If the time is entered using the 24 hour format, 6:30 am is entered as "06:30" and 6:30pm is entered as "18:30".

IMPORTANT

- ▶ Do not directly enter the URL into the address bar to move to another page, except when displaying the start page first.

4.2.4 System Property Group

This group is used for system configuration.

● System Event Log

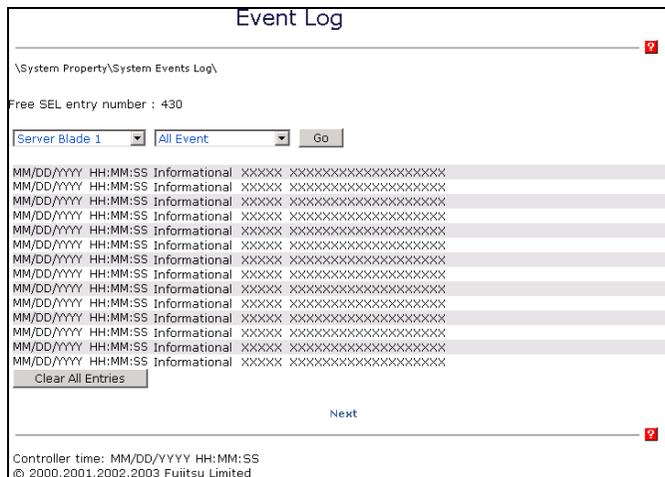
The Management Blade and server blade event logs are displayed and alarm handler settings are performed on the System Event Log page. Management blade logs include event logs related to the chassis.

• Event Log

Clicking [Event Log] displays the following page. The event log message recorded in the Management Blade can be checked by selecting Management Blade from the pull down menu. The event log message recorded in a selected server blade can be checked by selecting server blade from the pull down menu.

The latest event logs are displayed and past logs can be checked in order by clicking [Next]. The remaining number of event logs can be checked in "Free SEL entry number".

A maximum of 510 event log entries for Management Blade and 511 for BX620 S3 Server Blade can be saved.



The displayed content of the event logs can be filtered by selecting the error level from the pull down menu.

- ALL Event
All logs are displayed.
- Informational Event
Appropriate system operation. In order to notify the user of system events that are recorded.
- Minor Event
A warning about an event with a low level of importance. It is required to solve this problem as necessary.
- Major Event
A warning about an event with a high level of importance. This indicates a significant problem that could lead to the loss of operation status if the status does not change.
It is necessary to solve this problem as quick as possible.

- Critical Event

A warning about a critical problem. If the problem is not solved, it may cause an error in the operations of the system.

All logs can be deleted by clicking [Clear All Entries].

POINT

- ▶ When "Management Blade Wrap Around Event Log Enable" is set to "disable" in Management Blade, if the number of event logs is maximized, no more event logs can be recorded. Periodically check [Event Log] and save or delete logs as necessary. Save them by copying the screen text.

- **Alarm Handler**

On the Alarm Handler page, the settings of alarm handler are checked. Alarm handler can send emails notifying the content of events that have occurred within the system. Alarm handler can also set event log operations.

The Alarm Handler pages are explained below.

- **Mail Settings**

This is where mail settings are performed.

Display/Parameter	Description
To	Enter the e-mail address of the receiver.
From	Enter the e-mail address of the sender.
Host	Enter the IP address or host name of the host used to access the SMTP service.
Subject	The subject of the e-mail. The subject is fixed as PRIMAIL.
Administrator Name	Enter the name of the administrator. This is sent as the content of the mail.
Phone number	Enter contact phone number of the administrator. This is sent as the content of the mail.

- **Error Forwarding**

In this section, the filter for out going e-mails is set. In alarm handler, outgoing alarms can be filtered by the alarm group and error level.

- Error Forwarding Level

By using error level filter, you can set alarms not to send that have a lower level of importance than the specified level.

- **Server Blade Power On/Off Event Log Enable**

This is set whether power ON/OFF and shutdown of the server blade is recorded in a Management Blade event log.

- enable

Event logs related power ON/OFF and shutdown of the server blade is recorded.

- disable

Event logs related power ON/OFF and shutdown of the server blade is not recorded.



▶ If set to "enable", the number of event logs increases. Pay attention to the remaining number of event logs, make sure not to exceed the maximum number of event logs or set "Management Blade Wrap Around Event Log Enable" to "Enable" and set to overwrite old logs.

• **Management Blade Wrap Around Event Log Enable**

Sets the log operations when Management Blade event logs exceed the maximum capacity.

- enable (Default value)
When event logs exceed the maximum capacity, logs are overwritten in order of the oldest.
- disable
Stops log operations when event logs exceed the maximum capacity.

● **Environment/Maintenance**

In the Environment/Maintenance page, information about temperature, power supply and door status is checked. Actions for temperature errors and fan failures can also be set.

Order for the reboot of the Management Blade can be set.

• **Firmware Update**

Not normally used.

• **Power Supply**

On the Power Supply page, information such as the temperature of the PSU, the internal fans and running time is displayed and ON/OFF is controlled.

The Power Supply page is explained below.

Display/Parameter	Description
Power Status / Power Switch	<p>Displays and controls the power (main power) status of the PSU. When using refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137).</p> <ul style="list-style-type: none"> • power on: the main power of the chassis is turned on. • hard power off: the main power of the chassis is turned off. • graceful shutdown and off: "- graceful shutdown and off" (→pg.54) is ordered for all the installed server blades and the power is turned off. <p>Notes:</p> <ul style="list-style-type: none"> ▶ When using this function, it is necessary to make various settings to the installed server blades. For details, refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137). When performing operations for server blades that are not supported, do not select this, because, unexpected operations such as ACPI shutdown or power off may occur. <p>If the following checkbox is checked as ON, you can set the power to be forcibly turned off when graceful shutdown fails,</p> <p><input type="checkbox"/> When graceful shutdown fail, force power off after X minutes. (X can be 1-7 mins)</p>
Group Status	<p>Indicates the overall status of the PSU.</p> <ul style="list-style-type: none"> • ok: The PSU is operating normally. • degraded: A problem is occurring in the PSU. • critical: A critical problem is occurring in the PSU.
Power Redundancy	<p>Indicates whether the PSU is redundant or not (yes/no).</p>

Display/Parameter	Description
Power Supply unit 1 – 4	Displays the status of the various PSU/dummy PSU installed in PSU slots 1 – 4.
Server Blade Power Switch	<p>Controls the power supply of all the installed server blades.</p> <ul style="list-style-type: none"> • Turn on all server blades: all the installed server blades are turned on sequentially. • Turn off all server blades: Select this item and click [Apply] and the confirmation screen appears. If [YES] in the confirmation screen is clicked, "graceful shutdown and off" will be ordered for the "Power Status" of all the installed server blades (For details about "Power Status", refer to "• Power Status / Power Switch" (→pg.54)). <p>Important:</p> <ul style="list-style-type: none"> ▶ When performing server blade power control in this item, after ordering power ON/OFF, check that all power ON/OFF operations have been completed by icons on Web UI etc., and then move on to the next operation.

POINT

- ▶ Turning on the main power supply of the chassis starts the Switch Blade and the system fan operations. Power will be distributed to the server blade, but the server blade will not be booted until a separate order to turn power ON is ordered.

• **PSU replacement**

IMPORTANT

- ▶ PSU and dummy PSU are non-durable components (→ BX600 S2 Blade Server System Unit Hardware Guide). Change settings after replacement.

Display/Parameter	Description
Live Time	Indicates the running time of the PSU and dummy PSU. It is measured in units of hours (hrs). After replacing the PSU and dummy PSU, click [Reset] and set this value to 0.
Live Time Limited Count	Indicates the lifetime of the PSU and dummy PSU.

• **UPS**

Not normally used. Do not set.

- **Chassis**

Chassis and system fan unit information is displayed in the Chassis page. Internal temperature displays of the chassis and actions for temperature errors can also be set.

The Chassis page is explained below.

Display/Parameter	Description
Chassis Product Version	Displays the product version of the chassis.
System Information	System Information
Overall Status	Displays the overall status of the system.
System LED	Controls the maintenance LED of the chassis as the system indication LED display function. <ul style="list-style-type: none"> • power on: the front and rear maintenance LEDs of the chassis are lit. • off: the front and rear maintenance LEDs of the chassis are not lit. • blinking: the front and rear maintenance LEDs of the chassis are blinking.
Rear Fan Door Status	Rear Fan Door status
Sensor ID	Displays the corresponding system fan units. <ul style="list-style-type: none"> • Rear Panel-1: System fan unit 1 • Rear Panel-2: System fan unit 2
Status	Displays the status of the system fan unit. <ul style="list-style-type: none"> • open: the system fan unit has been removed. • close: the system fan unit has been inserted.
Ambient Temperature	Environment Temperature
No	Displays the numbers of each temperature sensor.
Status	Displays the status of each temperature sensor.
Designation	Displays the location of each temperature sensor. <ul style="list-style-type: none"> • Housing-Left, Center, Right: Chassis's left, center, right (Chassis front view) • Ambient: vicinity of the chassis main power supply • Switch 1-4: inside the Switch Blade • PSU-1-4: inside the PSU
Temperature	Displays the temperature measured by each temperature sensor.
Warning Level	Displays a temperature warning.
Critical Level	Displays a critical temperature.
Reaction	Displays the action if temperature reaches a dangerous level (Critical Level).

Sets the action for each sensor.

- continue

Continues server operations even during a temperature error.

- shutdown-and-poweroff

Performs graceful shutdown of the main power supply of the chassis if temperature reaches a dangerous level (Critical-Level).

POINT

- ▶ When "System Overall Status" is "error" or "critical", the maintenance LED of the chassis blinks, even if "on" is ordered.

• Fans

The status of fans is displayed and actions for fan failure are set in the Fans page.

The Fans page is explained below.

Display/Parameter	Description
ID	Displays the numbers of each fan.
Status	Displays the status of each fan.
Designation	Displays the location of each fan. <ul style="list-style-type: none"> • Rear 1,2_1-2 fans: system fan unit internal fan • PowerUnit 1, 2, 3, 4-Fan-1-3: PSU internal fan (1: power cooling fan, 2 and 3: system fan unit)
Normal Revolutions	Displays the rpm of each fan.
Reaction	Displays the action of each fan when an error has occurred.

Sets the action for each fan.

- continue
Sets operations to continue even during a fan failure.
- shutdown-and-poweroff
Performs graceful shutdown of the main power supply of the chassis when a fan error occurs.

• Fans Test

A fan operation test can be performed at a set time everyday (Daily test time) in order to predict fan failure.

- Daily test time
 - hour: minute
Time is set in "hours:minutes". The hours should be based on a 24-hour clock.
 - disabled
Fan operation test will not be performed.
 - Fan test at every start-up
If this is checked, a fan operation test will be performed every time the main power supply is turned on.

• Fans Live Time Counter

Displays and sets the running time and lifetime of the system fan unit.

Display/Parameter	Description
Rear1_1 – 2_2 fans	Displays the running time of the system fan unit. It is measured in units of hours (hrs). After replacing the system fan unit, click [Reset] to set this value to 0.
Rear1_1 – 2_2 fans limited count	Displays and sets the lifetime of the system fan unit.



- ▶ System fan units are non-durable components (→ "BX600 S2 Blade Server System Unit Hardware Guide").
Change settings after replacement.

• **Reset management Blade**

The Management Blade is rebooted in the Reset management Blade page. Clicking [Reset Management Blade] reboots the Management Blade.

POINT

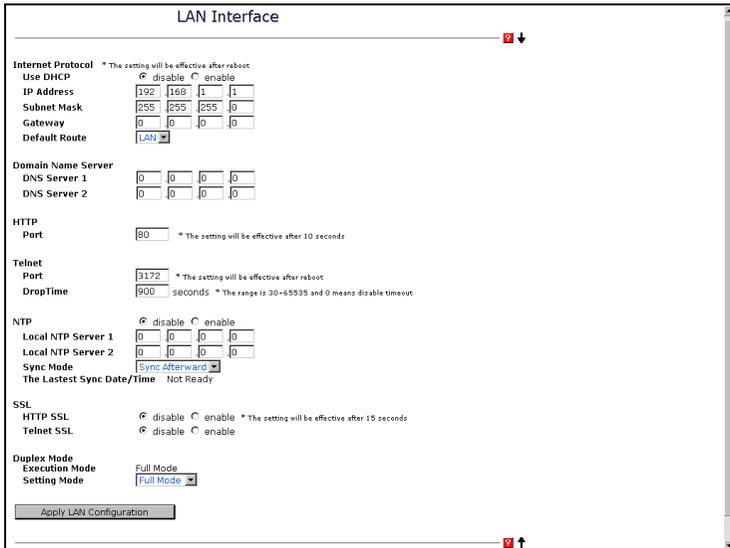
- ▶ Even if the Management Blade is rebooted, the main power supply and server blade power status is maintained.
- ▶ If rebooted when the Management Blade is redundantly configured, the master and slave are switched. During this 30 seconds LAN interface communication is not possible.

● **LAN Interface**

Management blade provides network service functions such as Web server, Telnet, SMTP, DNS, NTP, SSL etc.

Network configuration settings are performed on this page.

Click [Apply LAN Configuration] and settings are reflected. It is necessary to reboot Management Blade for some of the settings.



• **Internet Protocol**

IP address, subnet mask, gateway and DHCP are set on the Internet Protocol page.

Display/Parameter	Description
Use DHCP	Sets whether IP address etc. are acquired using DHCP. <ul style="list-style-type: none"> • enable: use DHCP. • disable: do not use DHCP.
IP Address	Set the IP address of the Management Blade (setting is required). Default value: 192.168.1.1
Subnet Mask	Set the subnet mask (setting is required). Default value: 255.255.255.0
Gateway	Set the IP address of the gateway.
Default Route	Not normally used. Set to LAN.

POINT

- ▶ These settings become valid after rebooting the Management Blade.

- **Domain Name Server**

Domain Name Server (DNS) is set on the Domain Name Server page.

Display/Parameter	Description
DNS Server 1	Sets the IP address of the primary DNS server.
DNS Server 2	Sets the IP address of the secondary DNS server.

- **HTTP**

Port number is set on the HTTP page.

Display/Parameter	Description
Port	Sets the port number of the HTTP interface. Default value:80

POINT

- ▶ Changes to port settings will make valid 10 seconds after the changes.

- **Telnet**

Port number and Drop Time settings are set on the Telnet page.

Display/Parameter	Description
Port	Sets the port number of telnet. Default value:3172
Drop Time	Sets the amount of time (secs) until a hibernating Telnet connection automatically disconnects. This can be set within the range of 30–65535 seconds. If set to 0 the automatic disconnection function is disabled. Also, the set value will be the same as the "Management Agent Timeout (Sec)" on the CLI.

POINT

- ▶ The change to the Telnet port number becomes valid after rebooting the Management Blade.

- **NTP**

The enabling/disabling of settings and NTP server settings are performed on the NTP page.

Display/Parameter	Description
NTP	Sets whether to perform time synchronization in the Management Blade using Network Time Protocol (NTP). If NTP is enabled, the time of the Management Blade is synchronized with the NTP server every 15 minutes. <ul style="list-style-type: none"> • enable: use NTP. • disable: do not use NTP.
Local NTP Server 1	Sets the IP address of the primary NTP server.

Display/Parameter	Description
Local NTP Server 2	Sets the IP address of the secondary NTP server.
Sync Mode	Specifies the time synchronization mode. <ul style="list-style-type: none"> • Sync Afterward The time of the Management Blade is synchronized to the time of the NTP server only when the time of the NTP server is fast. When using this for operations that demand time to be taken into careful consideration such as databases, select this mode. • Sync Always The time of the Management Blade is synchronized with the NTP server every 15 minutes.
The Latest Sync Date/Time	This displays the last time at which Management Blades and NTP server time synchronization was performed.


IMPORTANT

- ▶ If an incorrect IP address is entered, time synchronization cannot be performed.
- ▶ When NTP has been enabled, always check whether the time synchronization is being performed in "The Latest Sync Date/Time". Because straight after setting, it sometimes takes time to display this, click the frame reload button a few times and check display.

- **SSL**

SSL settings are performed on the SSL page. SSL version 3 is supported.

Display/Parameter	Description
HTTP SSL	Sets whether HTTP SSL is to be used. <ul style="list-style-type: none"> • enable: use HTTP SSL • disable: do not use HTTP SSL
Telnet SSL	Sets whether Telnet SSL is to be used. <ul style="list-style-type: none"> • enable: use Telnet SSL • disable: do not use Telnet SSL


IMPORTANT

- ▶ In order to use SSL, it is necessary to enable SSL version 3 only in the Web browser and terminal emulator. Also, if SSL version 2 is enabled in the Web browser, set to disable.

- **Duplex Mode**

Transmission rate settings are performed on the Duplex Mode page.

Display/Parameter	Description
Setting Mode	Sets the transmission rate. <ul style="list-style-type: none"> • Auto-Negotiation: auto-negotiation • 100 Full Mode: 100Mbps full duplex secure • 100 Half Mode: 100Mbps half duplex secure • 10 Full Mode: 10Mbps full duplex secure • 10 Half Mode: 10Mbps half duplex secure

● SNMP Interface

SNMP community names and trap destinations are set on the SNMP Interface page.

- **SNMP Communities**

The adding and deleting of SNMP community names is performed on the SNMP Communities page. If a set community name exists, click [Apply] after checking the checkbox next to the displayed community name and this community name will be deleted.

- **Community**

If you input the new community name and click [New Community], the new community name is added. A maximum of five communities can be registered.

POINT

- ▶ When using applications such as ServerView that perform communication using SNMP, community names must be set. Set a community name for which communication can be performed.

- **SNMP Trap Destination**

The adding and deleting of SNMP trap destinations is performed on the SNMP Trap Destination page.

- **Destination**

Enter the SNMP trap destination IP address (Example: 192.168.1.2). A maximum of five destinations can be registered.

- **Community**

Specify the community name when sending a SNMP trap.

After checking the checkbox beside the trap destination, click [Apply] and the set trap destination can be deleted.

● Console Redirection

Telnet/HTTP/SNMP filtering and KVM switching are set on the Console Redirection page.

- **Keyboard/Mouse/Video Switch to Local**

On the Keyboard/Mouse/Video Switch for Local page, switches which server blade of which slot is to be used for the keyboard/display/mouse connected to the chassis.

- **Select KVM**

Since a list of installed server blades is displayed, select the server blade that wish to use the keyboard/display/mouse connected to the chassis and click [Apply].

- **IP Filter For Telnet/IP Filter For HTTP/IP Filter For SNMP**

IP filtering that permits connection is performed. A maximum of 10 IP addresses can be registered. IP addresses that permit connection are displayed in the box.

- **Deleting IP filter**

Select an IP address registered in the box and click [Delete] to delete a registered IP address.

POINT

- ▶ 255.255.255.255 is registered by default for IP Filter For Telnet and IP Filter For HTTP as a setting that will not perform IP filtering. When performing IP filtering, delete it as necessary.

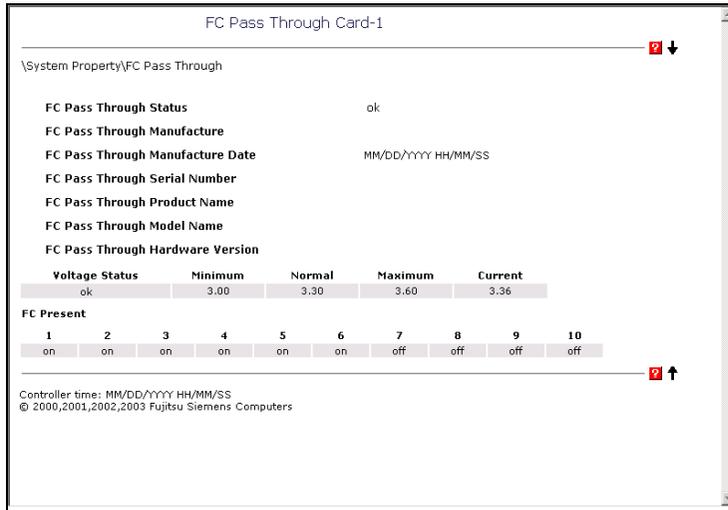
- **New Allowed IP**

Registers IP filter.

Enter an IP address that permits connection and click [Add] to register. Enter the IP address (Example: 192.168.1.2). A maximum of 10 can be registered.

● Fiber Channel

The status of the FC Pass-Thru Blades is displayed on the Fiber Channel page.



- **FC Pass Through Card-1 / FC Pass Through Card-2**
 - **FC Pass Through Status**
Displays the status of the FC Pass-Thru Blade.
 - **FC Pass Through Manufacture**
Displays the manufacturer of the FC Pass-Thru Blade.
 - **FC Pass Through Manufacture Date**
Displays the manufacture date of the FC Pass-Thru Blade.
 - **FC Pass Through Serial Number**
Displays the serial number of the FC Pass-Thru Blade.
 - **FC Pass Through Product Name**
Displays the product name of the FC Pass-Thru Blade.
 - **FC Pass Through Model Name**
Displays the model name of the FC Pass-Thru Blade.
 - **FC Pass Through Hardware Version**
Displays the hardware version of the FC Pass-Thru Blade.
 - **Voltage status**
Displays the voltage status of the FC Pass-Thru Blade. Also displays the current value.
 - **FC Present**
Displays the connection status of the fibre channel module.

● System Information

SNMP agent information and Management Blade time/time zone are set on the System Information page.

- **Agent Information**

Sets SNMP agent information.

Display/Parameter	Description
Name	Sets the system name of the Management Blade to identify the device in SNMP. Sets when using ServerView (recommended).
Location	Sets the location of the Management Blade in order to manage the device in SNMP.
Contact	Sets the "contact details" in order to manage the device in SNMP.

- **Daylight Saving Time**

Not used. Do not set.

- **Controller Time**

Sets the time of the Management Blade.

Display/Parameter	Description
(MM/DD/YYYY)	The Management Blade date is set in "month/day/year" format (Displayed when accessed).
(HH:MM:SS)	The Management Blade time is set in "hour:minute:second" 24 hour format (Displayed when accessed).

- **Time Zone**

Sets the time zone of the Management Blade.

Display/Parameter	Description
Time Zone	Sets the time zone.

● User Accounts

New user name creation, password and privilege settings and deletion of existing user accounts can be performed in the User Account page. Without administrators privileges, user related operations cannot be performed.

Click an existing user name or [Add New User Account] and the Accounts page in which user account changes can be made or new user accounts created is displayed.

POINT

- ▶ A user name "root" (password "root") that has administrator privileges is set by default. Change the password of the user name "root" during initial settings.

The following settings are performed on the Accounts page.

Display/Parameter	Description
Name	Sets new user names.
Password	Sets a password. Passwords are case sensitive.
Confirm Password	Sets again to confirm the password.
Permissions	<p>Sets the user privileges.</p> <ul style="list-style-type: none"> • Read Only [LOGIN]: settings are read only • Modify values: settings can be read and written. • Configure users: manages user accounts (for Management Blade). • Reset/Switch Off: reset and power off can be performed. • Access EMP via CLI: EMP can be accessed via CLI. (This server does not support this function). • Adv.KVM User (incl. KVM configuration rights): Graphical console redirection function of advanced KVM Module can be used. <p>Notes:</p> <ul style="list-style-type: none"> ▶ If you set the "Adv.KVM User (incl. KVM configuration rights)" privilege, check all other privileges as well.

Check "Delete User Account" and then click [Apply] to delete users.

POINT

- ▶ The user "root" cannot be deleted. Up to 10 users, including "root", can be registered.

● Deployment Table

Displays and sets the following Deployment Parameters for each installed blade. Deployment Parameters can be used in various types of Deployment software and ServerView.

By selecting an installed server blade from the pull down menu the Deployment Parameters of various server blades are set.

Display/Parameter	Description
Chassis ID	Displays the ID of the chassis.
Slot ID	Displays the slot numbers to which server blades are installed.
MAC Address 1 MAC Address 2	Displays the MAC Address of LAN port 1 and LAN port 2 of the server blade.
IP Address 1 IP Address 2	Displays the IP Address of LAN port 1 and LAN port 2 of the server blade.
Subnet Mask 1 Subnet Mask 2	Displays the subnet mask of LAN port 1 and LAN port 2 of the server blade.
Default Gateway 1 Default Gateway 2	Displays the default gateway of LAN port 1 and LAN port 2 of the server blade.
Hostname	Sets the hostname.
MasterImageReference	Sets the master image directory.
Status of Blade	Displays the present status of the server blade.
Lan Status of slot	Sets the LAN status.
AutomaticRecovery	Sets whether the automatic recovery function is enabled.
Status of Cloning	Displays the overall status of cloning.
OEM Parameters 1-10	Specifies OEM Parameters.



- ▶ "IP Address", "Subnet Mask", "Default Gateway", "Hostname", "MasterImageReference" are automatically set by software such as ServerView. Do not make changes unless necessary when using the various types of Deployment software.

● PPP and Modem Setting

Not used. Do not set.

4.2.5 Management Blade Group

Displays all the installed Management Blades.

Click the link and the following information will be displayed for Management Blade.

Display/Parameter	Description
Blade Information	Blade information
Play Role	Displays the operation mode of the Management Blade. <ul style="list-style-type: none"> • master: operates as the master and manages the chassis • slave: operates as a slave and monitors the Management Blade of the master. If the Management Blade of the master fails, the slave will take over the management of the chassis.
Manufacture	Displays the manufacturer.
Produce Date	Displays the manufacture date.
Serial Number	Displays the system serial number.
Product Name	Displays the product name of the system.
Model Name	Displays the model name.
MAC Address	Displays the MAC address for management.
Firmware Version	Displays the firmware version.
Hardware Version	Displays the hardware version.
Change Management Role to Slave	Changes the operation mode of the Management Blade. Not used normally (not displayed if not redundant configuration).
Change Management Role to Master	

4.2.6 Switch Blade Group

Displays all the installed Switch Blades.

Click the link and the following information will be displayed for Switch Blades.



- ▶ Click [Reload] to update the displayed Switch Blade information. However, the information is not updated when the Switch Blade is not activated or straight after a replacement.

● Blade Info group

Sets and displays various Switch Blade information.

Display/Parameter	Description	
Located LED	Controls the display of the maintenance LED of the Switch Blade. Used to identify the multiple Switch Blades installed in the chassis. <ul style="list-style-type: none"> • blinking: blinks the maintenance Switch Blade LED. • off: will not control the maintenance Switch Blade LED. 	
Blade Information	Blade information	
Manufacture	Displays the manufacturer.	
Produce Date	Displays the manufacture date.	
Serial Number	Displays the system serial number.	
Product Name	Displays the product name of the system.	
Model Name	Displays the model name.	
Board Version	Displays the board version.	
Firmware Version	Displays the firmware version.	
Network Setting	Network setting	
MAC Address	Displays the MAC address for management.	
URL Address	The URL of the Switch Blade Web UI is displayed. Click the URL to jump to the page (network wiring and settings are necessary).	
IP Address	Sets and displays the management IP address of the Switch Blade.	<ul style="list-style-type: none"> • Current Value Present settings are displayed. • Setting Value Enter the new settings. After entering, click [Apply] and settings are set to the Switch Blade.
Subnet Mask	Sets and displays Switch Blade subnet masks.	
Gateway Address	Sets and displays Switch Blade gateway address.	
Apply	Applies the values set in "IP Address", "Subnet Mask", and "Gateway Address" to the Switch Blade. Applied information is saved as a Switch Blade boot file named "backupexi".	
Reload	Updates Switch Blade display information.	
Reset Switch Blade	Clicking [Reboot] displays the confirmation window. Clicking [YES] reboots the Switch Blade.	

● Backup/restore group

Backs up and restores the various settings to Switch Blade.

- **Backup/Restore**

Controls backup/restore.

- backup

Backs up the current settings of the selected Switch Blade.

- force-restore

Force restore the backed up settings to the currently installed Switch Blade. Force restored settings is saved as a Switch Blade boot file named "backup_cfg".

- **Last Action**

Displays the last operation performed.

- **Last Done Backup file time**

Displays the time of the last backup.

- **View Backup File**

Displays backed up settings.

- **Auto Restore**

Sets whether the backed up settings will be restored to the Switch Blade.

If set to "enable", automatic restore is only performed for Switch Blades newly installed to the chassis. Restored settings is saved as a Switch Blade boot file named "backup_cfg".

4.2.7 PHY Module Group

All installed GbE Pass-Thru Blades are displayed. Click the link and the following information will be displayed for each GbE Pass-Thru Blade.

Display/Parameter	Description
LAN Pass Thru Manufacture	Displays the manufacturer.
LAN Pass Thru Manufacture Date	Displays the manufacture date.
LAN Pass Thru Serial Number	Displays the system serial number.
LAN Pass Thru Product Name	Displays the product name of the system.
LAN Pass Thru Model Name	Displays the model name.
LAN Pass Thru Hardware Version	Displays the hardware version.
LAN Pass Thru Firmware Version	Displays the firmware version.

4.2.8 Fibre Channel Switch Group

All the installed fibre channel switch blades are displayed. Click the link and the following information will be displayed for each Fibre Channel Switch.

Display/Parameter	Description
Located LED	This acts as the fibre channel server blade identification function to control the fibre channel maintenance lamp display. <ul style="list-style-type: none"> • off Does not control the maintenance lamps of the fibre channel switch blade. • blinking Controls the maintenance lamps of the fibre channel switch blade.
Power Switch	Controls the power of the fibre channel switch blade. <ul style="list-style-type: none"> • off Turns off the power of the fibre channel switch blade. • power on Turns on the power of the fibre channel switch blade.
FC Switch Manufacture	Displays the manufacturer.
FC Switch Manufacture Date	Displays the manufacture date.
FC Switch Serial Number	Displays the system serial number.
FC Switch Product Name	Displays the product name.
FC Switch Product Number	Displays the product number.
FC Switch Hardware Version	Displays the hardware version.
Switch Domain ID	Displays the domain ID set in the fibre channel switch blade.
Switch Name	Displays the name set in the fibre channel switch blade.
IP Address	Displays the IP Address of the management LAN interface set in the fibre channel switch blade.
Subnet Mask	Displays the subnet mask of the management LAN interface set in the fibre channel switch blade.
FC IP Address	Displays the IP Address set in the fibre channel switch blade.
FC Subnet Mask	Displays the subnet mask set in the fibre channel switch blade.
Gateway Address	Displays the gateway address set in the fibre channel switch blade.

4.2.9 Adv. KVM Blade Group

The installed advanced KVM Module is displayed. The advanced KVM Module can only be set from the Web UI of Management blade. CLI is used only for referring information and cannot be used for setting.

● Blade Info group

Displays the following information of the advanced KVM Module.

Display/Parameter	Description
Adv. KVM blade Manufacture	Displays the manufacturer.
Adv. KVM blade Manufacture Date	Displays the manufacture date.
Adv. KVM blade Serial Number	Displays the system serial number.
Adv. KVM blade Product Name	Displays the product name.
Adv. KVM blade Model Name	Displays the model name.
Adv. KVM blade Hardware Version	Displays the hardware version.

● KVM_Config group

Sets the installed advanced KVM Module.

When changing the settings, set parameters and click [Apply Changes].

Display/Parameter	Description
Use DHCP (For KVM IP Address)	Sets whether to obtain IP address of advanced KVM Module automatically (enables DHCP).
KVM IP Address	Sets IP address of advanced KVM Module manually.
KVM Gateway	Sets Gateway address of advanced KVM Module.
KVM Subnet Mask	Sets Subnet mask of advanced KVM Module.
KVM HTTP Port	Sets HTTP port of advanced KVM Module (default:80). If graphical console redirection is performed, three consecutive ports from this setting value are used by advanced KVM Module.
KVM Redirection	[Launch]-When clicked, starts graphical console redirection to the server blade. [Adv. KVM had been launched by user [Date Time]]-Displays the graphical console redirection has opened in the Date-Time.
Reset	Resets advanced KVM Module.

● KVM_update group

Performs the firmware update of the installed advanced KVM Module.

When performing updates, set various parameters and click [Update Firmware].

Display/Parameter	Description
Image Name	Enter the file name for updating advanced KVM Module.
TFTP IP Address	Enter the IP address of TFTP server.

4.2.10 Server Blade Group

All the server blades installed in the chassis are shown in Server Blade group. The power supply status and the keyboard/display/mouse (KVM) select location are both shown as an icon at the same time.

Icon	Description
	Server blade is powered OFF.
	Server blade is powered ON.
	KVM is selected for this server blade but it is powered OFF.
	KVM is selected for this server blade and it is powered ON.

A Recovery group and a Blade Info group exist in every server blade and clicking on pages in these groups displays the system setting page relating to that server blade. The following operations will be performed for the selected server blade.

● Recovery group

Recovery group performs the actions when an error occurs, CMOS backup/restore settings, power supply settings and schedule and boot option settings.

• ASR

• Software Watchdog

Sets by ServerView.

• Boot Watchdog

Sets actions when the server blade OS boot fails. The server blade OS boot is monitored by monitoring the interval between the end of server blade POST and the boot of ServerView agent. If communication with ServerView agent does not begin during the timeout period (Watchdog Time) after the server blade POST exits, an OS boot failure is detected and an action will be executed. These following options exist for actions.

Display/Parameter	Description
Boot Watchdog	This section explains the settings when OS boot fails. <ul style="list-style-type: none"> • enable: monitor OS boot. • disable: do not monitor OS boot.
Watchdog Time	Monitors OS boot failure according to the set time. Watchdog time can be set to between 2–100 minutes and phased setting is possible.
Watchdog Action	Sets actions when OS boot fails. <ul style="list-style-type: none"> • no-action: no action is taken • hard reset: reboots server blade. • off: turn server blade off. • graceful shutdown and power-cycle: the server blade is shut down, power is temporarily turned off and back on again.
Maximum Restart Retries	Sets how many times boot will be retried after OS boot fails. <ul style="list-style-type: none"> • 0: will not retry • 1–7: The set number of retries are performed.

IMPORTANT

- ▶ If ServerView is not installed to the server blade, be sure to set the "Boot Watchdog" to "disable". If the setting is "enable", there is a fear that the server blade may automatically turn off or restart improperly.
- ▶ Even when ServerView is installed to the server blade, When starting the system while the ServerStart CD-ROM or floppy disks for activating hardware configuration tools is inside, be sure to disable the OS Boot Monitoring function (default settings are disable).
If you start up the system while the "OS Boot Monitoring" function remains enabled, the server blade may automatically turn off or restart unexpectedly. If the OS Boot Monitoring function is needed, it should be reset to enabled before resuming normal server operation.
- ▶ When setting this function, refer to "ServerView User's Guide" to fully learn about its specifications, in order to set it correctly.

POINT

- ▶ The "OS Boot Monitoring" function can also be enabled or disabled from ServerView.

• **Auto Configuration**

• **System CMOS Configuration Backup/Restore**

Performs the backup and restore of CMOS information specified by the BIOS setup utility of the server blade.

After turning on the server blade, operations cannot be performed until POST ends. In this case "Not ready to backup/restore, now!!" is displayed.

IMPORTANT

- ▶ It is necessary to back up the BIOS settings when:
 - Using the server blade for the first time
 - Using the BIOS Setup Utility to make information changes
 - Hardware configuration of this server is changed, in specific memory expansion change
 - Updating the BIOS version
- ▶ Information that is configured with the BIOS setup utility can be backed up/restored. BIOS information of the onboard SCSI Array Controller cannot be backed up/ restored.
- ▶ Backup/restore results are recorded in the Management Blade event log.

Display/Parameter	Description
CMOS Backup	Backs up the CMOS settings of BIOS.

• **CMOS Restore**

Restores the CMOS settings of BIOS.

It is necessary to restart server blade to enable the BIOS information. Restart as necessary.



- ▶ This function cannot be used when the server blade that backed up the CMOS settings and the restore destination server blade differs or when the BIOS version differs.

Display/Parameter	Description
CMOS File	Displays the CMOS settings file backed up to the Management Blade. "Slot number: MAC address: Backup date: BIOS version" is attached as the file name. Select the settings file to be restored.
Restore Policy	<p>Sets the conditions (policy) for restoring BIOS CMOS settings to server blade.</p> <ul style="list-style-type: none"> • smart-restore: stops restore when the MAC address and slot number of the server blade for restoration and the server blade which backed up the CMOS setting file differs. • force-restore: forcibly restore even if the server blade for restoration and the server blade to which backed up the CMOS setting file differs. <p>Important:</p> <ul style="list-style-type: none"> ▶ This function cannot be used when the model of the server blade that backed up the CMOS settings and the restore destination server blade differs.

- **Power Control**

- **Power Status / Power Switch**

Controls server blade power supply. When using refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137).

- Power on
Turns on the server.
- graceful shutdown and off
Sends an order to shut down the OS to the ServerView agent operating on the server blade, and turn off the power.
- graceful shutdown and power-cycle
Sends an order to shut down the OS to the ServerView agent operating on the server blade and after temporarily turning off, turns on the power again.



- ▶ When using the graceful shutdown function it is necessary to make various settings to server blades. For details, refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137). Do not select "graceful shutdown and power-cycle" when performing operations for server blades that are not supported because there is a fear that unexpected operations such as ACPI shutdown or power off may occur.

- hard reset
Reactivates the server blade.
- NMI
Normally, do not select.
- Hard Power off
The server blade is forcibly turned off.



- ▶ When ordering power on after ordering server blade power off, check that the power has been turned off first.

• Power On/Off

Sets the server blade scheduled operations. Orders for scheduled operations are given from the Management Blade.

To perform scheduled operations everyday set the "On Time" and "Off Time" of "Everyday" and click [Everyday].

Display/Parameter	Description
On Time	<ul style="list-style-type: none"> • hour: minute: Sets the time when to turn on the server blade each day by "hour: minute". Time should be set in a 24-hour clock format. • disabled: Time to turn on is not set.
Off Time	<ul style="list-style-type: none"> • hour: minute: Sets the time when to turn off the server blade everyday by "hour: minute". Time should be set in a 24-hour clock format. • disabled: Time to turn off is not set. <p>Note:</p> <ul style="list-style-type: none"> ▶ Since server blade turns off by ordering "off" from the Management Blade, it is necessary to make various setting to server blades. When using, refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137). Do not set this item when performing operations for server blades that are not supported, because there is a fear that unexpected operations such as ACPI shutdown or power off may occur.

• Power Setting

Sets the operations to forcibly turn off the power supply if the "off" order in "Off Time" for server blade fails. If the following checkbox is checked, power will be forcibly turned off after a specified period of time from when "off" failed.

- When power off fail, force power off after X minutes. (X can be 1-7 mins)

• Boot Option

Changes server blade boot order.

• Boot Option Selected

Sets the boot method for OS boot.

- normal
Sets the boot order of server blade to the default settings set in BIOS.
- pxe-lan-1 / pxe-lan-2
Sets LAN port 1 or 2 to the top priority of the server blade boot order and change so that it boots in Preboot eXecution Environment (PXE).
- add-in-pci-lan-1 / add-in-pci-lan-2
Sets LAN port 1 or 2 installed in the expansion card slot module to the top priority of the server blade boot order and change so that it boots in Preboot eXecution Environment (PXE).

• Set BIOS recovery flash bit

Not used. Do not set.

• Boot CPU Operating

Displays the operation mode of the CPU installed to the server blades.

- Performance
The CPU installed to the server blade in operating in Performance mode.
- not-ready
The CPU is not operating.

● Blade Info group

Blade Info group displays information about the system board, CPU, memory and voltage of each server blade installed in the chassis.

• Blade Info

Controls the display of server blade information and power LED.

Display/Parameter	Description
Blade Status	Displays the overall status of server blade.
Server LED	Controls the display of the server blade power LED as the server blade identification function. Used to identify the multiple server blades installed in the chassis. <ul style="list-style-type: none"> • blinking: the server blade power LED is blinking. • off: will not control the server blade power LED.
OS Type	Displays the OS type if ServerView agent is installed to the OS.
OS Version	Displays the OS version if ServerView agent is installed to the OS.
Model	Displays the model name.
Serial Number	Displays the system serial number.
BIOS Version	Displays the BIOS version.
Firmware Version	Displays the Baseboard Management Controller (BMC: a micro controller that controls temperature and voltage sensors on the baseboard) firmware version.
KME Version	Displays the keyboard mouse emulator (KME) version.
Hardware Version	Displays the hardware version.
Product Name	Displays the product name.
Product Version	Displays the product version.
Manufacture Date	Displays the manufacture date.
PCI Add-In Card	Displays the status of the PCI Add-In Card.
Daughter Card	Displays the status of the I/O expansion board (Fibre Channel Expansion Board, etc.) installed in the server blade.
Memory Dump Flag	Displays the status of the memory dump flag.

- **Processors**

Displays various CPU information.

Display/Parameter	Description
No	Displays the CPU number.
Status	Displays the status of the CPU.
Type	Displays the CPU type.
Frequency	Displays the clock frequency of the CPU.
External Clock	Displays the clock frequency of the CPU bus.
CPU Step	Displays the CPU stepping.
Socket	Displays the location of CPU socket.

- **Network Interface Card**

Displays various information about the LAN interface status.

Display/Parameter	Description
No	Displays the LAN port number.
Mac Address	Displays the MAC address.
IP Address	Displays the IP address if ServerView agent is installed to the OS.

- **Memory Modules**

Displays various information relating to memory.

Display/Parameter	Description
Memory Module No	Displays the memory module number.
Status	Displays the status of the memory.
Module Size	Displays the memory capacity.
Type	Displays the type of memory.
Speed	Displays the speed of the memory bus.
Socket Designation	Displays the socket location to which memory is installed.

- **Voltage**

Displays the settings of the various voltages and voltage thresholds on the server blade board.

Display/Parameter	Description
No	Displays the number of each voltage sensor.
Status	Displays the status of each voltage sensor.
Minimum	Displays the minimum danger threshold for voltage.
Maximum	Displays the maximum danger threshold for voltage.
Nominal	Displays the nominal value for voltage.
Current	Displays the current voltage value.
Designation	Displays the designated type of voltage.

- **Temperature**

Displays the settings of the various temperature and temperature thresholds on the server blade board.

Display/Parameter	Description
No	Displays the number of each temperature sensor.
Status	Displays the status of each temperature sensor.
Designation	Displays the designated location of each temperature sensor.
Temperature	Displays the current temperature value.
Upper Warning Level	Displays an upper temperature warning.
Upper Critical Level	Displays an upper level temperature error.
Lower Warning Level	Displays a lower temperature warning.
Lower Critical Level	Displays a lower level temperature error.

Chapter 5

CLI

5

This chapter explains the command line interface (CLI) which enables the management/operation of the blade server system in the Management Blade.

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5.3 CLI Login	63
5.4 CLI Menu	65

5.1 CLI Connection Methods

This chapter explains CLI connection methods using Telnet via LAN or a serial interface.

When using CLI via LAN using Telnet it is recommended to use the following software.

- RemoteControlService V3.06 or later

5.1.1 Using Serial Interface

- 1 Connect Management Blade to the management terminal using an RS-232C cross cable.

→ "■ Serial Interface Settings" (pg.18)



- ▶ Connect the Management Blade operating in master mode. A Management Blade in slave mode cannot be accessed.
Check the operation mode of the Management Blade with the Management Blade master display LED (→ "1.2 Component Names and Functions" (pg.11)).

- 2 Start the terminal software in the management terminal and perform the following port settings.

Parameter	Setting
Bits/sec.	115200
Data bit	8
Parity	None
Stop bit	1
Flow control	None

- 3 Sets the terminal software of the management terminal to [VT100].

For more details about how to set terminal software, refer to the manual supplied with the terminal software.

5.1.2 Using Telnet via LAN Interface

- 1** Connect Management Blade to the management terminal using a LAN cable.
→ "■ LAN Interface Settings" (pg.16)
- 2** Start the Telnet client software in the management terminal and specify the IP address and port number of the Management Blade to connect the Management Blade to the management terminal.
(Default value IP address: 192.168.1.1, subnet mask: 255.255.255.0, port number: 3172)

IMPORTANT

- ▶ Telnet only opens one session for Management Blade at a time.
- ▶ It is necessary to set Telnet client software to [VT100]. For more details about how to set client software, refer to the manual supplied with the client software.

5.2 Basic Operations of Each Screen

In the CLI page, if you enter the numbers shown on the screen after "Enter Selection:" and press [Enter], information can be set and displayed and pages can be changed.

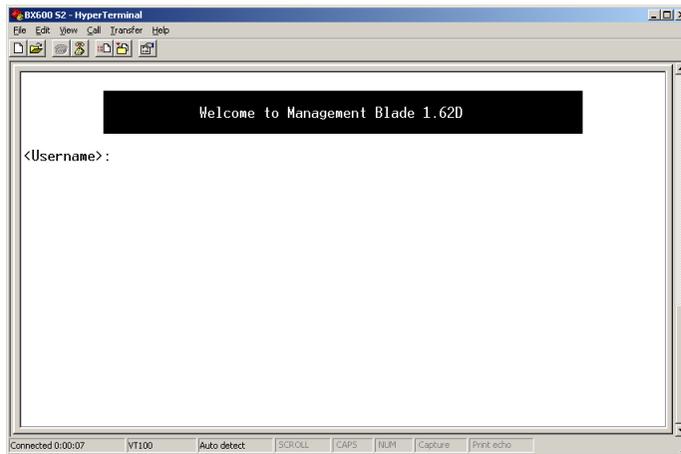
- When entering setting values, enter the number or letter strings in accordance with the directions displayed on the screen after the symbol [- - >>].
- If <effect after reboot> is displayed on the screen, it is necessary to restart the Management Blade after changing settings.
- The items shown as (-) display only and cannot be changed.
- Letter strings can be deleted by pressing [Space] and then pressing [Enter] in the same input window.
- If the time is entered using the 24 hour format, 6:30 am is entered as "06:30" and 6:30pm is entered as "18:30".

5.3 CLI Login

If terminal software is started on the management terminal during Management Blade operations, the following login screen will appear.

If the Management Blade is not operating, connect the power supply cable. A self-diagnostic test message appears and then the login screen appears.

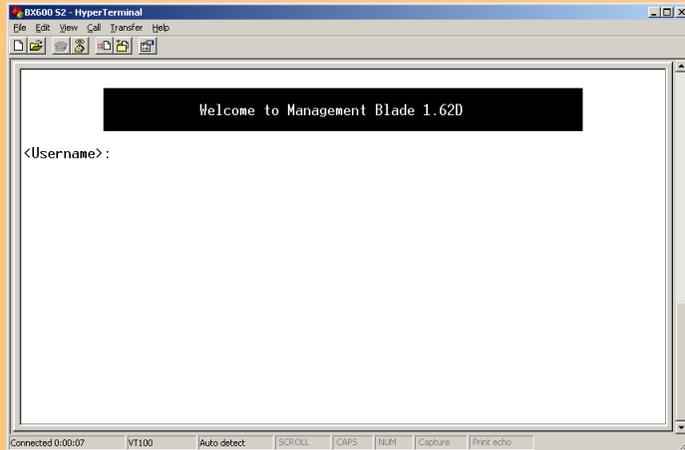
The following screen images are those of firmware V1.62D.



Enter the <Username> and <Password> to login to CLI.

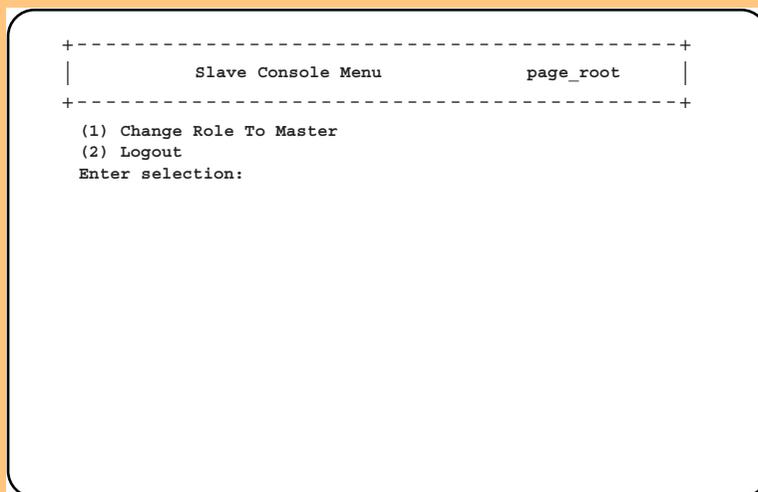


- If you connect a serial interface to a Management Blade operating in slave mode, [Welcome to Management Blade] window is displayed and the following slave mode login screens appear.



Because settings cannot be performed from a Management Blade in slave mode, display the master mode login screen using one of the following methods.

- Change the connection destination of the serial interface to the Management Blade operating in master mode.
- Enter the username and password to a slave mode login screen, select "1. Change Role To Master" in the following screen and change the operational mode of the connected Management Blade from slave to master.



5.4 CLI Menu

This section explains the various types of CLI menus and methods of operation. Because the majority of the Parameters are the same as those of the Web UI, for details about Parameters refer also to "Chapter 4 Web UI" (→pg.25).

5.4.1 Console Menu

When the login is completed, a console menu is displayed as the top page. This section explains the features of the console menu.

```

+-----+
|           Console Menu           Page_root           |
+-----+
(1) Management Agent
(2) Emergency Management Port
(3) Console Redirection
(4) TFTP update
(5) Logout
(6) Reboot Management Blade
(7) System Information Dump
(8) Command Line Interface
Enter selection:

```

Menu	Description
1. Management Agent	Displays and sets various information of the blade server system. →"5.4.2 Management Agent" (pg.66)
2. Emergency Management Port	Not normally used.
3. Console Redirection	Console redirection of server blade and Switch Blade is used. →"5.4.3 Console Redirection" (pg.129)
4. TFTP update	Not normally used.
5. Logout	Performs logout. →"5.4.4 Logout" (pg.132)
6. Reboot Management Blade	Reboot the Management Blade. →"5.4.5 Reboot" (pg.132)
7. System Information Dump	Displays the configuration of the system and server, and logs of Management Blade and server blade. →"5.4.6 System Information Dump" (pg.133)
8. Command Line Interface	Not normally used. When this is selected by mistake, enter "exit" after the "Script>" prompt to return to the console menu.

5.4.2 Management Agent

Displays and sets various information of the blade server system.

```

+-----+
|           Management Agent           page_1           |
+-----+
(1) Management Agent Information
(2) Management Blade
(3) System Information
(4) Server Blade
(5) Switch Blade
(6) Username And Password
(7) Blue Screen
(8) Event Log
(9) Set System Default
(10) Server Blade CMOS Backup/Restore
(11) Switch Blade Configuration Backup/Restore
(12) Deployment Parameter
(13) Power Consumption
(14) PPP and Modem Setting
(15) Fiber Channel
(16) PHY Module
(17) FC Switch
Enter selection or type (0) to quit:

```

Menu	Description
1. Management Agent Information	Sets the various agents of HTTP and SNMP operating in the Management Blade. → "■ Management Agent Information (1_1)" (pg.67)
2. Management Blade	Displays various information of the Management Blade. → "■ Management Blade (1_2)" (pg.78)
3. System Information	Sets and checks system information. → "■ System Information (1_3)" (pg.80)
4. Server Blade	Performs various settings and displays information of server blade. → "■ Server Blade (1_4)" (pg.94)
5. Switch Blade	Displays and sets various information of the Switch Blade. → "■ Switch Blade (1_5)" (pg.109)
6. Username And Password	Adds users and sets passwords. → "■ Username And Password (1_6)" (pg.111)
7. Blue Screen	Not normally used.
8. Event Log	Displays and deletes various types of event logs. → "■ Event Log (1_8)" (pg.113)
9. Set System Default	Returns Management Blade settings to default. → "■ Set System Default (1_9)" (pg.115)
10. Server Blade CMOS Backup/Restore	Performs the backup of and restores information specified by the BIOS setup utility of the server blade. → "■ Server CMOS Backup/Restore (1_10)" (pg.116)
11. Switch Blade Configuration Backup/Restore	Backs up and restores the various settings to Switch Blade. → "■ Switch Blade Configuration Backup/Restore (1_11)" (pg.119)
12. Deployment Parameter	Performs various settings and displays the deployment Parameters. → "■ Deployment Parameter (1_12)" (pg.121)
13. Power Consumption	Not normally used.
14. PPP and Modem Setting	Not normally used.

Menu	Description
15. Fiber Channel	Displays the status of the FC Pass-Thru Blade. →" ■ Fiber Channel (1_15)" (pg.123)
16. PHY Module	Displays the status of the GbE pass thru blade. →" ■ PHY Module (1_16)" (pg.125)
17. FC Switch	Displays the status of the fibre channel switch blade. →" ■ FC Switch (1_17)" (pg.127)

■ Management Agent Information (1_1)

Sets the various agents operating in the Management Blade.

```

+-----+
|           Agent Information           page_1_1           |
+-----+
(1) Set Management Agent IP Address      : 192.168.1.1
(2) Set Management Agent Network Mask   : 255.255.255.0
(3) Set Management Agent Gateway        : 0.0.0.0
(4) Set Management Agent Default Route   : LAN
(5) Set Management Agent DHCP Configure  : disable
(6) Set Time Zone                        : (GMT+9) Osaka, Sapporo, Tokyo
(7) Set Management Agent Date Time      : MM/DD/YYYY HH:MM:SS
(8) Set Management Agent Timeout (Sec)   : 900
(9) Agent System Info
(-) Management Agent Administrative URL  : http://192.168.1.1:80/
(11) Automatically Adjust Clock for Daylight Saving Changes : disable
(12) Agent HTTP
(13) Agent SNMP
(14) Agent Telnet
(15) Agent DNS
(16) Agent SMTP
(17) Agent NTP
(18) Agent NIC Duplex Mode
(19) Change Management Role To Slave
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. Set Management Agent IP Address	(setting required)	Sets the IP address of the Management Blade. Settings become valid after restarting the Management Blade.
2. Set Management Agent Network Mask	(setting required)	Sets the subnet mask of the Management Blade. Settings become valid after restarting the Management Blade.
3. Set Management Agent Gateway	-	Sets the gateway of the Management Blade. Settings become valid after restarting the Management Blade.
4. Set Management Agent Default Route	-	Not normally used. Set to LAN.
5. Set Management Agent DHCP Configure	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether to set the IP address, subnet mask and gateway of the Management Blade from the DHCP server. Settings become valid after restarting the Management Blade.
6. Set Time Zone	-	Sets the time zone of the Management Blade. Supports the time zone table.
7. Set Management Agent Date Time	-	Sets the time of the Management Blade. <Enter in the format of month/day/year hour:minute:second>. Time is set in 24 hour format.

Parameter	Setting	Contents
8. Set Management Agent Timeout (Sec)	<input type="checkbox"/> 30– 65535	Sets the timeout value during console login. If operations could not be performed in the specified seconds, the screen will automatically be returned to the login screen. If set to 0, the automatic disconnection function is disabled. Also, the set value will be the same as the [DropTime] on the Web UI Telnet.
9. Agent System Info	-	Sets the system name, installation location and contact address for SNMP.
Management Agent Administrative URL	-	Displays the URL to access the Web UI.
11. Automatically Adjust Clock for Daylight Saving Changes	-	Not supported. Do not set.
12. Agent HTTP	-	Sets the HTTP agents in the Management Blade. →"● 12. Agent HTTP (1_1_12)" (pg.69)
13. Agent SNMP	-	Sets the SNMP agents in the Management Blade. →"● 13. Agent SNMP (1_1_13)" (pg.70)
14. Agent Telnet	-	Sets the Telnet agents in the Management Blade. →"● 14. Agent Telnet (1_1_14)" (pg.72)
15. Agent DNS	-	Sets DNS of the Management Blade. →"● 15. Agent DNS (1_1_15)" (pg.74)
16. Agent SMTP	-	Sets SMTP function (alarm handler) of the Management Blade. →"● 16. Agent SMTP (1_1_16)" (pg.74)
17. Agent NTP	-	Sets Network Time Protocol (NTP) of the Management Blade. →"● 17. Agent NTP (1_1_17)" (pg.76)
18. Agent NIC Duplex Mode	-	Sets NIC transmission rate of the Management Blade. →"● 18. Agent NIC Duplex Mode (1_1_18)" (pg.77)
19. Change Management Role To Slave	-	Forcibly changes the operational mode to slave mode if the Management Blade is redundantly configured,Do not use normally.

● 12. Agent HTTP (1_1_12)

Sets the HTTP agents in the Management Blade.

```

+-----+
|                Agent HTTP                page_1_1_12                |
+-----+

(1) Set HTTP Enable      : enable
(2) Set HTTP Port       : 80
(3) Set HTTP SSL Enable  : disable
(4) HTTP IP Filter Table
Enter selection or type (0) to quit:

```

: Parameter

Parameter	Setting	Contents
1. Set HTTP Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets HTTP service enable/disable. Settings become valid after restarting the Management Blade. If HTTP service is disabled Web UI cannot be used.
2. Set HTTP Port	-	Sets the port number of HTTP. These setting become valid in 10 seconds.
3. Set HTTP SSL Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether HTTP SSL is to be used.
	Important: ▶ In order to use SSL, it is necessary to enable SSL version 3 only in the Web browser. Also, if SSL version 2 is enabled in the Web browser, change to disable.	
4. HTTP IP Filter Table	-	Performs IP settings that permit HTTP connection. A maximum of 10 IPs that permit HTTP can be registered. "255.255.255.255" is registered by default so it will not perform IP filtering. It must be deleted as necessary when performing IP filtering.

● 13. Agent SNMP (1_1_13)

Sets the SNMP agents in the Management Blade.

```

+-----+
|                Agent SNMP                page_1_1_13                |
+-----+

(1) Set Agent SNMP Enable : enable
(2) Set Agent SNMP Security Enable : disable
(3) Agent SNMP Trap Table
(4) Agent SNMP Community String Table
(5) SNMP IP Filter Table
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. Set Agent SNMP Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets SNMP service enable/disable. When using applications such as ServerView that communicate on SNMP, set to enable.
2. Set Agent SNMP Security Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether to ask for user name and password when [System Indication LED Display Button] in ServerView is used.
3. Agent SNMP Trap Table	-	Sets and displays a SNMP trap destination table. →"• 3. Agent SNMP Trap Table (1_1_13_3)" (pg.71)
4. Agent SNMP Community String Table	-	Sets and displays the SNMP community name. →"• 4. Agent SNMP Community String Table (1_1_13_4)" (pg.71)
5. SNMP IP Filter Table	-	Performs IP settings that permit SNMP connection. →"• 5. SNMP IP Filter Table (1_1_13_5)" (pg.72)

- **3. Agent SNMP Trap Table (1_1_13_3)**

Sets and displays a SNMP trap destination table.

```

+-----+
|           Agent SNMP Trap Table           page_1_1_13_3           |
+-----+

(1) Agent SNMP Trap 1 : 0.0.0.0
(2) Agent SNMP Trap 2 : 0.0.0.0
(3) Agent SNMP Trap 3 : 0.0.0.0
(4) Agent SNMP Trap 4 : 0.0.0.0
(5) Agent SNMP Trap 5 : 0.0.0.0
Enter selection or type (0) to quit:

```

The IP address of the SNMP trap destination can be set by selecting the numbers of each SNMP trap. Also, "SNMP Trap Community String" can be set for each IP address.

- **4. Agent SNMP Community String Table (1_1_13_4)**

Sets and displays the SNMP community name.

```

+-----+
|           Agent SNMP Community String           page_1_1_13_4           |
+-----+

(1) SNMP Community String 1 :
(2) SNMP Community String 2 :
(3) SNMP Community String 3 :
(4) SNMP Community String 4 :
(5) SNMP Community String 5 :
Enter selection or type (0) to quit:

```

POINT

- ▶ When using applications such as ServerView that perform communication using SNMP, community names must be set. Set a community name for which communication can be performed.

• **5. SNMP IP Filter Table (1_1_13_5)**

Performs IP settings that permit SNMP connection.

A maximum of 10 IP that permit SNMP can be registered.

255.255.255.255, that was set at the time of purchase, does not perform IP filtering. When performing IP filtering, delete it as necessary.

```

+-----+
|          SNMP IP Filter Table          page_1_1_13_5          |
+-----+

(1) SNMP IP Filter 1 : 255.255.255.255
(2) SNMP IP Filter 2 : 0.0.0.0
(3) SNMP IP Filter 3 : 0.0.0.0
(4) SNMP IP Filter 4 : 0.0.0.0
(5) SNMP IP Filter 5 : 0.0.0.0
Enter selection or type (0) to quit:
    
```

● **14. Agent Telnet (1_1_14)**

Sets the Telnet agents in the Management Blade.

```

+-----+
|          Agent TELNET          page_1_1_14          |
+-----+

(1) Set Telnet Enable      : enable
(2) Set Telnet Port       : 3172
(3) Telnet IP Filter Table
(4) Telnet Disconnection
(5) Set telnet SSL Enable : disable
Enter selection or type (0) to quit:
    
```

□: Parameter

Parameter	Setting	Contents
1. Set Telnet Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets Telnet service enable/disable. Settings become valid after restarting the Management Blade.
2. Set Telnet Port	-	Sets the port number of telnet. Settings become valid after restarting the Management Blade.

Parameter	Setting	Contents
3. Telnet IP Filter Table	-	Performs IP settings that permit Telnet service. →"• 3. Telnet IP Filter Table (1_1_14_3)" (pg.73)
4. Telnet Disconnection	-	The Telnet connection is forcibly turned OFF. Perform operations following the directions on the screen.
5. Set telnet SSL Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether Telnet SSL is to be used.
	Important: ▶ In order to use SSL, it is necessary to enable SSL version 3 only in the Telnet client software.	

- **3. Telnet IP Filter Table (1_1_14_3)**

Performs IP settings that permit Telnet service.

A maximum of 10 IP that permit Telnet can be registered.

255.255.255.255, that was set at the time of purchase, does not perform IP filtering. When performing Ipfiltering, delete it as necessary.

```

+-----+
|           Telnet IP Filter Table           page_1_1_14_3           |
+-----+

(1) Telnet IP Filter 1 : 255.255.255.255
(2) Telnet IP Filter 2 : 0.0.0.0
(3) Telnet IP Filter 3 : 0.0.0.0
(4) Telnet IP Filter 4 : 0.0.0.0
(5) Telnet IP Filter 5 : 0.0.0.0
(6) Telnet IP Filter 6 : 0.0.0.0
(7) Telnet IP Filter 7 : 0.0.0.0
(8) Telnet IP Filter 8 : 0.0.0.0
(9) Telnet IP Filter 9 : 0.0.0.0
(10)Telnet IP Filter 10: 0.0.0.0
Enter selection or type (0) to quit:

```

● 15. Agent DNS (1_1_15)

Sets DNS of the Management Blade.

```

+-----+
|           Agent Network DNS           page_1_1_15           |
+-----+

(1) Set DNS IP Address_1 : 0.0.0.0
(2) Set DNS IP Address_2 : 0.0.0.0
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. Set DNS IP Address_1	Enter the IP address of the primary DNS server.
2. Set DNS IP Address_2	Enter the IP address of the secondary DNS server.

● 16. Agent SMTP (1_1_16)

Sets SMTP function (alarm handler) of the Management Blade.

```

+-----+
|           Agent SMTP           page_1_1_16           |
+-----+

(1) Set Agent SMTP ENABLE           : enable
(2) Set Agent SMTP Relay Server Domain Name :
(3) Set Agent SMTP Sender E-mail Address :
(4) Agent SMTP User Table
Enter selection or type (0) to quit:
    
```

☐: Parameter

Parameter	Setting	Contents
1. Set Agent SMTP ENABLE	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether to send an event with the mail or not using SMTP. Settings become valid after restarting.

Parameter	Setting	Contents
2. Set Agent SMTP Relay Server Domain Name	-	Enter the IP address of the SMTP server.
3. Set Agent SMTP Sender E-mail Address	-	Enter the e-mail address of the sender.
4. Agent SMTP User Table	-	Enter the e-mail address of the user who will receive the event. →"• 4. Agent SMTP User Table (1_1_16_4)" (pg.75)

• **4. Agent SMTP User Table (1_1_16_4)**

Enter the e-mail address of the user who will receive the event.

```

+-----+
|           Agent SMTP User Table           page_1_1_16_4           |
+-----+

(1) Agent SMTP User 1 :
(2) Agent SMTP User 2 :
(3) Agent SMTP User 3 :
(4) Agent SMTP User 4 :
(5) Agent SMTP User 5 :
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Agent SMTP User 1 – Agent SMTP User 5	Enter the e mail address of the user.

● 17. Agent NTP (1_1_17)

Sets Network Time Protocol (NTP) of the Management Blade.

```

+-----+
|           Agent NTP           page_1_1_17           |
+-----+

(1) Set NTP ENABLE                : disable
(2) NTP Server IP                  :
(-) The Lastest Sync Date/Time    : Not Ready
(4) Sync Mode                      : Sync Afterward
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. Set NTP ENABLE	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets NTP enable/disable. If NTP is enabled, the time of the Management Blade is synchronized with the NTP server periodically. Specify the synchronization formation In "(4) Sync Mode".
2. NTP Server IP	-	Enter the IP address of the NTP server. →"• 2. NTP Server IP (1_1_17_2)" (pg.77)
The Lastest Sync Date/Time	-	This displays the latest time at which Management Blades and NTP server time synchronization was performed. Important: ▶ When NTP has been enabled, always check whether the time synchronization is being performed in this display. Because straight after setting, it sometimes takes time to display this, click the page reload button a few times and check the display.
4. Sync Mode	<input type="checkbox"/> Sync Afterward <input type="checkbox"/> Sync Always	Specify the time synchronization mode. <ul style="list-style-type: none"> • Sync Afterward The time of the Management Blade is synchronized to the time of the NTP server only when the time of the NTP server is faster. When using this for operations that demand time to be taken into careful consideration such as databases, select this mode. • Sync Always The time of the Management Blade is synchronized with the NTP server every 15 minutes.

- **2. NTP Server IP (1_1_17_2)**

Enter the IP address of the NTP server.

```

+-----+
|           NTP Server IP           page_1_1_17_2           |
+-----+

(1) NTP Server IP 1 : 0.0.0.0
(2) NTP Server IP 2 : 0.0.0.0
Enter selection or type (0) to quit:

```

Parameter	Contents
1. NTP Server IP 1	Enter the IP address of the primary NTP server.
2. NTP Server IP 2	Enter the IP address of the secondary NTP server.



- ▶ If an incorrect IP address is entered, time synchronization cannot be performed.

- **18. Agent NIC Duplex Mode (1_1_18)**

Sets the NIC transmission rate of the Management Blade.

```

+-----+
|           Agent NIC Duplex Mode           page_1_1_18           |
+-----+

(-) Execution Mode : Auto-Negotiation
(3) NIC Mode : Auto-Negotiation
Enter selection or type (0) to quit:

```

☐: Parameter

Parameter	Setting	Contents
Execution Mode	-	Displays current NIC transmission rate settings.
3. NIC Mode	<input type="checkbox"/> Auto-Negotiation <input type="checkbox"/> 100 Full Mode <input type="checkbox"/> 100 Half Mode <input type="checkbox"/> 10 Full Mode <input type="checkbox"/> 10 Half Mode	Sets the NIC transmission rate. <ul style="list-style-type: none"> • Auto-Negotiation: auto-negotiation • 100 Full Mode: 100Mbps full duplex secure • 100 Half Mode: 100Mbps half duplex secure • 10 Full Mode: 10Mbps full duplex secure • 10 Half Mode: 10Mbps half duplex secure

■ Management Blade (1_2)

Displays all the installed Management Blades and their operational mode.

```

+-----+
|           Management Blade           page_1_2           |
+-----+

(1) Management Blade_1 : master
(2) Management Blade_2 : slave
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Management Blade_1 – Management Blade_2	Displays various information of the Management Blade. Selects the Management Blade number to display the various information of the Management Blade. → "● Management Blade (1_2_1)" (pg.79)

● **Management Blade (1_2_1)**

Displays various information of the selected Management Blade.

```

+-----+
|           Management Blade           page_1_2_1           |
+-----+

(-) Management Blade Run Mode           : master
(-) Management Blade Status             : **
(-) Management Blade Manufacture        : **
(-) Management Blade Manufacture Date   : MM/DD/YYYY HH:MM:SS
(-) Management Blade Serial Number      : **
(-) Management Blade Product Name       : **
(-) Management Blade Model Name         : **
(-) Management Blade Hardware Version   : **
(-) Management Blade Firmware Version   : **
(-) Management MAC Address              : **:**:**:**:**:**
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Management Blade Run Mode	Displays the operation mode of the Management Blade. <ul style="list-style-type: none"> • master The Management Blade operates as the master and manages the chassis. • slave The management operates as a slave. This is a standby mode used if an error occurs in the master.
Management Blade Status	Displays the status of the Management Blade.
Management Blade Manufacture	Displays the manufacturer.
Management Blade Manufacture Date	Displays the manufacture date.
Management Blade Serial Number	Displays the serial number.
Management Blade Product Name	Displays the product name of the system.
Management Blade Model Name	Displays the model name.
Management Blade Hardware Version	Displays the hardware version.
Management Blade Firmware Version	Displays the firmware version.
Management MAC Address	Displays the MAC address being used in the LAN interface.

■ System Information (1_3)

Checks / Sets the status of the blade server system and configuration information of the power supply unit, system fan unit, temperature, etc.

```

+-----+
|                System Information                page_1_3                |
+-----+

(1) System Control Information
(2) System Power Supply
(3) System Fan
(4) System Temperature
(5) System Chassis Table
(6) System UPS
(7) System KVM
(8) System LED Control : off
(9) NIC Status Detection
(10) Turn on/off all server blades
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. System Control Information	-	Displays system information. →"● 1. System Control Information (1_3_1)" (pg.81)
2. System Power supply	-	Displays the state of the power supply. →"● 2. System Power Supply (1_3_2)" (pg.82)
3. System Fan	-	Displays the status of the system fan. →"● 3. System Fan (1_3_3)" (pg.85)
4. System Temperature	-	Displays system temperature status. →"● 4. System Temperature (1_3_4)" (pg.88)
5. System Chassis Table	-	Displays the status of the chassis system fan and serial number. →"● 5. System Chassis Table (1_3_5)" (pg.91)
6. System UPS	-	Not used.
7. System KVM	-	Switches which server blade of which slot is to be used for the keyboard/display/mouse connected to the chassis.
8. System LED Control	<input type="checkbox"/> on <input type="checkbox"/> off <input type="checkbox"/> blinking	Controls the front and rear maintenance LEDs of the chassis as the system indication LED display function. <ul style="list-style-type: none"> • on Maintenance LEDs are lit. • off Maintenance LEDs are not lit. • blinking Maintenance LEDs are blinking.
	Important:	▶ Even if "on" is set when "System Overall Status" is "error" or "critical" the maintenance LED blinks.
9. NIC Status Detection	-	Sets NIC status detection. →"● 9. NIC Status Detection (1_3_9)" (pg.92)

Parameter	Setting	Contents
10. Turn on/off all server blades	-	Controls the power supply of all the installed server blades. → "● 10. Turn on/off all server blades (1_3_10)" (pg.93)

● **1. System Control Information (1_3_1)**

Displays system information.

```

+-----+
|           System Control Information           page_1_3_1           |
+-----+

(-) System Name                : BX600
(-) Number of Fans              : **
(-) Number of Temperature Sensors : **
(-) Number of Power Supply Unit  : **
(-) System Housing Type         : BX600S2
(-) System Overall Status       : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
System Name	Displays system name.
Number of Fans	Displays the number of the fans installed to the chassis.
Number of Temperature Sensors	Displays the number of the temperature sensors installed to the chassis.
Number of Power Supply Unit	Displays the number of the PSUs installed to the chassis.
System Housing Type	Displays the type of the chassis.
System Overall Status	Displays the overall status of the system.

● 2. System Power Supply (1_3_2)

Displays the state of the power supply.

```

+-----+
|           System Power Supply           page_1_3_2           |
+-----+

(1) System Power Supply Control      : Hard Power off
(-) System Power Supply Status       : not-ready
(-) System Power Supply Redundancy   : yes
(4) System Power Supply Unit Table
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. System Power Supply Control	<input type="checkbox"/> power on <input type="checkbox"/> Hard Power off <input type="checkbox"/> graceful shutdown and off	<p>Controls the main power supply of the chassis.</p> <p>When using refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137).</p> <ul style="list-style-type: none"> power on Turns on the main power supply of the chassis. Hard Power off Turns off the main power supply of the chassis. graceful shutdown and off "graceful shutdown and off" in "1. Server power" in "● 1. Server Blade Control Information (1_4_1_1)" (→pg.95) is ordered for all the installed server blades and the power is turned off. <p>Important:</p> <ul style="list-style-type: none"> ▶ When using this function it is necessary to make various settings to the installed server blades. For details, refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137). Do not select this when performing operations for server blades that are not supported, because there is a fear that unexpected operations such as ACPI shutdown or power off may occur.
System Power Supply Status	-	Displays the status of the overall power supply.
System Power Supply Redundancy	-	Displays "yes" when the power supply is redundant and "no" when not redundant.
4. System Power Supply Unit Table	-	Displays a list of the PSUs installed. →"• 4. System Power Supply Unit Table (1_3_2_4)" (pg.83)

• **4. System Power Supply Unit Table (1_3_2_4)**

Displays the status of the PSUs installed.

```

+-----+
|           System Power Unit Status Table           page_1_3_2_4           |
+-----+

(1) Power Supply Unit 1 : **
(2) Power Supply Unit 2 : **
(3) Power Supply Unit 3 : **
(4) Power Supply Unit 4 : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
System Power Supply Unit 1 - System Power Supply Unit 4	Displays the status of each PSU. If the PSU number is selected, more detailed information is displayed. →"• 4. System Power Supply Unit Table (1_3_2_4_1)" (pg.83)

• **4. System Power Supply Unit Table (1_3_2_4_1)**

Displays the detailed status of the selected PSU.

```

+-----+
|           System Power Supply Unit Table           page_1_3_2_4_1           |
+-----+

(-) System Power Supply Unit Status                : ok
(-) System Power Supply Unit Manufacture            : DELTA
(-) System Power Supply Unit Product Name           : DPS-1200CEA
(-) System Power Supply Model Name                  : AFC00B00043
(-) System Power Supply Product Version             : S3
(-) System Power Supply Serial Number               : ZOD0345003945
(-) System Power Supply Live Time                   : 94
(8) System Power Supply Live Time Reset             : reset
(9) Power Supply Live Time Limited Count            : 0
(-) System Power Supply OVP                         : ok
(-) System Power Supply OCP                         : ok
Enter selection or type (0) to quit:
    
```

Parameter	Contents
System Power Supply Unit Status	Displays the status of the PSU.
System Power Supply Unit Manufacture	Displays the manufacturer of the PSU.
System Power Supply Unit Product Name	Displays the product name of the PSU.

Parameter	Contents
System Power Supply Model Name	Displays the model name of the PSU.
System Power Supply Product Version	Displays the product version of the PSU.
System Power Supply Serial Number	Displays the serial number of the PSU.
System Power Supply Live Time	Displays the running time of the PSU.
8. System Power Supply Live Time Reset	Sets the running time of the PSU to 0. After replacing the PSU, select "reset" and set this value to 0.
9. Power Supply Live Time Limited Count	Displays and sets the life time of the PSU. Do not normally change the settings.
System Power Supply OVP	Displays the Over Voltage Protection (OVP) status.
System Power Supply OCP	Displays the Over Current Protection (OCP) status.

 **IMPORTANT**

- ▶ PSU replacement
PSU and dummy PSU are non-durable components (→ "BX600 S2 Blade Server System Unit Hardware Guide").
Change settings after replacement.

● 3. System Fan (1_3_3)

Displays and sets the status of the system fan.

```

+-----+
|               System Fan           page_1_3_3               |
+-----+

(1) System Fans Table
(2) System Fans Live Time Table
(3) Set System Fans Daily Test Time      : disable
(4) Fan Test At Every Start-up          : disable
(-) System Fans Overall Status           : ok
(6) All Rear Fans Unavailable Reaction   : continue
Enter selection or type (0) to quit:
    
```

□: Parameter

Parameter	Setting	Contents
1. System Fans Table	-	Displays a table showing the fans installed in the chassis and PSU. →"• 1. System Fans Table (1_3_3_1)" (pg.86)
2. System Fans Live Time Table	-	Displays and sets the lifetime of the system fan. →"• System Fan (1_3_3_2)" (pg.87)
3. Set System Fans Daily Test Time	<input type="checkbox"/> <hh.mm> <input type="checkbox"/> disable	Sets the time when system fans operation tests are performed everyday. <ul style="list-style-type: none"> • <hh:mm> Time is set in "hours: minutes". Time should be set in a 24-hour clock format. • disable Does not perform an operation test.
4. Fan Test At Every Start-up	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether system fans operation tests are performed every time fan operations start.
System Fans Overall Status	-	Displays the overall status of the system fans. Important: <ul style="list-style-type: none"> ▶ System fan unit replacement System fan units are non-durable components (→ "BX600 S2 Blade Server System Unit Hardware Guide"). Change settings after replacement.
6. All Rear Fans Unavailable Reaction	<input type="checkbox"/> continue <input type="checkbox"/> shutdown-and-poweroff	Sets system fan operations if all the system fans cannot be operated. <ul style="list-style-type: none"> • continue System operations are continued. • shutdown-and-poweroff Shutdown is ordered for the server and power is turned off.

- **1. System Fans Table (1_3_3_1)**

Displays a table showing the fans installed in the chassis and PSU.

```

+-----+
|                System Fan                page_1_3_3_1                |
+-----+
(1) Rear1-Fan-1      : **
(2) Rear1-Fan-2      : **
(3) Rear2-Fan-3      : **
(4) Rear2-Fan-4      : **
(5) PowerUnit1-Fan-1 : **
(6) PowerUnit1-Fan-2 : **
(7) PowerUnit1-Fan-3 : **
(8) PowerUnit2-Fan-1 : **
(9) PowerUnit2-Fan-2 : **
(10) PowerUnit2-Fan-3 : **
(11) PowerUnit3-Fan-1 : **
(12) PowerUnit3-Fan-2 : **
(13) PowerUnit3-Fan-3 : **
(14) PowerUnit4-Fan-1 : **
(15) PowerUnit4-Fan-2 : **
(16) PowerUnit4-Fan-3 : **
Enter selection or type (0) to quit:

```

Parameter	Contents
Rear1-Fan-1 – PowerUnit4-Fan-3	Sets and displays the numbers of each fan. The settings and information of a specific fan can be displayed by selecting that fan number. →"• System Fan (1_3_3_1_1)" (pg.86)

- **System Fan (1_3_3_1_1)**

Sets and displays the selected fan.

```

+-----+
|                System Fan                page_1_3_3_1_1                |
+-----+
(1) System Fan Fail Reaction      : continue
(-) System Fan Designation       : Rear1-Fan-1
(-) System Fan Status             : **
(-) System Fan Current Speed     : **
(-) System Nominal Maximum Speed : **
(-) System Current Maximum Speed : **
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. System Fan Fail Reaction	<input type="checkbox"/> continue <input type="checkbox"/> shutdown-and-poweroff	Sets the action for each fan. <ul style="list-style-type: none"> • continue Sets operations to continue even during a fan failure. • shutdown-and-poweroff Performs graceful shutdown of the main power supply of the chassis when a fan error occurs. When using refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137).
System Fan Designation	-	Displays the location of each fan. <ul style="list-style-type: none"> • Rear1,2-Fan-1 - 2 System fan unit internal fan • PowerUnit1,2,3,4-Fan-1 - 3 PSU internal fan (1: power cooling fan, 2 and 3: rear system fan unit)
System Fan Status	-	Displays the status of each fan.
System Fan Current Speed	-	Displays the current rpm of each fan.
System Nominal Maximum Speed	-	Displays the nominal maximum speed of each fan.
System Current Maximum Speed	-	Displays the maximum speed of each fan.

• **System Fan (1_3_3_2)**

Displays and sets the lifetime of the system fan.

```

+-----+
|           System Fan (REAR Fans)           page_1_3_3_2           |
+-----+

(1) System Fan_1
(2) System Fan_2
(3) System Fan_3
(4) System Fan_4
Enter selection or type (0) to quit:
    
```

Parameter	Contents
System Fan_1 – System Fan_4	The settings for running time and display of a specific fan can be displayed by selecting that system fan number. →"• 2. System Fans Live Time Table (1_3_3_2_1)" (pg.88)

• **2. System Fans Live Time Table (1_3_3_2_1)**

The information related to the running time of the selected system fan unit can be set and displayed.

```

+-----+
|           System Fan           page_1_3_3_2_1           |
+-----+

(-) Fan Live Time                : 0
(2) Fan Live Time Reset          : reset
(3) Fan Live Time Limited Count  : 26000
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Fan Live Time	Displays the running time of the system fan unit.
2. Fan Live Time Reset	Sets the running time of the system fan unit to 0. After replacing the system fan unit, click "reset" and set running time to 0.
3. Fan Live Time Limited Count	Displays and sets the lifetime of the system fan unit. Do not normally change the settings.

● **4. System Temperature (1_3_4)**

Displays system temperature status.

```

+-----+
|           System Temperature           page_1_3_4           |
+-----+

(1) System Temperature Sensor Table
(-) System Temperature Overall Status : ok
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. System Temperature Sensor Table	Displays system temperature status. Displays a list of temperature sensors and their status. →"• 1. System Temperature Sensor Table (1_3_4_1)" (pg.89)
System Temperature Overall Status	Displays the overall status of the temperature sensors of the system.

• **1. System Temperature Sensor Table (1_3_4_1)**

Displays a list of temperature sensors and their status.

```

+-----+
|           System Temperature           page_1_3_4_1           |
+-----+

(1) Housing-Left   : ok
(2) Housing-Center : ok
(3) Housing-Right  : ok
(4) Ambient        : ok
(5) Switch-1       : ok
(6) Switch-2       : ok
(7) Switch-3       : not-available
(8) Switch-4       : not-available
(9) PSU-1          : ok
(10) PSU-2         : ok
(11) PSU-3         : ok
(12) PSU-4        : ok
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Housing-Left – PSU-4	Displays a list of temperature sensors and their status. The settings and information of a specific temperature sensor can be displayed by selecting that sensor. →"• System Temperature (1_3_4_1_1)" (pg.90)

• **System Temperature (1_3_4_1_1)**

Sets and displays the selected temperature sensor.

```

+-----+
|           System Temperature           page_1_3_4_1_1           |
+-----+

(1) System Temperature Critical Reaction      : continue
(-) System Temperature Sensor Designation    : Housing-Left
(-) System Temperature Sensor Status         : **
(-) System Temperature Upper Warning Level   : **
(-) System Temperature Upper Critical Level  : **
(-) System Temperature Current Value        : **
Enter selection or type (0) to quit:
    
```

□: Parameter

Parameter	Setting	Contents
1. System Temperature Critical Reaction	<input type="checkbox"/> continue <input type="checkbox"/> shutdown-and-poweroff	Sets the action for each temperature sensor. <ul style="list-style-type: none"> • continue Sets operations to continue even during a temperature error. • shutdown-and-poweroff Performs graceful shutdown of the main power supply of the chassis when a temperature error occurs. When using refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137).
System Temperature Sensor Designation	-	Displays the location of each temperature sensor. <ul style="list-style-type: none"> • Housing-Left, Center, Right The left, centre and right of the chassis when looking from the front. • Ambient Inside the front control board • Switch 1–4: Inside the Switch Blade: • PSU1–4 Inside the PSU
System Temperature Sensor Status	-	Displays the status of each temperature sensor.
Set System Temperature Upper Warning Level	-	Displays the temperature warning threshold.
Set System Temperature Upper Critical Level	-	Displays the temperature danger threshold.
System Temperature Current Value	-	Displays the current temperature value of each temperature sensor.

● **5. System Chassis Table (1_3_5)**

Displays the status of the chassis system fan and serial number.

```

+-----+
|           System Chassis           page 1_3_5           |
+-----+

(1) System Chassis Intrusion Table
(-) System Chassis Serial Number : **
(-) System Chassis Product Version : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. System Chassis Intrusion Table	Displays the installation status of the system fan unit. →"• System Chassis Intrusion Table (1_3_5_1)" (pg.91)
System Chassis Serial Number	Displays the chassis serial number.
System Chassis Product Version	Displays the chassis product version.

• **System Chassis Intrusion Table (1_3_5_1)**

Displays the installation status of the system fan unit.

```

+-----+
| Chassis Intrusion (Sensor_1:Front, Sensor_2:Rear) page 1_3_5_1 |
+-----+

(-) System Chassis Intrusion Sensor_1 : **
(-) System Chassis Intrusion Sensor_2 : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
System Chassis Intrusion Sensor_1	Displays the status of Sensor_1: system fan unit 1, and Sensor_2: system fan unit 2.
System Chassis Intrusion Sensor_2	<ul style="list-style-type: none"> • close Fans units are installed. • open Fans units are removed.

● 9. NIC Status Detection (1_3_9)

Sets NIC status detection.

```

+-----+
|          NIC Status Detection          page_1_3_9          |
+-----+

(1) NIC Status Detection : disable
(2) NIC Detection Timeout : 120
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. NIC Status Detection	<input type="checkbox"/> enable <input type="checkbox"/> disable	<p>Sets whether to detect NIC status or not when the Management Blade is redundantly configured.</p> <p>If this setting is enabled, communication is monitored on a steady basis via the LAN interface. If communication does not take place for a given amount of time (2. NIC Detection Timeout) performs a NIC status self diagnostic test. If an error is detected, the master is forcibly switched and the communication path is changed. Not only this but management and operation can also be continued via the LAN interface even if a communication failure caused by NIC error or LAN cable disconnection occurs.</p>
	Note:	<ul style="list-style-type: none"> ▶ When Management Blade is non redundantly configured, it is necessary to set "NIC Status Detection" to "disable". ▶ When Management Blade is redundantly configured and "NIC Status Detection" is set to "enable" always check the following in advance. <ul style="list-style-type: none"> • Connect the LAN cable to the master and slave Management Blades. Check that the link between this and the connection destination network device has been established. • Check that both the master and slave Management Blade of the monitoring terminal have a network configuration that enables communication using LAN interface.

Parameter	Setting	Contents
2. NIC Detection Timeout	<input type="checkbox"/> 0 – 300	Sets the time (seconds) for NIC status detection. If communication does not take place in the setting time here, a NIC status self diagnostic test is performed.
	Remarks: ▶ Set the timeout of server monitoring software such as ServerView to a time longer than that of the "NIC Detection Timeout". For details about setting timeout, refer to the manuals attached to the server monitoring software products.	



▶ If an error is detected by "NIC Status Detection", the status of the Management Blade will become "critical" but the management error LED will not blink or light up.

● 10. Turn on/off all server blades (1_3_10)

Controls the power supply of all the installed server blades.

```

+-----+
|          Turn on/off all server blades          page_1_3_10          |
+-----+

(1) Turn on all server blades
(2) Turn off all server blades
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. Turn on all server blades	The power supply of all the installed server blades is turned on sequentially.
2. Turn off all server blades	Select and the "Confirmation" screen appears. Select "Yes, turn off all server blades" and "off" or "graceful shutdown and off" will be ordered sequentially for the "Server power" of all the installed server blades. For details about "Server power", refer to " 1. Server power" (→pg.96).



▶ When performing server blade power control in this setting, after ordering power ON/OFF, check in the CLI display etc. that all power ON/OFF operations have been completed and move on to the next operation.

■ Server Blade (1_4)

Displays and sets the various information of server blades.

```

+-----+
|          Server Control Information Table          page_1_4          |
+-----+

(1) Server Blade_1: ok
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Server Blade_1 – Server Blade_10	A list of the installed server blades is displayed. The information of a specific server blade can be set and displayed by selecting that server blade number. →"● Server Blade (1_4_1)" (pg.94)

● Server Blade (1_4_1)

Displays and sets the selected server blade.

```

+-----+
|          Server Blade          page_1_4_1          |
+-----+

(1) Server Blade Control Information
(2) Server Blade Information
(3) Server Blade CPU
(4) Server Blade Memory
(5) Server Blade Voltage Table
(6) Server Blade Temperature
(7) Server Blade NIC Information
(8) Server Blade Watch Dog
(9) Raid Controller Type
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. Server Blade Control Information	Sets server blade startup and power supply. →"● 1. Server Blade Control Information (1_4_1_1)" (pg.95)
2. Server Blade Information	Displays the information of server blade. →"● 2. Server Blade Control Information (1_4_1_2)" (pg.97)

Parameter	Contents
3. Server Blade CPU	Displays the information of the CPU installed to the server blades. →"● 3. Server Blade CPU (1_4_1_3)" (pg.98)
4. Server Blade Memory	Displays the information of the memory installed to the server blades. →"● 4. Server Blade Memory (1_4_1_4)" (pg.100)
5. Server Blade Voltage Table	Displays the information about the voltage of the server blades. →"● 5. Server Blade Voltage Table (1_4_1_5)" (pg.102)
6. Server Blade Temperature	Displays the information about the temperature of the server blades. →"● 6. Server Blade Temperature (1_4_1_6)" (pg.103)
7. Server Blade NIC Information	Displays the information about the onboard NIC of the server blades. →"● 7. Server Blade NIC Information (1_4_1_7)" (pg.105)
8. Server Blade Watch Dog	Sets the information about Watch Dog of server blade. →"● 8. Server Blade Watch Dog (1_4_1_8)" (pg.106)
9. Raid Controller Type	Displays the disk controller type.

● 1. Server Blade Control Information (1_4_1_1)

Sets server blade startup and power supply.

```

+-----+
|           Server Blade Control           page_1_4_1_1           |
+-----+

(1) Server power                : power on
(2) Set Server Maximum Restart Retries : 3
(3) Set Server Boot Mode         : normal
(4) Server LED Control           : off
(-) Server CPU Mode              : performance
(-) Server Administrative URL     :
(-) Server Memory Dump Flag      : normal
Enter selection or type (0) to quit:

```

☐: Parameter

Parameter	Setting	Contents
1. Server power	<input type="checkbox"/> Power on <input type="checkbox"/> graceful shutdown and off <input type="checkbox"/> graceful shutdown and power-cycle <input type="checkbox"/> hard reset <input type="checkbox"/> NMI <input type="checkbox"/> Hard Power off	<p>Sets server blade power supply.</p> <p>When using, refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137).</p> <ul style="list-style-type: none"> • Power On Turns the server on. • graceful shutdown and off Turns off power after shutting down the OS using the ServerView agent operating on the server blade. • graceful shutdown and power-cycle Turns power on again after turning off power and shutting down the OS using the ServerView agent operating on the server blade. • hard reset Reboots the server blade. • NMI Do not normally select. • Hard Power off The server blade is forcibly turned OFF.
	<p>Important:</p> <ul style="list-style-type: none"> ▶ When using this function, it is necessary to make various settings to server blades. For details, refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137). Do not select when performing operations for server blades that are not supported because there is a fear that unexpected operations such as ACPI shutdown or power off may occur. <p>Notes:</p> <ul style="list-style-type: none"> ▶ When ordering power on after ordering server blade power off, check the power has been turned off correctly. 	
2. Set Server Maximum Restart Retries	<input type="checkbox"/> 0 – 7	<p>Sets how many times will be retried after OS start fails.</p> <p>If set to 0, retry will not be performed.</p>
3. Set Server Boot Mode	<input type="checkbox"/> normal <input type="checkbox"/> pxe-lan-1 <input type="checkbox"/> pxe-lan-2 <input type="checkbox"/> add-in-pci-lan-1 <input type="checkbox"/> add-in-pci-lan-2	<p>Sets the boot method for server blade OS boot.</p> <ul style="list-style-type: none"> • normal Sets the boot order of server blade to the default settings set in BIOS. • pxe-lan-1 / pxe-lan-2 Set LAN port 1 or 2 to the top priority of the server blade boot order and change so that it boots in Preboot eXecution Environment (PXE). • add-in-pci-lan-1 / add-in-pci-lan-2 Set LAN port 1 or 2 installed in the expansion card slot module to the top priority of the server blade boot order and change so that it Preboot eXecution Environment (PXE).
	<p>Remarks:</p> <ul style="list-style-type: none"> ▶ When installing expansion cards other than a LAN card, if "add-inpci-lan-1" or "add-in-pci-lan-2" is selected the server blade will stop in the middle of boot. If this happens, turn off the server blade, change the boot mode and then turn the power on again. 	

Parameter	Setting	Contents
4. Server LED Control	<input type="checkbox"/> blinking <input type="checkbox"/> off	Controls the display of the server blade power supply LED as the server blade identification function. Used to identify the multiple server blade installed in the chassis. <ul style="list-style-type: none"> • blinking The server blade power LED is blinking. • off Will not control the server blade power LED.
Server CPU Mode	-	Displays the operation mode of the CPU installed to the server blades. <ul style="list-style-type: none"> • performance The CPU installed to the server blade is operating in Performance mode. • not-ready The CPU is not operating.
Server Administrative URL	-	Not used.
Server Memory Dump Flag	-	Displays the status of the memory dump flag.

● 2. Server Blade Control Information (1_4_1_2)

Displays the information of server blade.

```

+-----+
|          Server Blade Information          page_1_4_1_2          |
+-----+
(-) Server Blade Status           : **
(-) Server Blade Manufacture      : **
(-) Server Blade Manufacture Date : MM/DD/YYYY HH:MM:SS
(-) Server Blade Serial Number    : **
(-) Server Blade Product Name     : **
(-) Server Blade Product Version  : **
(-) Server Blade Model Name       : **
(-) Server Blade Hardware Version : **
(-) Server Blade BIOS Version     : **
(-) Server Blade KME Version      : **
(-) Number Of CPU Socket          : **
(-) Number Of Memory Socket       : **
(-) Server Blade OS Type          : **
(-) Server Blade OS Version       : **
(-) Server Blade BMC Firmware Version : **
(-) Server Blade PCI Add-In Card  : Not-present
(-) Server Blade Daughter Card    : present
Enter selection or type (0) to quit:

```

Parameter	Contents
Server Blade Status	Displays the overall status of server blade.
Server Blade Manufacture	Displays the manufacturer.
Server Blade Manufacture Date	Displays the manufacture date.
Server Blade Serial Number	Displays the system serial number.
Server Blade Product Name	Displays the official name of the system.
Server Blade Product Version	Displays the product version.
Server Blade Model Name	Displays the model name.
Server Blade Hardware Version	Displays the hardware version.
Server Blade BIOS Version	Displays the version of the BIOS installed.
Server Blade KME Version	Displays the KME (keyboard mouse emulator) version.

Parameter	Contents
Number of CPU Socket	Displays the number of CPU sockets.
Number of Memory Socket	Displays the number of the memory slots installed.
Server Blade OS Type	Displays the OS type if ServerView agent is installed to the OS.
Server Blade OS Version	Displays the OS version if ServerView agent is installed to the OS.
Server Blade BMC Firmware Version	Displays the BMC (Baseboard Management Controller: a micro controller that controls temperature and voltage sensors on the baseboard) firmware version.
Server Blade PCI Add-In Card	Displays the installation status of the expansion card slot module.
Server Blade Daughter Card	Displays the status of the I/O expansion board (Fibre Channel Expansion Board, etc.) installed in the server blade.

● **3. Server Blade CPU (1_4_1_3)**

Displays the information of the CPU installed to the server blades.

```

+-----+
|          Server Blade CPU Table          page_1_4_1_3          |
+-----+

(1) CPU 1 : ok
Enter selection or type (0) to quit:
    
```

Parameter	Contents
CPU 1 - CPU 2	Lists the status of the CPUs installed to the server blade. The settings and information of a specific CPU can be displayed by selecting that CPU number. →"• Server Blade CPU Information" (pg.99)

- **Server Blade CPU Information**

Displays the detailed information of the selected CPU.

```

+-----+
|      Server Blade CPU Information      page_1_4_1_3_1      |
+-----+

(-) CPU Type           : **
(-) CPU Frequency     : **
(-) CPU Step          : **
(-) CPU Status        : **
(-) CPU Name          : **
(-) CPU Socket Designation : **
(-) CPU Manufacturer  : **
(-) CPU CLock         : **
Enter selection or type (0) to quit:

```

Parameter	Contents
CPU Type	Displays the CPU type.
CPU Frequency	Displays the frequency of the CPU.
CPU Step	Displays the CPU stepping.
CPU Status	Displays the overall status of the CPU.
CPU Name	Displays various types of CPU.
CPU Socket Designation	Displays the location of CPU sockets.
CPU Manufacturer	Displays the CPU manufacturer.
CPU Clock	Displays the operating frequency of the CPU bus.

● 4. Server Blade Memory (1_4_1_4)

Displays the information of the memory installed to the server blades.

```

+-----+
|          Server Blade Memory          page_1_4_1_4          |
+-----+

(1) Server Blade Memory Information Table
(2) Server Blade Memory Modules Table
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. Server Blade Memory Information Table	Displays the total memory capacity. →"• 1. Server Blade Memory Information Table (1_4_1_4_1)" (pg.100)
2. Server Blade Memory Modules Table	Displays the status of the installed memory modules. →"• 2. Server Blade Memory Modules Table (1_4_1_4_2)" (pg.101)

- 1. Server Blade Memory Information Table (1_4_1_4_1)

Displays the total memory capacity.

```

+-----+
|          Memory Information Table          page_1_4_1_4_1          |
+-----+

(-) Physical Memory Size      : **
Enter selection or type (0) to quit:
    
```

• **2. Server Blade Memory Modules Table (1_4_1_4_2)**

Displays the status of the installed memory modules.

The figure uses BX620 S3 Server Blade as an example.

```

+-----+
| Server Blade Memory Module Table      page_1_4_1_4_2 |
+-----+

(1) Memory Module 1 : **
(2) Memory Module 2 : **
(3) Memory Module 3 : **
(4) Memory Module 4 : **
(5) Memory Module 5 : **
(6) Memory Module 6 : **
(7) Memory Module 7 : **
(8) Memory Module 8 : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Memory Module n (n is the memory slot number)	Displays the status of the installed memory modules. Detailed information about a specific memory module can be displayed by selecting that memory module number. →"• Memory Module Information Table" (pg.101)

• **Memory Module Information Table**

Displays the detailed status of the selected memory module.

```

+-----+
| Memory Module Information Table      page_1_4_1_4_2_1 |
+-----+

(-) Memory Module Status                : **
(-) Memory Module Size                   : **
(-) Memory Module Type                   : **
(-) Memory Module Socket Designation    : **
(-) Memory Module Speed                  : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Memory Module Status	Displays the overall status of the memory module.
Memory Module Size	Displays the capacity of the memory module.
Memory Module Type	Displays the memory module type.

Parameter	Contents
Memory Module Socket Designation	Displays the socket location to which memory module is installed.
Memory Module Speed	Displays the operating frequency of the memory bus.

● **5. Server Blade Voltage Table (1_4_1_5)**

Displays the information about the voltage of the server blades.

The figure uses BX620 S3 Server Blade as an example.

```

+-----+
|           Server Voltage Table           page_1_4_1_5           |
+-----+

(1) Voltage ID 1 : CPU 2 12V
(2) Voltage ID 2 : CPU 1 12V
(3) Voltage ID 3 : 12V
(4) Voltage ID 4 : 3.3V Standby
(5) Voltage ID 5 : 3.3V
(6) Voltage ID 6 : 5V
(7) Voltage ID 7 : RTC Battery
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Voltage ID n (n is the voltage sensor number)	Displays the information about the voltage of the server blades. Displays the voltage being measured. Detailed information about a specific voltage can be displayed by selecting that voltage sensor number. →"• Server Voltage Information Table (1_4_1_5_1)" (pg.102)

• **Server Voltage Information Table (1_4_1_5_1)**

Displays detailed information about the selected voltage.

```

+-----+
|           Server Voltage Information Table           page_1_4_1_5_1           |
+-----+

(-) Server Voltage Designation      : 12V
(-) Server Voltage Status           : **
(-) Server Voltage Minimum Value    : **
(-) Server Voltage Maximum Value    : **
(-) Server Voltage Current Value    : **
(-) Server Voltage Nominal Value    : **
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Server Voltage Designation	Displays the location of each voltage sensor.
Server Voltage Status	Displays the status of each voltage sensor.
Server Voltage Minimum Value	Displays the minimum danger threshold for voltage.
Server Voltage Maximum Value	Displays the maximum danger threshold for voltage.
Server Voltage Current Value	Displays the current voltage value.
Server Voltage Nominal Value	Displays the nominal value for voltage.

● **6. Server Blade Temperature (1_4_1_6)**

Displays the information about the temperature of the server blades.

The figure uses BX620 S3 Server Blade as an example.

```

+-----+
|           Server Temperature           page_1_4_1_6           |
+-----+

(1) Temperature Sensor ID 1 : CPU1 Temp
(2) Temperature Sensor ID 2 : CPU2 Temp
(3) Temperature Sensor ID 3 : System Temp 3
(4) Temperature Sensor ID 4 : DIMM Temp
Enter selection or type (0) to quit:
    
```

Parameter	Contents
Temperature Sensor ID n (n is the temperature sensor number)	Displays the information about the temperature of the server blades. Displays the temperature being measured. Detailed information about temperature can be displayed by selecting a temperature value. →"• Server Temperature Sensor Information Table (1_4_1_6_1)" (pg.104)

- **Server Temperature Sensor Information Table (1_4_1_6_1)**

Displays the detailed information of the selected measured temperature.

```

+-----+
| Server Temperature Sensor Information Table      page 1_4_1_6_1 |
+-----+

(-) Server Temperature Sensor Designation      : SYSTEM TEMP1
(-) Server Temperature Sensor Status           : **
(-) Server Temperature Upper Warning Level     : **
(-) Server Temperature Upper Critical Level    : **
(-) Server Temperature Lower Warning Level     : **
(-) Server Temperature Lower Critical Level    : **
(-) Server Temperature Current Value          : **
Enter selection or type (0) to quit:

```

Parameter	Contents
Server Temperature Sensor Designation	Displays the location of each temperature sensor.
Server Temperature Sensor Status	Displays the status of each temperature sensor.
Server Temperature Upper Warning Level	Displays upper level temperatures when a temperature is judged to be warning level.
Server Temperature Upper Critical Level	Displays upper level temperatures when a temperature is judged to be critical level.
Server Temperature Lower Warning Level	Displays lower level temperatures when a temperature is judged to be warning level.
Server Temperature Lower Critical Level	Displays lower level temperatures when a temperature is judged to be critical level.
Server Temperature Current Value	Displays the current temperature value of the sensor.

● **7. Server Blade NIC Information (1_4_1_7)**

Displays the information about the onboard NIC of the server blades.

```

+-----+
|           Server NIC Information           page_1_4_1_7           |
+-----+

(1) Server Blade NIC IP Table
(2) Server Blade MAC Address Table
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. Server Blade NIC IP Table	Displays the server blade IP address if ServerView agent is installed to the OS. →"• 1. Server Blade NIC IP Table (1_4_1_7_1)" (pg.105)
2. Server Blade MAC Address Table	Displays the MAC address for server blade. →"• 2. Server Blade MAC Address Table (1_4_1_7_2)" (pg.106)

• **1. Server Blade NIC IP Table (1_4_1_7_1)**

Displays the server blade IP address if ServerView Agent is installed to the OS.

The figure uses BX620 S3 Server Blade as an example.

```

+-----+
|           Server Blade NIC IP           page_1_4_1_7_1           |
+-----+

(-) IP1 : n.n.n.n
(-) IP2 : n.n.n.n
Enter selection or type (0) to quit:
    
```

- **2. Server Blade MAC Address Table (1_4_1_7_2)**

Displays the MAC address for server blade.

The figure uses BX620 S3 Server Blade as an example.

```

+-----+
|          Server Blade MAC Address          page_1_4_1_7_2          |
+-----+

(-) NIC1 : nn:nn:nn:nn:nn:nn
(-) NIC2 : nn:nn:nn:nn:nn:nn
Enter selection or type (0) to quit:

```

- **8. Server Blade Watch Dog (1_4_1_8)**

Sets information about Watch Dog of server blade.

```

+-----+
|          Server Blade Watchdog          page_1_4_1_8          |
+-----+

(1) Server Blade Software Watchdog
(2) Server Blade Boot Watchdog
Enter selection or type (0) to quit:

```

Parameter	Contents
1. Server Blade Software Watchdog	Displays the OS hang monitor function of the server blade. →"• 1. Server Blade Software Watchdog (1_4_1_8_1)" (pg.107)
2. Server Blade Boot Watchdog	Performs OS boot monitoring for server blade. →"• 2. Server Blade Boot Watchdog (1_4_1_8_2)" (pg.107)

- **1. Server Blade Software Watchdog (1_4_1_8_1)**

Displays the OS hang monitor function of the server blade.

Settings are performed on ServerView.

```

+-----+
|   Software Watchdog Information   page_1_4_1_8_1   |
+-----+

(-) Software Watchdog Time      : 0.00
(-) Software Watchdog Action    : not-ready
(-) Software Watchdog Status    : disable
Enter selection or type (0) to quit:

```

Parameter	Contents
Software Watchdog Time	Displays the timeout time during OS hang.
Software Watchdog Action	Displays actions during the server blade OS hang.
Software Watchdog Status	Displays the status of software watchdog.

- **2. Server Blade Boot Watchdog (1_4_1_8_2)**

Performs OS boot monitoring for server blade. The server blade OS boot is monitored by monitoring the interval between the end of server blade POST and the boot of ServerView agent.

```

+-----+
|   Boot Watchdog Information   page_1_4_1_8_2   |
+-----+

(1) Set Boot Watchdog Time      : 10 minutes
(2) Set Boot Watchdog Enable    : disable
(3) Set Boot Watchdog Action    : hard reset
Enter set selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. Set Boot Watchdog Time	<input type="checkbox"/> 2minutes <input type="checkbox"/> 5minutes <input type="checkbox"/> 10minutes <input type="checkbox"/> 15minutes <input type="checkbox"/> 20minutes <input type="checkbox"/> 30minutes <input type="checkbox"/> 60minutes <input type="checkbox"/> 100minutes	Monitors OS boot failure according to the set time.
2. Set Boot Watchdog Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Specifies whether to monitor the OS boot or not.
3. Set Boot Watchdog Action	<input type="checkbox"/> no-action <input type="checkbox"/> hard reset <input type="checkbox"/> off <input type="checkbox"/> graceful shutdown and power-cycle	Sets server blade power supply. When using refer to "6.2 Points to Note about Remote Power OFF and the Shutdown Function" (→pg.137). <ul style="list-style-type: none"> • no-action No action is taken • hard reset Reboots the server blade. • off Turn the server blade off. • graceful shutdown and power-cycle Turns power on again after turning off power and shutting down the OS using the ServerView agent operating on the server blade.

 **POINT**

- ▶ The "OS Boot Monitoring" function can also be enabled or disabled from ServerView.

 **IMPORTANT**

- ▶ If ServerView is not installed to the server blade, be sure to set "2. Set Boot Watchdog Enable" to "disable". If the setting is "enable", there is a fear that this server may automatically turn off or restart improperly.
- ▶ Even when ServerView is installed to the server blade, if starting the system while the ServerStart CD-ROM or floppy disks for activating hardware configuration tools is inside, be sure to disable the "OS Boot Monitoring" function (default settings are invalid).
If you start up the system while the "OS Boot Monitoring" function remains effective, the operation of the server blade may become unpredictable at such times as an abrupt power interruption or restart. If the "OS Boot Monitoring" function is needed, it should be reset to enabled before resuming normal server operation.
- ▶ When setting this function, refer to "ServerView User's Guide" to fully learn about its specifications, in order to set it correctly.

■ Switch Blade (1_5)

Displays various information of the Switch Blade.

```
+-----+
|          Switch Blade Name Table          page_1_5          |
+-----+

(1) Switch Blade_1: ok
Enter selection or type (0) to quit:
```

Parameter	Contents
Switch Blade_1 – Switch Blade_4	A list of the installed Switch Blades is displayed. Detailed information about a specific Switch Blade can be set and displayed by selecting that Switch Blade. →"● Switch Blade Information (1_5_1)" (pg.109)

● Switch Blade Information (1_5_1)

Sets and displays detailed information of each Switch Blade.

```
+-----+
|          Switch Blade Information          page_1_5_1          |
+-----+

(-) Administrative URL          : http://n.n.n.n.n/
(-) Switch Blade Status        : **
(-) Switch Blade Manufacture   : **
(-) Switch Blade Manufacture Date : MM/DD/YYYY HH:DD:SS
(-) Switch Blade Serial Number  : **
(-) Switch Blade Product Name   : **
(-) Switch Blade Model Name     : **
(-) Switch Blade Hardware Version : **
(-) Switch Blade Firmware Version : **
(-) Switch Blade MAC Address    : nn:nn:nn:nn:nn:nn
(-) Switch Blade IP Address     : n.n.n.n
(-) Switch Blade Subnet Mask    : n.n.n.n
(-) Switch Blade Gateway       : n.n.n.n
(14)Switch Blade IP Address Setting Value : n.n.n.n
(15)Switch Blade Subnet Mask Setting Value : n.n.n.n
(16)Switch Blade Gateway Setting Value : n.n.n.n
(17)Apply Network Setting
(18)Switch Blade LED Control    : off
(19)Reboot Switch Blade
Enter selection or type (0) to quit:
```

□: Parameter

Parameter	Setting	Contents
Administrative URL	-	Displays the URL of the Switch Blade Web interface.
Switch Blade Status	-	Displays the overall status of Switch Blade.
Switch Blade Manufacture	-	Displays the manufacturer.
Switch Blade Manufacture Date	-	Displays the manufacture date.
Switch Blade Serial Number	-	Displays the system serial number.
Switch Blade Product Name	-	Displays the official name of the system.
Switch Blade Model Name	-	Displays the model name.
Switch Blade Hardware Version	-	Displays the board version.
Switch Blade Firmware Version	-	Displays the firmware version.
Switch Blade MAC Address	-	Displays the MAC address of the management LAN interface of the Switch Blade.
Switch Blade IP Address	-	Displays the IP address of the management LAN interface of the Switch Blade.
Switch Blade Subnet Mask	-	Displays the subnet mask set in the Switch Blade.
Switch Blade Gateway	-	Displays the gateway address set in the Switch Blade.
14. Switch Blade IP Address Setting Value	-	Sets the IP address for the Switch Blade. Switch Blade is set by setting apply in (17).
15. Switch Blade Subnet Mask Setting Value	-	Sets the subnet mask of the Switch Blade. Switch Blade is set by setting apply in (17).
16. Switch Blade Gateway Setting Value	-	Sets the Switch Blade gateway address. Switch Blade is set by setting apply in (17).
17. Apply Network Setting	-	Applies the values set in (14), (15) and (16) to the Switch Blade. Applied information is saved as a Switch Blade boot file named "backupexi".
18. Switch Blade LED Control	<input type="checkbox"/> blinking <input type="checkbox"/> off	Controls the display of the Switch Blade power supply LED as the Switch Blade identification function. Used to identify the multiple Switch Blades installed in the chassis. <ul style="list-style-type: none"> • blinking Switch Blade maintenance LEDs are blinking. • off Switch Blade maintenance LEDs are not controlled.
19. Reboot Switch Blade	-	Reboots the Switch Blade. →"• 19. Reboot Switch Blade (1_5_1_19)" (pg.111)

• **19. Reboot Switch Blade (1_5_1_19)**

Reboots the Switch Blade.

```

+-----+
|                                     |
|                                     | page_1_5_1_19 |
|                                     |
+-----+

Reboot Switch Blade
(1) reboot now!
(0) quit
Enter selection :
```

Parameter	Contents
1. reboot now!	If selected reboots the Switch Blade.
0. quit	Returns to Switch Blade Information (1_5_1)

■ **Username And Password (1_6)**

Adds users and sets passwords.

```

+-----+
|                                     |
|                                     | User ID List   page_1_6 |
|                                     |
+-----+

(1) User_1 : root
(2) User_2 :
(3) User_3 :
(4) User_4 :
(5) User_5 :
(6) User_6 :
(7) User_7 :
(8) User_8 :
(9) User_9 :
(10)User_10:
Enter selection or type (0) to quit:
```

Parameter	Contents
User_1 – User_10	Adds users and sets passwords. A list of users appears. Changes in settings such as password of a specific user can be performed by selecting that User number. → "● Edit Username And Password (1_6_1)" (pg.112)

● Edit Username And Password (1_6_1)

Sets password etc. for the selected user.

```

+-----+
|           Edit Username And Password           page_1_6_1           |
+-----+

(1) Change Username : root
(2) Change Password : *****
(3) User Permission : 255
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. Change Username	-	Enter new name or user name to be changed.
2. Change Password	-	Enter the password to be changed.
3. User Permission	<input type="checkbox"/> 0-255	Set the user privileges with the value of 0-255 that is the total of various set bitmaps. (*) Because this is a complex operation, it is recommended to perform settings using the Web UI.

*: Various setting bitmaps are as follows.

Parameter	Bitmap	Value
Read Only [LOGIN]	0x00000001	1
Modify values	0x00000010	2
Configure users	0x00000100	4
Reset/Switch Off	0x00001000	8
Access EMP via CLI	0x00010000	16
Adv. KVM User (incl. KVM configuration rights)	0x00100000	32
Administrator	0x11111111	255

POINT

- ▶ Passwords and user names can be set to a maximum of 16 characters. Passwords and user names are case sensitive.
- ▶ A user name "root" (password "root") that has administrator privileges is set by default. Change the password of the user name "root" during initial settings.
- ▶ The username "root" cannot be changed.

● 2. Server Blade Event Log Table

Checks the logs of the server blades installed in the chassis.

After selection, log filtering and deletion is performed in the following screen.

```

+-----+
|          Manage Blade Event Log Level          page_1_8_1          |
+-----+

(1) All Event
(2) Informational Event
(3) Minor Event
(4) Major Event
(5) Critical Event
(6) Clear All Entries
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. ALL Event	Displays all logs.
2. Informational Event	Displays only informational event logs.
3. Minor Event	Displays only minor event logs.
4. Major Event	Displays only major events logs.
5. Critical Event	Displays only critical event logs.
6 Clear All Entries	Deletes all logs.

Logs are displayed in the following format. Press the [Enter] key to check all the logs. A maximum of 510 event log entries for Management Blade and 511 for BX620 S3 Server Blade can be saved.

- Information regarding the number of logs is displayed at the top of the screen.

```
SEL entry number: nnn
```

- Displays the number of logs in the system event log (SEL).

```
Free space of SEL entry: nnn
```

- Displays the remaining number of logs that will enter the system event log.

```

SEL entry number:nnn, Free space of SEL entry:nnn
MM/DD/YYYY HH:MM:SS Info 00062 *****.
----- XXX entries left, Press Enter (or type 0 to quit) -----
    
```

POINT

- ▶ When "Management Blade Wrap Around Event Log Enable" is set to "disable" in Management Blade, if the maximum number of event logs is reached, no more event logs can be recorded. Periodically check "Event Log" and save or delete logs as necessary. Save by copying the screen text.

■ Set System Default (1_9)

Returns Management Blade settings to default.

```

+-----+
|           Set System Default           page_1_9           |
+-----+

(1) Set Config Default           : false
(2) Set Username/Password Default : false
(3) Set CMOS Backup Default      : false
(4) Set Deployment Default       : false
(5) Set Switch Blade Config Default : false
Enter selection or type (0) to quit:
    
```

: Parameter : Setting at time of purchase

Parameter	Setting	Contents
1. Set Config Default	<input type="radio"/> false <input type="checkbox"/> true	Returns settings to default. However, IP address, subnet mask and default gateway will not return to default settings. Also, Time Zone will become (GMT+0). Change as necessary. In order to set to default, after setting "True", reboot the Management Blade. Settings become valid after reboot.
2. Set Username/Password Default	<input type="radio"/> false <input type="checkbox"/> true	Returns user name and password to default. In order to set to default, after setting "True", reboot the Management Blade. Settings become valid after reboot.
3. Set CMOS Backup Default	<input type="radio"/> false <input type="checkbox"/> true	Returns CMOS Backup settings to default. In order to set to default, after setting "True", reboot the Management Blade. Settings become valid after reboot.
4. Set Deployment Default	<input type="radio"/> false <input type="checkbox"/> true	Returns deployment settings to default. In order to set to default, after setting "True", reboot the Management Blade. Settings become valid after reboot.
5. Set Switch Blade Config Default	<input type="radio"/> false <input type="checkbox"/> true	This function is not supported.

■ Server CMOS Backup/Restore (1_10)

Performs the backup/restore of CMOS information specified by the BIOS setup utility of the server blade.

After turning on the server blade operations cannot be performed until POST ends. Server blades that are available for operation are displayed as [Ready].

Displays the backup status of BIOS information of the server blades. If backup data exists, the [MAC address, date, BIOS version] is displayed.

```

+-----+
| Server Blade [Status][CMOS Backup File] Table   page_1_10 |
+-----+
(1) Server Blade_1  :[Ready    ] [No Backup COMS File           ]
(2) Server Blade_2  :[Ready    ] [No Backup COMS File           ]
(3) Server Blade_3  :[Not Ready ] [No Backup COMS File           ]
(4) Server Blade_4  :[Not Ready ] [No Backup COMS File           ]
(5) Server Blade_5  :[Not Ready ] [No Backup COMS File           ]
(6) Server Blade_6  :[Not Ready ] [No Backup COMS File           ]
(7) Server Blade_7  :[Not Ready ] [No Backup COMS File           ]
(8) Server Blade_8  :[Not Ready ] [No Backup COMS File           ]
(9) Server Blade_9  :[Not Ready ] [No Backup COMS File           ]
(10) Server Blade_10 :[Not Ready ] [No Backup COMS File           ]
Enter selection or type (0) to quit:

```

Parameter	Contents
Server Blade_1 – Server Blade_10	<p>Performs the backup/restore of CMOS information specified by the BIOS setup utility of the server blade.</p> <p>After turning on the server blade operations cannot be performed until POST ends. Server blades that are available for operation are displayed as [Ready].</p> <p>Displays the backup status of BIOS information of the server blades. If backup data exists, the [MAC address, date, BIOS version] is displayed.</p> <p>The settings relating to backup/restore of a specific server blade can be performed by selecting that server blade number.</p> <p>→"● Server CMOS Configure (1_10_1)" (pg.117)</p>

● **Server CMOS Configure (1_10_1)**

Sets the CMOS file of the selected server blade.

```

+-----+
|           Server CMOS Configure           page_1_10_1           |
+-----+

(1) CMOS Control
(2) CMOS Configure Restore Target      : **
(-) Server CMOS ID With BIOS Version  : nnnn
(-) Server CMOS ID With Mac Address   : nn:nn:nn:nn:nn:nn
(-) Backup Date Time                  : MM/DD/YYYY HH:MM:SS
Enter selection or type (0) to quit:
    
```

Parameter	Contents
CMOS Control	Controls CMOS. →"• CMOS Control (1_10_1_1)" (pg.117)
CMOS Configure Restore Target	Enter the server blade slot number setting of the restoration target. →"• CMOS Configure Restore Target (1_10_1_2)" (pg.118)
Server CMOS ID With BIOS Version	Displays the BIOS version of the server blade that backed up BIOS information.
Server CMOS ID With Mac Address	Displays the MAC address of the server blade that backed up BIOS information.
Backup Date Time	Displays the date that BIOS information was backed up from the server blade.

• **CMOS Control (1_10_1_1)**

Controls CMOS.

```

+-----+
|           Page_1_10_1_1           |
+-----+

CMOS Control : unknown
(1) backup
(2) smart-restore
(3) force-restore
(0) quit
Enter selection :
    
```

Parameter	Contents
1. backup	Backs up the BIOS information of the selected server blade.
2. smart-restore	Perform smart restore of the data backed up in this slot to the server blade installed in the slot selected in "CMOS Configure Restore Target". BIOS information can only be restored if the MAC address and slot number of the server blade that backed up BIOS information and of the restore target is the same.
3. force-restore	Perform force restore of the data backed up in this slot to the server blade installed in the slot selected in "CMOS Configure Restore Target". BIOS information can be forcibly restored even if the MAC address and slot number of the server blade that backed up BIOS information and of the restore target is not the same.

 **IMPORTANT**

- ▶ This function cannot be used when the model of the server blade that backed up the CMOS settings and the restore destination server blade differ. Can also not be used when the BIOS version differs.

- **CMOS Configure Restore Target (1_10_1_2)**

Enter the server blade slot number setting of the restoration target.

```

+-----+
|           Page_1_10_1_2           |
+-----+

CMOS Configure Restore Target : 1
Please Input New Value (Press enter to quit)
-->>

```

 **IMPORTANT**

- ▶ Information that is configured with the BIOS setup utility only can be backed up and restored. BIOS information of the onboard SCSI array controller cannot be backed up nor restored.
- ▶ Backup and restore results are recorded in the Management Blade event log.

■ Switch Blade Configuration Backup/Restore (1_11)

Backs up and restores the various settings to Switch Blade.

```

+-----+
| Switch Blade [Last Action] [Last Done Backup Date] page_1_11 |
+-----+
(1) Blade_1 : [ none] [None Configuration Backup]
(2) Blade_2 : [ none] [None Configuration Backup]
Enter selection or type (0) to quit:

```

Parameter	Contents
Blade_1 – Blade_2	Displays a list of the installed Switch Blades. The settings relating to backup and restore of a specific Switch Blade can be performed by selecting that Switch Blade number. →"● Switch Backup/Restore Configure (1_11_1)" (pg.119)

● Switch Backup/Restore Configure (1_11_1)

Performs various settings for the backup and restoration of each Switch Blade.

```

+-----+
| Switch Backup/Restore Configure page_1_11_1 |
+-----+
(1) Backup/restore Control
(2) View Backup Configuration
(3) Auto Restore Enable : disable
Enter selection or type (0) to quit:

```

□: Parameter

Parameter	Setting	Contents
1. Backup/restore Control	-	Controls backup and restore. →"• Backup/restore Control (1_11_1_1)" (pg.120)
2. View Backup Configuration	-	Displays backed up setting information.
3. Auto Restore Enable	<input type="checkbox"/> enable <input type="checkbox"/> disable	Sets whether the backed up setting information will be automatically restored to the Switch Blade. If set to "enable", automatic restore is only performed for Switch Blades newly installed to the chassis. Restored setting information is saved as a Switch Blade boot file named "backup_cfg".

• **Backup/restore Control (1_11_1_1)**

Controls backup and restore.

```

+-----+
| page_1_11_1_1 |
+-----+
Switch Backup/restore Control : backup
(1) backup
(2) force-restore
(0) quit
Enter selection or type (0) to quit:
    
```

Parameter	Contents
1. backup	Backs up the current settings of the selected Switch Blade.
2. force-restore	Force restore the backed up settings to the currently installed Switch Blade. Force restored settings is saved as a Switch Blade boot file named "backup_cfg".

■ Deployment Parameter (1_12)

Displays and sets the Parameters for Deployment for the each installed blade.

```

+-----+
|           Deployment Configuration           page_1_12           |
+-----+
(1) Server Blade_1
(2) Server Blade_2
(3) Server Blade_3
(4) Server Blade_4
(5) Server Blade_5
(6) Server Blade_6
(7) Server Blade_7
(8) Server Blade_8
(9) Server Blade_9
(10) Server Blade_10
Enter selection or type (0) to quit:

```

Parameter	Contents
Server Blade_1 – Server Blade_10	Displays all the installed server blades. The settings of the deployment Parameters of a specific server blade can be displayed and changed by selecting that server blade number. →"● Deployment Configuration (1_12_1)" (pg.122)

● Deployment Configuration (1_12_1)

Displays and sets the Parameters for Deployment for the selected blade.

```

+-----+
|           Deployment Configuration           page_1_12_1           |
+-----+
(-) Chassis ID           : nn
(-) Slot ID             : nn
(-) MAC Address_1       : nn:nn:nn:nn:nn:nn
(-) MAC Address_2       : nn:nn:nn:nn:nn:nn
(7) IP Address_1        : n.n.n.n
(8) IP Address_2        : n.n.n.n
(11) Subnet Mask_1      : n.n.n.n
(12) Subnet Mask_2      : n.n.n.n
(15) Default Gateway_1  : n.n.n.n
(16) Default Gateway_2  : n.n.n.n
(19) Hostname           : **
(20) Master Image Reference : **
(-) Status of Blade     : **
(22) Automatic Recovery : **
(-) States of Cloning   : **
(24) LAN status of slot : **
Enter selection or type (0) to quit:

```

Parameter	Contents
Chassis ID	Displays the ID of the chassis.
Slot ID	Displays the slot to which server blades are installed.
MAC Address_1 MAC Address_2	Displays the Mac Address of LAN port 1 and LAN port 2 of the server blade.
7. IP Address_1 8. IP Address_2	Displays the IP Address of LAN port 1 and LAN port 2 of the server blade.
11. Subnet Mask_1 12. Subnet Mask_2	Displays the subnet mask of LAN port 1 and LAN port 2 of the server blade.
15. Default Gateway_1 16. Default Gateway_2	Displays the default gateway of LAN port 1 and LAN port 2 of the server blade.
19. Hostname	Sets the hostname.
20. Master Image Reference	Sets the master image directory.
Status of Blade	Displays the current status of the server blade.
22. Automatic Recovery	Sets whether the automatic recovery function is enabled.
Status of Cloning	Displays the overall status of cloning.
24 LAN status of slot	Sets the LAN status.

IMPORTANT

- ▶ IP Address, Subnet Mask, Default Gateway, Hostname, MasterImageReference are automatically set by software such as ServerView. Do not make changes unless necessary when using the various types of Deployment software.

■ Fiber Channel (1_15)

Displays various information of the FC Pass-Thru Blade.

```

+-----+
|          Fiber_Channel Table          page_1_15          |
+-----+
(1) FC Pass Through_1 : ok
(2) FC Pass Through_2 : ok
Enter selection or type (0) to quit:

```

Parameter	Contents
FC Pass Through_1 – FC Pass Through_2	Displays the installed FC Pass-Thru Blades. Detailed information about a specific FC Pass-Thru Blade can be displayed by selecting the number of that FC Pass-Thru Blade. →"● FC Pass Through Information (1_15_1)" (pg.124)

● FC Pass Through Information (1_15_1)

Displays the information of the selected FC Pass-Thru Blade.

```

+-----+
|          FC Pass Through Information          page_1_15_1 |
+-----+
(-) FC Pass Through Status      : ok
(-) FC Pass Through Manufacture : **
(-) FC Pass Through Manufacture Date : DD/MM/YYY nn:nn:nn
(-) FC Pass Through Serial Number : **
(-) FC Pass Through Product Name  : **
(-) FC Pass Through Model Name    : **
(-) FC Pass Through Hardware Version : nn
(-) FC Pass Through Voltage Status : ok
(-) FC Pass Through Voltage Maximum : nnn
(-) FC Pass Through Voltage Minimum : nnn
(-) FC Pass Through Voltage Normal  : nnn
(-) FC Pass Through Voltage Current : nnn
(13) FC Present Table
Enter selection or type (0) to quit:

```

Parameter	Contents
FC Pass Through Status	Displays the status of the FC Pass-Thru Blade.
FC Pass Through Manufacture	Displays the manufacturer of the FC Pass-Thru Blade.
FC Pass Through Manufacture Date	Displays the manufacture date of the FC Pass-Thru Blade.
FC Pass Through Serial Number	Displays the serial number of the FC Pass-Thru Blade.
FC Pass Through Product Name	Displays the product name of the FC Pass-Thru Blade.
FC Pass Through Model Name	Displays the model name of the FC Pass-Thru Blade.
FC Pass Through Hardware Version	Displays the hardware version of the FC Pass-Thru Blade.
FC Pass Through Voltage Status	Displays the voltage status of the FC Pass-Thru Blade.
FC Pass Through Voltage Maximum	Displays the maximum voltage of the FC Pass-Thru Blade.
FC Pass Through Voltage Minimum	Displays the minimum voltage of the FC Pass-Thru Blade.
FC Pass Through Voltage Normal	Displays the normal voltage of the FC Pass-Thru Blade.
FC Pass Through Voltage Current	Displays the current voltage of the FC Pass-Thru Blade.
13. FC Present Table	Displays the connection status of the fibre channel module.

■ PHY Module (1_16)

Displays various information of the GbE Pass-Thru Blade.

```

+-----+
|          PHY Module                      page_1_16          |
+-----+
(1) PHY MODULE_1
Enter selection or type (0) to quit: 4

```

Parameter	Contents
PHY MODULE_1 – PHY MODULE_4	Displays the installed GbE Pass-Thru Blades. Detailed information about a specific GbE Pass-Thru Blade can be displayed by selecting the number of that GbE Pass-Thru Blade.

● PHY Module Information (1_16_1)

Displays the various information of the selected GbE Pass-Thru Blade.

```

+-----+
|          LAN Pass Through Information          page_1_16_1 |
+-----+
(-) LAN Pass Through Manufacture      : ***
(-) LAN Pass Through Manufacture Date : ***
(-) LAN Pass Through Serial Number   : ***
(-) LAN Pass Through Product Name    : ***
(-) LAN Pass Through Model Name      : ***
(-) LAN Pass Through Hardware Version : ***
(-) LAN Pass Through FW Version      : ***
(8) LAN Pass Through LED Control     : off
Enter selection or type (0) to quit:

```

Parameter	Value	Contents
LAN Pass Through Manufacture	-	Displays the manufacturer of the GbE Pass-Thru Blade.
LAN Pass Through Manufacture Date	-	Displays the manufacture date of the GbE Pass-Thru Blade.
LAN Pass Through Serial Number	-	Displays the serial number of the GbE Pass-Thru Blade.
LAN Pass Through Product Name	-	Displays the product name of the GbE Pass-Thru Blade.
LAN Pass Through Model Name	-	Displays the model name of the GbE Pass-Thru Blade.
LAN Pass Through Hardware Version	-	Displays the hardware version of the GbE Pass-Thru Blade.
LAN Pass Through FW Version	-	Displays the firmware version of the GbE Pass-Thru Blade.
LAN Pass Through LED Control	<input type="checkbox"/> blinking <input type="checkbox"/> off	Controls the GbE Pass-Thru Blade maintenance LED by acting as a GbE Pass-Thru Blade distinctional function. <ul style="list-style-type: none"> • blinking Blinks GbE Pass-Thru Blade maintenance LED. • off Does not control GbE Pass-Thru Blade maintenance LED.

■ FC Switch (1_17)

Displays various information of the fibre channel switch blade.

```

+-----+
|          FC SWITCH Table          page_1_17  |
+-----+
(1) FC SWITCH MODULE_1
(2) FC SWITCH MODULE_2
Enter selection or type (0) to quit: 1

```

Parameter	Contents
FC SWITCH MODULE_1-	Displays the installed fibre channel switch blades.
FC SWITCH MODULE_2	Detailed information about a specific fibre channel switch blade can be displayed by selecting the number of that fibre channel switch blade.

● FC SWITCH Information (1_17_1)

Displays the various information of the selected fibre channel switch blade.

```

+-----+
|          FC SWITCH Information          page_1_17_1  |
+-----+
(-) FC SWITCH Manufacture      : FSC
(-) FC SWITCH Manufacture Date  : 11/25/2005 00:00:00
(-) FC SWITCH Serial Number    : RQ040002505
(-) FC SWITCH Product Name     : FC Switch Blade
(-) FC SWITCH Product Number   : S26361-F3144
(-) FC SWITCH Hardware Version  : A0
(-) FC SWITCH IP Address       : 0.0.0.0
(-) FC SWITCH Subnet Mask      : 0.0.0.0
(-) FC SWITCH gateway         : 0.0.0.0
(-) FC SWITCH FC IP Address    : 0.0.0.0
(-) FC SWITCH FC Subnet Mask   : 0.0.0.0
(-) FC SWITCH Name             :
(-) FC SWITCH Domain ID       :
Enter selection or type (0) to quit:

```

Parameter	Contents
FC SWITCH Manufacture	Displays the manufacturer.
FC SWITCH Manufacture Date	Displays the manufacture date.
FC SWITCH Serial Number	Displays the system serial number.
FC SWITCH Product Name	Displays the product name.
FC SWITCH Product Number	Displays the product number.

Parameter	Contents
FC SWITCH Hardware Version	Displays the hardware version.
FC SWITCH IP Address	Displays the IP Address of the management LAN interface set in the fibre channel switch blade.
FC SWITCH Subnet Mask	Displays the subnet mask of the management LAN interface set in the fibre channel switch blade.
FC SWITCH gateway	Displays the gateway address set in the fibre channel switch blade.
FC SWITCH FC IP Address	Displays the IP Address set in the fibre channel switch blade.
FC SWITCH FC Subnet Mask	Displays the subnet mask set in the fibre channel switch blade.
FC SWITCH Name	Displays the name set in the fibre channel switch blade.
FC SWITCH Domain ID	Displays the domain ID set in the fibre channel switch blade.

5.4.3 Console Redirection

Server blade and Switch Blade console redirection can be performed from the Management Blade. Server blade performs POST screen display and BIOS setup utility operations. Switch Blade performs console menu display and operations.



- ▶ Console redirection can only be used for one of multiple installed server blades or Switch Blades at a time.

```

+-----+
|           Console Redirection Table           page_3           |
+-----+

(1) Console Redirect Server Blade
(2) Console Redirect Switch Blade
(3) Set Return Hotkey , Ctrl+(a character) : Q
Enter selection or type (0) to quit:

```

Parameter	Contents
1. Console Redirect Server Blade	Performs server blade console redirection. → "■ 1. Console Redirect Server Blade (3_1)" (pg.130)
2. Console Redirect Switch Blade	Performs Switch Blade console redirection. → "■ 2. Console Redirect Switch Blade (3_2)" (pg.131)
3. Set Return Hotkey, Ctrl+ (a character)	Enter the return key "[Ctrl] + [(character to be used) key]" in the console redirection screen enables return to the CLI screen. The character keys used in return hotkey are set here. Default value is [Q]. When changing it enter the character to be used as the hotkey after selection. Set the character keys to be used as [A] – [Z] excluding [M].

■ 1. Console Redirect Server Blade (3_1)

Performs server blade console redirection.

```

+-----+
|           Console Redirect Server Blade           page_3_1           |
+-----+

(1) Console Redirect Server Blade_1
Enter selection or type (0) to quit:

```

A list of the installed server blades is displayed.

Select the server blade for which you wish to perform console redirection and the console redirection screen will appear.

If the return hotkey is pressed in the console redirection screen it is possible to return to the menu screen (For details about the return hot key, refer to "3. Set Return Hotkey, Ctrl+ (a character)" (→pg.129)).

POINT

- ▶ Server blade supports console redirection. Console redirection can only be performed for text screens. Screen using graphic mode cannot be output.
Console redirection is performed in the serial port A of the server blade connected to the Management Blade.
Using the console redirection function, management of Bios operations can be performed from the CLI of the Management Blade.
Usually only ASCII characters can be used in the emulate console used for console redirection and there is no arrow key, function key or [Ctrl] key. However, these are necessary to enter BIOS settings as normal. If entered in a special way (escape sequence) the following key entries are possible.

Key	Escape sequence
[F1]	[Esc] → [1]
[F2]	[Esc] → [2]
[F3]	[Esc] → [3]
[F4]	[Esc] → [4]
[F5]	[Esc] → [5]
[F6]	[Esc] → [6]
[F7]	[Esc] → [7]
[F8]	[Esc] → [8]
[F9]	[Esc] → [9]
[F10]	[Esc] → [0]
[F11]	[Esc] → [!]

Key	Escape sequence
[F12]	[Esc] → [@]
[HOME]	[Esc] → [h]
[End]	[Esc] → [k]
[Ins]	[Esc] → [+]
[Del]	[Esc] → [-]
[Page Up]	[Esc] → [?]
[Page Down]	[Esc] → [/]
[↑]	[Esc] → [w]
[↓]	[Esc] → [x]
[→]	[Esc] → [d]
[←]	[Esc] → [a]
[Reset]	[Esc] → [R] → [ESC] → [r] → [ESC] → [R]

■ 2. Console Redirect Switch Blade (3_2)

Performs Switch Blade console redirection.

```

+-----+
|           Console Redirect Switch Blade           page_3_2           |
+-----+

(1) Console Redirect Switch Blade_1
Enter selection or type (0) to quit:

```

A list of the installed Switch Blades is displayed.

Select the Switch Blade for which you wish to perform console redirection and the console screen will appear.

If the return hotkey is pressed in the console redirection screen, it is possible to return to the menu screen (For details about the return hot key, refer to "3. Set Return Hotkey, Ctrl+ (a character)" (→pg.129)).

POINT

- ▶ Switch Blade supports the console management interface. Access can be gained from this menu.

5.4.4 Logout

Logs out and returns to the login screen.

5.4.5 Reboot

Reboots the Management Blade.

```

+-----+
| Reboot Selection: [1] Yes or [0] No      page_6 |
+-----+

(1) Yes,Reboot Now!
Enter selection or type (0) to quit:

```

Select (1) and the following screen is displayed and then Management Blade is rebooted.

```

+-----+
| Management Blade Reboot Now!      page_6_1 |
+-----+

```

POINT

- ▶ Even if the Management Blade is rebooted, the main power supply and server blade power status is maintained.
- ▶ If rebooted, the master and slave of the Management Blade will switch. When connected to the CLI using LAN interface, because the connection will be temporarily disconnected, reconnection is necessary.
When connected using serial interface, refer to "5.3 CLI Login" (→pg.63) and reconnect the master.

5.4.6 System Information Dump

Displays the various information of blades installed to the chassis.

This menu is used when dumping information via the CLI. Check in the menu of each unit.

```

+-----+
|   System Information Dump                   page_7   |
+-----+

(1) System Configuration/Status
(2) SEL for Management Blade
(3) Server Blade Configuration/Status
(4) SEL for Server Blade
Enter selection or type (0) to quit:

```

Parameter	Contents
1. System Configuration/Status	Displays various information regarding the chassis, Management Blades and Switch Blades.
2. SEL for Management Blade	Displays log information of the Management Blade.
3. Server Blade Configuration/Status	Displays the information of all installed server blades.
4. SEL for Server Blade	Displays the log information of all installed server blades.

Chapter 6

Technical Information Knowledgebase

6

This chapter explains the specifications and operational notes of the Management Blade.

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6.1 Specifications

The Management Blade is installed to the chassis by default. Specifications are as follows:

Parameter	Functions and Specifications
Product name	Management blade
External interface	LAN (10BASE-T/100BASE-TX) × 1, Serial × 1
Dimension (Length × Width × Height)	275 × 75 × 26 mm
Weight	About 0.4kg
Operation environment	This is the same as the operation environment for the chassis.

6.2 Points to Note about Remote Power OFF and the Shutdown Function

6.2.1 Remote Power OFF

This is a function in Management Blade that remotely turns OFF the power of the chassis and server blade from the Web UI or CLI.

When using this function, note the following points.

- When remotely turning OFF the main power of the chassis, first check that the power of all the installed server blades is OFF. If server blades are operational, the system may be damaged.
- When ordering server blade power to be turned OFF, first finish the OS on the server blade.

6.2.2 Graceful Shutdown Function

When using the graceful shutdown function, install ServerView to the server blade.

6.3 Notes

The following are points to note when using Management Blade.

■ Notes on the event logs recorded when the power cable is unplugged

When unplugging the power cable from the chassis, the following Management Blade event log will be recorded, but because the log is caused by unplugging the power cable, please ignore it.

```
MM/DD/YYYY HH:MM:SS Critical 49198 System overall status is critical.  
MM/DD/YYYY HH:MM:SS Critical 49254 Power supply overall status is critical.  
MM/DD/YYYY HH:MM:SS Major 32796 Power supply unit X is error.  
MM/DD/YYYY HH:MM:SS Major 32813 System overall status is error.  
MM/DD/YYYY HH:MM:SS Critical 49253 Power supply overall status is degraded.  
MM/DD/YYYY HH:MM:SS Major 32796 Power supply unit X is error.  
(X = PSU number)
```

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