

FUJITSU Software
Infrastructure Manager V2.6.0
Infrastructure Manager for PRIMEFLEX V2.6.0

A decorative horizontal band with a red-to-dark-red gradient. It features abstract, glowing white and red lines that swirl and intersect, creating a sense of motion and technology.

Items for Profile Settings
(for Profile Management)

Preface

Purpose

This manual describes the installation procedure and the general functions of the following operation and management software. This software manages and operates ICT devices such as servers, storages, and switches, as well as facility devices such as PDUs, in an integrated way

- FUJITSU Software Infrastructure Manager (hereafter referred to as "ISM")
- FUJITSU Software Infrastructure Manager for PRIMEFLEX (hereafter referred to as "ISM for PRIMEFLEX")

Product Manuals

Manual Name	Description
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 First Step Guide	This manual is for those using this product for the first time. This manual summarizes the procedures for the use of this product, the product system, and licensing. In this manual, it is referred to as "First Step Guide."
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 User's Guide	This manual describes the functions of this product, the installation procedure, and procedures for operation. It allows you to quickly grasp all functions and all operations of this product. In this manual, it is referred to as "User's Guide."
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 Operating Procedures	This manual describes the installation procedure and usages for the operations of this product. In this manual, it is referred to as "Operating Procedures."
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 REST API Reference Manual	This manual describes how to use the required APIs and provides samples and parameter information for using user-created applications that integrate with this product. In this manual, it is referred to as "REST API Reference Manual."
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 Messages	This manual describes the messages that are output when using ISM or ISM for PRIMEFLEX and the actions to take for these messages. In this manual, it is referred to as "ISM Messages."
FUJITSU Software Infrastructure Manager for PRIMEFLEX V2.6.0 Messages	This manual describes the messages that are output when using ISM for PRIMEFLEX and the actions to take for these messages. In this manual, it is referred to as "ISM for PRIMEFLEX Messages."
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 Items for Profile Settings (for Profile Management)	This manual describes detailed information for the items set when creating profiles for managed devices. In this manual, it is referred to as "Items for Profile Settings (for Profile Management)."
FUJITSU Software Infrastructure Manager for PRIMEFLEX V2.6.0 Cluster Creation and Cluster Expansion Parameter List	This manual describes Cluster Definition Parameters that are used for the automatic settings in Cluster Creation and Cluster Expansion when using ISM for PRIMEFLEX. In this manual, it is referred to as "ISM for PRIMEFLEX Parameter List."
FUJITSU Software Infrastructure Manager V2.6.0	This document defines the terms that you need to understand in order to use this product. In this manual, it is referred to as "Glossary."

Manual Name	Description
Infrastructure Manager for PRIMEFLEX V2.6.0 Glossary	
FUJITSU Software Infrastructure Manager V2.6.0 Infrastructure Manager for PRIMEFLEX V2.6.0 Plug-in and Management Pack Setup Guide	<p>This manual describes the procedures, from installation to operation as well as precautions and reference information, for the following features of Infrastructure Manager Plug-in.</p> <ul style="list-style-type: none"> - Infrastructure Manager Plug-in for Microsoft System Center Operations Manager - Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager - Infrastructure Manager Plug-in for VMware vCenter Server - Infrastructure Manager Plug-in for VMware vCenter Server Appliance - Infrastructure Manager Management Pack for VMware vRealize Operations - Infrastructure Manager Plug-in for VMware vRealize Orchestrator - Infrastructure Manager Plug-in for Microsoft Windows Admin Center <p>In this manual, it is referred to as "ISM Plug-in/MP Setup Guide."</p>

Together with the manuals mentioned above, you can also refer to the latest information about ISM by contacting your local Fujitsu customer service partner.

For the information about managed hardware products, refer to the manuals of the relevant hardware.

For PRIMERGY, refer to "ServerView Suite ServerBooks" or the manual pages for PRIMERGY.

<https://support.ts.fujitsu.com/>

Intended Readers

This manual is intended for system administrators, network administrators, facility administrators, and service technicians who have sufficient knowledge of hardware and software.

Notation in this Manual

Notation

Keyboard

Keystrokes that represent nonprintable characters are displayed as key icons such as [Enter] or [F1]. For example, [Enter] means press the key labeled "Enter." [Ctrl]+[B] means hold down the key labeled "Ctrl" or "Control" and then press the B key.

Symbols

Items that require particular attention are indicated by the following symbols.



.....
Describes the content of an important point.
.....



.....
Describes an item that requires your attention.
.....

Variables: <xxx>

Represents variables that require replacement by numerical values or text strings in accordance with your usage environment.

Example: <IP address>

Abbreviation

This document may use the abbreviation for OS as shown in the following examples.

Official name	Abbreviation	
Microsoft(R) Windows Server(R) 2019 Datacenter	Windows Server 2019 Datacenter	Windows Server 2019
Microsoft(R) Windows Server(R) 2019 Standard	Windows Server 2019 Standard	
Microsoft(R) Windows Server(R) 2019 Essentials	Windows Server 2019 Essentials	
Red Hat Enterprise Linux 8.2 (for Intel64)	RHEL 8.2	Red Hat Enterprise Linux Or Linux
SUSE Linux Enterprise Server 15 SP1 (for AMD64 & Intel64)	SUSE 15 SP1(AMD64) SUSE 15 SP1 (Intel64) or SLES 15 SP1 (AMD64) SLES 15 SP1 (Intel64)	SUSE Linux Enterprise Server Or Linux
SUSE Linux Enterprise Server 15 (for AMD64 & Intel64)	SUSE 15(AMD64) SUSE 15(Intel64) or SLES 15(AMD64) SLES 15(Intel64)	
VMware(R) vSphere(TM) ESXi 7.0	VMware ESXi 7.0	VMware ESXi
VMware Virtual SAN	vSAN	
Microsoft Storage Spaces Direct	S2D	

Terms

For the major terms and abbreviations used in this manual, refer to "Glossary."

Using PDF applications (Adobe Reader, etc.)

Depending on the specifications of the PDF application you are using, issues (the addition of extra spaces, missing spaces, missing line breaks, and missing hyphens in line breaks) may occur when you perform the following operations.

- Saving to a text file
- Copying and pasting text

High Risk Activity

The Customer acknowledges and agrees that the Product is designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use, household use, and ordinary industrial use, but is 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. The Customer shall not use the Product without securing the sufficient safety required for the High Safety Required Use. In addition, Fujitsu (or other affiliate's name) shall not be liable against the Customer and/or any third party for any claims or damages arising in connection with the High Safety Required Use of the Product.

To Use This Product Safely

This document contains important information required for using this product safely and correctly. Read this manual carefully before using the product. In addition, to use the product safely, the customer must understand the related products (hardware and software) before using the product. Be sure to use the product by following the precautions on the related products. Be sure to keep this manual in a safe and convenient location for quick reference during use of the product.

Modifications

The customer may not modify this software or perform reverse engineering through decompiling or disassembly.

Disclaimers

Fujitsu Limited assumes no responsibility for any claims for losses, damages or other liabilities arising from the use of this product. The contents of this document are subject to change without notice.

Trademarks

Microsoft, Windows, Windows Vista, Windows Server, Hyper-V, Active Directory, and the titles or names of other Microsoft products are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.

Linux is a trademark or registered trademark of Linus Torvalds in the United States and other countries.

Red Hat and all trademarks and logos based on Red Hat are trademarks or registered trademarks of Red Hat, Inc. in the United States and other countries.

SUSE and the SUSE logo are trademarks or registered trademarks of SUSE LLC in the United States and other countries.

VMware, VMware logo, VMware ESXi, VMware SMP, and vMotion are trademarks or registered trademarks of VMware, Inc. in the United States and other countries.

Intel and Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Java is a registered trademark of Oracle Corporation and its subsidiaries/affiliates in the United States and other countries.

Zabbix is a trademark of Zabbix LLC that is based in Republic of Latvia.

PostgreSQL is a trademark of PostgreSQL in the United States and other countries.

Apache is a trademark or registered trademark of Apache Software Foundation.

Cisco is a trademark of Cisco Systems, Inc. in the United States and other countries.

Elasticsearch is a trademark or registered trademark of Elasticsearch BV in the United States and other countries.

Xen is a trademark of XenSource, Inc.

Trend Micro and Deep Security are trademarks or registered trademarks of Trend Micro Incorporated.

All other company and product names are trademarks or registered trademarks of the respective companies.

All other products are owned by their respective companies.

Copyright

Copyright 2020 FUJITSU LIMITED

This manual shall not be reproduced or copied without the permission of Fujitsu Limited.

Modification History

Edition	Issue Date	Section	Modification Overview
01	May 2020	-	First edition
02	July 2020	3.1 Profiles for Windows Server 3.2 Profiles for VMware ESXi 3.3 Profiles for Red Hat Enterprise Linux	Target OS Modified the description of the OS that can be specified in the profile

Edition	Issue Date	Section		Modification Overview
		3.4 Profiles for SUSE Linux Enterprise Server		
		3.1 Profiles for Windows Server 3.2 Profiles for VMware ESXi 3.3 Profiles for Red Hat Enterprise Linux 3.4 Profiles for SUSE Linux Enterprise Server	Parameter of [Network Card]	Modified PCI card-specific language
		3.2 Profiles for VMware ESXi	OS (for each node) tab	Added the note that a hash tag (#) is not available for [Root password] parameter settings
03	October 2020	Chapter 1 BIOS/iRMC Setting Items of Profiles for PRIMERGY/ PRIMEQUEST3000B Servers	BIOS tab	<p>Added the following items under "PCI Subsystem Settings"</p> <ul style="list-style-type: none"> - Above 4G Decoding - SR-IOV Support <p>Added SATA Configuration and the following items under it</p> <ul style="list-style-type: none"> - SATA Mode - SATA Controller - SSATA Controller
		4.2 Port Settings	-	In the description of the [UEFI Boot] parameter, note that "UEFI only" is specified for PRIMERGY M6 series.

Contents

Chapter 1 BIOS/iRMC Setting Items of Profiles for PRIMERGY/ PRIMEQUEST3000B Servers.....	1
Chapter 2 MMB Setting Items of Profiles for PRIMEQUEST 2000 (Partition)/PRIMEQUEST 2000B/PRIMEQUEST 3000E Series Partitions.....	20
Chapter 3 OS Setting Items of Profiles for Servers.....	22
3.1 Profiles for Windows Server.....	22
3.2 Profiles for VMware ESXi.....	27
3.3 Profiles for Red Hat Enterprise Linux.....	31
3.4 Profiles for SUSE Linux Enterprise Server.....	35
Chapter 4 Virtual IO Setting Items of Profiles for PRIMERGY Servers/PRIMEQUEST 3000E Partitions.....	41
4.1 Card Settings.....	41
4.2 Port Settings.....	42
4.3 Boot Settings.....	43
4.4 CNA Settings.....	45
4.5 Virtual Address Settings.....	45
Chapter 5 Setting Items of Profiles for Storages.....	47
5.1 Profiles for ETERNUS DX.....	47
5.2 Profiles for ETERNUS NR/ETERNUS AX/ETERNUS HX.....	49
Chapter 6 Setting Items of Profiles for Switches.....	52
6.1 Profiles for SR-X.....	52
6.2 Profiles for VDX.....	54
6.3 Profiles for PSWITCH 2048P/T PSWITCH 4032P.....	57
6.4 Profiles for CFX.....	60
Chapter 7 Setting Items of Common Policy.....	64
7.1 Monitoring Policy.....	64

Chapter 1 BIOS/iRMC Setting Items of Profiles for PRIMERGY/ PRIMEQUEST3000B Servers

This section describes the items that you can set up with BIOS/iRMC tab, in profiles.

Note

You find some items that you are unable to set up or some items with different setting contents, depending on the model of your server. Therefore, set up your servers within the scope of support.

You can select Enable or Disable individually for the setting items in profiles. When you disable a setting item, the disabled item is not changed even after assigning the profile.

There are some cases where profiles and setting items on the actual device type may differ. For details of each item, refer to the manual of the target servers and apply settings to the items corresponding to the profile.

BIOS tab


Item Name	Description	Parameter
PCI Subsystem Settings		
ASPM Support (PCI-E ASPM Support (Global)) (Disable/L1 only/Auto/Force L0s)	This specifies whether to use Active State Power Management (ASPM) for the power management of PCI Express. Even if this setting enables ASPM entirely, it only becomes enabled for certain links when the applicable PCI Express expansion card and the onboard controller also support ASPM.	Disable = Disable ASPM L1 only = Sets the power saving mode of the PCI Express link to L1 (Unidirectional) Auto = Sets to maximize power saving Force L0s/Limit to L0s = Set the power saving mode of PCI Express link to L0s (Unidirectional)
DMI Control (GEN 1/GEN 2)	Select the bus connection speed between the CPU and the chip set. The slower it is the lower the power consumption, but the system performance is also reduced.	GEN 1 = Sets the bus connection between the CPU and the chip set, and execute with 2.5 GT/s GEN 2 = Sets the bus connection between the CPU and the chip set, and execute with 5.0 GT/s
Above 4G Decoding (Enable/Disabled) (ISM 2.6.0.020 or later)	This specifies whether memory resources beyond the 4 GB address boundary can be allocated to PCI devices. The option depends on the operating system and the adapter card installed.	Enable = Allocate memory resources beyond 4 GB address boundaries to PCI devices. Disable = Allocate only memory resources below the 4 GB address boundary to PCI devices.
SR-IOV Support (Enabled/Disabled) (ISM 2.6.0.020 or later)	This specifies whether to enable Single Root IO Virtualization if the system has an SR-IOV capable PCIe device	Enable = Enables function. Disable = Disables function.
CPU Configuration		
Execute Disable Bit (Enable/Disable)	This specifies Execute Disable Bit behavior of a CPU. Depending on the manual, this function is described as XD (eXecute Disable) bit or NX (No eXecute) bit.	Enable = Function made available Disable = Function disabled



Item Name	Description	Parameter
Hyper-Threading (Enable/Disable)	This specifies Hyper Threading Technology behavior of a CPU. If the installed CPU does not support this function, this setting is ignored.	Enable = Function made available Disable = Function disabled
Active Processor Cores (All/1-64)	For processors that includes multiple processor cores, specify the number of active processor cores. Processor cores that are not enabled and are not used are hidden from the OS.	All = Enable all processor cores that can be used 1-64 = Enables only the selected processor cores, the other processor cores are disabled
Hardware Prefetcher (Enable/Disable)	This specifies whether to automatically preload the necessary and available memory contents to the cache when a memory bus becomes inactive. By reading the contents from cache instead of the memory, latency is reduced especially for applications using linear access to data.	Enable = Enable the use of the function Disable = Disable the use of the function
Adjacent Cache Line Prefetch (Enable/Disable)	This specifies whether to load the added adjacent 64 byte cache line when the processor sends cache requests. This parameter can be used when the processor is equipped with a mechanism to load the added adjacent 64 byte cache line when the processor sends cache requests. This increases the cache hit ratio for application with high spatial locality.	Enable = The requested cache line and the adjacent cache line are loaded Disable = The requested cache line is loaded
DCU Streamer Prefetcher (Enable/Disable)	This specifies whether to automatically preload the necessary and available memory contents to the L1 data cache when a memory bus becomes inactive. By reading the contents from cache instead of the memory, latency is reduced especially for applications using linear access to data.	Enable = Enable the function Disable = Disable the function
DCU IP Prefetcher (Enable/Disable)	This specifies the DCU IP Prefetch operation of the CPU.	Enable = Enable the DCU IP Prefetch of the CPU Disable = Disable the DCU IP Prefetch of the CPU
Intel Virtualization Technology (Enable/Disable)	This specifies virtualization support function behavior of a CPU.	Enable = Function enabled Disable = Function disabled
Intel(R) Vt-d (Enable/Disable)	This specifies Virtualization Technology for Directed I/O function behavior of a CPU.	Enable = Function enabled Disable = Function disabled
Power Technology (Energy Efficient/Custom/Disable)	This sets up the power source management behavior of a CPU.	Energy Efficient = Behavior optimized for power-saving Custom = Detailed behavior setup by using additional setting items.

Item Name	Description	Parameter
		Disable = Power source management function disabled
HWPM Support (Disable/Native Mode/OOB Mode)	This item can only be set when Power Technology is Custom. Specifies the settings of the performance and power saving managed by HWPM (Hardware Power Management).	Disable = Do not use the HWPM function Native Mode = HWPN cooperatively operates with the operating system via the software interface. OOB Mode = The CPU automatically controls the frequency based on the settings in the energy efficiency policy of the operating system
Enhanced Speed Step (Enable/Disable)	This is the item you can set up only when Power Technology is Custom. This specifies EIST (Enhanced Intel SpeedStep Technology) behavior of a CPU.	Enable = Function enabled Disable = Function disabled
Turbo Mode (Enable/Disable)	This is the item you can set up only when Enhanced Speed Step is Enable. This specifies Turbo Boost Technology behavior of a CPU. If the installed CPU does not support this function, this function is set to (Disable) regardless of this setting.	Enable = Function enabled Disable = Function disabled
Override OS Energy Performance (Enable/Disable)	This item can be set up only when Power Technology is Custom. This item specifies whether to prevent the OS from overwriting the settings of the energy efficiency policy of the setup.	Enable = Enable the function Disable = Disable the function
Energy Performance (Performance/Balanced Performance/Balanced Energy/Energy Efficient)	This item can be set up only when Power Technology is Custom and Override OS Energy Performance is Enabled. This item specifies the energy efficiency policy of the processor in non-legacy operating systems. Depending on the operations, it may be decided to not use this mode.	Performance = Strongly optimizes to increase performance, even if it sacrifices energy efficiency, Balanced Performance = Set to get performance while saving energy at the same time Balanced Energy = Set to save energy while getting good performance Energy Efficient = Strongly optimize energy efficiency, even if this sacrifices performance
Utilization Profile (Even/Unbalanced)	This item can be set up only when Power Technology is Custom and Override OS Energy Performance is Enabled. Specify the share of energy performance to be optimized for use by a different system.	Even = Optimizes to create a system with balanced energy performance Unbalanced = Optimizes for unbalanced system use prioritizing performance
CPU C1E Support (Enabled / Disabled)	This item can be set up only when Power Technology is Custom. Specify whether to stop the processor when it is possible to save power.	Enable = Function enabled Disable = Function disabled



Item Name	Description	Parameter	
	Autonomous C-state Support (Enable/Disable)	This item can be set up only when Power Technology is Custom. Specifies whether to enable the Autonomous C-state Support of the processor.	Enable = Function enabled Disable = Function disabled
	CPU C3 Report (Enable/Disable)	This item can be set up only when Power Technology is Custom. Specify whether to transfer the C3 state of the processor to OSPM (OS Power Management) as ACPI C-2 state.	Enable = CPU C3 is transferred to OSPM as ACPI C-2 state Disable = CPU C3 is not transferred to OSPM as ACPI C-2 state
	CPU C6 Report (Enable/Disable)	This item can be set up only when Power Technology is Custom. Specify whether to transfer the C6 state of the processor to OSPM as ACPI C-3 state, and to enable Deep Power Down Technology.	Enable = CPU C6 is transferred to OSPM as ACPI C-3 state Disable = CPU C6 is not transferred to OSPM as ACPI C-3 state
	Package C State limit (C0/C2/C6/ C6(Retention)/C7/C7s/No Limit/ Auto)	This item can be set up only when Power Technology is Custom. Specify the upper limit of the C State of the processor.	C0=: The upper limit of C State is set to C0 C2=: The upper limit of C State is set to C2 C6=: The upper limit of C State is set to C6 C6(Retention)=:C6 Retention is set to C status limitation C7=: The upper limit of C State is set to C7 C7s=: The upper limit of C State is set to C7s No Limit=: The upper limit for C State is not set Auto=: The system decides automatically
	QPI Link Frequency Select (Auto/6.4 GT/s, 7.2 GT/s, 8.0 GT/s, 9.6 GT/S, 10.4 GT/s)	This specifies the frequency to a shared frequency supported by the CPU.	Auto = The fastest is set from BIOS, based on the CPU existing in the system and the chip set. The speed settings that can be selected depends on the CPU. Select from the following. 6.4 GT/s, 7.2 GT/s, 8.0 GT/s, 9.6 GT/s, 10.4 GT/s
	Uncore Frequency Override (Maximum/Nominal/Disable)	This item specifies the uncore frequency of the processor. This improves the I/O performance.	Maximum = The maximum value of the frequency is always set in advance Nominal = To save power, the processor automatically controls the frequency within the range set in advance. The rate frequency will not be exceeded

Item Name	Description	Parameter
		Disable = To save power, the processor automatically controls the frequency within the range set in advance
LLC Dead Line Alloc (Enable/Disable)	This item specifies the dead line processing of LLC (Last Level Cache). This affects the system performance.	Enable = It easily meets the LLC data dead line Disable = It does not meet the LLC dead line
Stale AtoS (Enable/Disable)	This item specifies the directory optimization of data that has become obsolescent in Caching Agent. This affects the system performance.	Enable = Optimization enabled Disable = Optimization disabled
COD Enable (Enable/Auto/Disable)	This item specifies whether the BIOS should configure the added NUMA nodes for each socket and optimizes the performance of operation loads with high NUMA directivity. For this item, a CPU that has two home agents is required. For systems where COD (Cluster-on-Die) is enabled, it is required to disable isochronous applications, and early snooping is not supported.	Enable = Function enabled Auto = COD is enabled if this is allowed in the system configuration Disable = Function disabled
Early Snoop (Enable/Auto/Disable)	This setting specifies whether to enable early snooping. It is not supported if COD is enabled.	Enable = Function enabled Auto = If this is not allowed in the system configuration and COD is disabled, early snoop mode is enabled Disable = Function disabled
Home Snoop Dir OSB (Enable/Auto/Disable)	This setting specifies whether to use Home Snoop Directory with plain OSB (Opportunistic Snoop Broadcast) caching to optimize snooping processes.	Enable = Function enabled Auto = It is selected automatically based on the CPU configuration Disable = Function disabled
Memory Configuration		
NUMA (Enable/Disable)	This specifies whether to use NUMA (Non-Uniform Memory Access) function. This is rendered meaningless when a multiprocessor configuration is not employed. For BX920, BX924, RX200, RX300, and RX2520, this settings is supported only the devices on which the BIOS 1.3.0 of BX920 S4, BX924 S4, RX200 S8, RX300 S8, RX2520 M1, and the iRMC firmware 7.19F or later. In other devices, this setting must be disabled.	Enable = NUMA function enabled Disable = NUMA function disabled
DDR Performance (Low-Voltage optimized/Energy optimized/Performance optimized)	Memory modules operate with different speeds (Frequencies). The faster the speed, the higher the performance. The slower the speed the more the power	Low-Voltage optimized = The fastest setting available with low voltage Energy optimized = The slowest setting available with power-saving

Item Name	Description	Parameter
	saved. The available memory speeds differ depending on the installed memory module configurations.	Performance optimized = The fastest setting available for achieving the highest performance
Patrol Scrub (Enable/Disable)	This setting specifies whether to regularly screen all memories in the background.	Enable = Background memory screening enabled. Disable = Background memory screening disabled
IMC Interleaving (Auto/1-Way/2-Way)	This setting specifies the interleaving of Integrated Memory Controllers (IMC). This option can be used to create system performance depending on the memory configuration.	Auto = Interleaving is automatically selected in the BIOS depending on the memory configurations that can be used 1-Way = 1-Way interleaving is selected 2-Way = 2-Way interleaving is selected
Sub NUMA Clustering (Enable/Disable/Auto)	Sub NUMA Clustering (SNC) is a function that segments LLC (Last Level Cache) into separate clusters based on the address range. It improves the average latency from the LLC to the local memory.	Enable = Full Sub NUMA Clustering, in other words, 2 clusters of 1-Way interleaving is supported. Disable = Sub NUMA Clustering disabled Auto = By selecting IMC interleaving, 1 cluster or 2 clusters are supported. Also if IMC interleaving is in "Auto," 1 cluster of 2-Way interleaving is supported
Onboard Device Configuration		
Onboard SAS/SATA(SCU) (Enable/Disable)	This specifies Onboard SAS/SATA storage controller unit (SCU) behavior.	Enable = SCU enabled Disable = SCU disabled
SAS/SATA OpROM (Enable/Disable)	This item can be set up only when Onboard SAS/SATA (SCU) is Enable. It specifies the Option ROM behavior of SAS/SATA controller.	Enable = Option ROM enabled Disable = Option ROM disabled
SAS/SATA Driver (LSI MegaRAID/Intel RSTe)	This item can be set up only when SAS/SATA OpROM is Enable. It specifies the Option ROM type of SAS/SATA controller.	LSI MegaRAID = Option ROM for Embedded MegaRAID used Intel RSTe = Option ROM for Intel RSTe used
Flexible LOM (Enable/Disable)	This specifies whether to use Flexible LOM (OCP) ports.	Enable = Enable all Flexible LOM ports Disable = Disable Flexible LOM ports
Flexible LOM OproM (Enable/Disable)	This specifies whether to boot Legacy Option ROM of a Flexible LOM adapter. Only Legacy, that is, non-UEFI Option ROM can be used. UEFI Option ROM is not affected by this setting.	Enable = Boot Legacy Option ROM Disable = Do not boot Legacy Option ROM
LAN Controller (LAN 1/LAN 1 & 2/Disable)	This specifies the LAN controllers to use.  Note Depending on the model of the server, the BIOS settings value may be	LAN 1 = Enable LAN 1 controller and disable LAN 2 controller LAN 1 & 2 = Enable both of the LAN controllers Disable = Disable both of the LAN controllers

Item Name	Description	Parameter
	<p>"Disable/Enable." If you want to make the BIOS setting value "Enable," specify "LAN 1" for this item.</p> <p>.....</p>	
<p>LAN 1 Oprom (Disable/PXE/iSCSI)</p>	<p>This specifies whether to boot Option ROM. If booting, specify a type of Option ROM.</p> <p>If the appropriate Option ROM is booted during BIOS POST, LAN controller can be used as a boot device.</p> <p> Note</p> <p>.....</p> <p>Depending on the model of the server, the BIOS settings value may be "Disable/Enable." If you want to make the BIOS setting value "Enable," specify "PXE" for this item.</p> <p>.....</p>	<p>Disable = Do not boot Option ROM</p> <p>PXE = Boot PXE Option ROM</p> <p>iSCSI = Boot iSCSI Option ROM</p>
<p>LAN 2 Oprom (Disable/PXE/iSCSI)</p>	<p>This specifies whether to boot Option ROM. If booting, specify a type of Option ROM.</p> <p>If the appropriate Option ROM is booted during BIOS POST, LAN controller can be used as a boot device.</p> <p> Note</p> <p>.....</p> <p>Depending on the model of the server, there may not be a LAN 2 controller. In this case, disable this item.</p> <p>Depending on the model of the server, the BIOS settings value may be "Disable/Enable." If you want to make the BIOS setting value "Enable," specify "PXE" for this item.</p> <p>.....</p>	<p>Disable = Do not boot Option ROM</p> <p>PXE = Boot PXE Option ROM</p> <p>iSCSI = Boot iSCSI Option ROM</p>
SATA Configuration (ISM 2.6.0.020 or later)		
<p>SATA Mode (Disable/IDE/AHCI/RAID)</p>	<p>This specifies the operation mode of the SATA interface.</p>	<p>Disable = Disable the operation mode</p> <p>IDE = Operate in IDE mode</p> <p>AHCI = Operate in AHCI mode</p> <p>RAID = Operate in RAID mode</p>
<p>SATA Controller (Enable/Disable)</p>	<p>This specifies whether to enable SATA controller.</p>	<p>Enable = Enable the SATA controller</p> <p>Disable = Disable the SATA controller</p>
<p>SSATA Controller (Enable/Disable)</p>	<p>This specifies whether to enable SSATA controller.</p>	<p>Enable = Enable the SSATA controller</p> <p>Disable = Disable the SSATA controller</p>
Option ROM Configuration		
<p>Launch Slot X OpROM (Enable/Disable)</p>	<p>This specifies the execution of extended ROM of the option card mounted on each PCI slot.</p>	<p>Enable = Extended ROM executed</p>

Item Name	Description	Parameter
	You can specify this for multiple slots in profile. Do not specify this for the slot that does not exist on an actual device.	Disable = Extended ROM not executed [Note 1]
CSM Configuration		
Launch CSM (Enable/Disable)	This specifies whether to execute CSM (Compatibility Support Module). Your legacy operating system can be booted only when CSM is loaded.	Enable = CSM executed Disable = CSM not executed [Note 2]
Boot Option Filter (UEFI and Legacy/UEFI only/ Legacy only)	This specifies which drive can be booted first.	UEFI and Legacy = Bootable from UEFI OS drive and Legacy OS drive UEFI only = Bootable only from UEFI OS drive [Note 3] Legacy only = Bootable only from Legacy OS drive [Note 3]
Launch PXE OpROM Policy (UEFI only/Legacy only/Do not launch)	This specifies the PXE Option ROM to be booted. For PXE boot, there are available normal (Legacy) PXE boot and UEFI PXE boot.	UEFI only = UEFI Option ROM only booted [Note 3] [Note 4] Legacy only = Legacy Option ROM only booted [Note 3] Do not launch = Option ROM not booted [Note 5]
Launch Storage OpROM Policy (UEFI only/Legacy only/Do not launch)	This specifies the Storage Option ROM to be booted.	UEFI only = UEFI Storage Option ROM only booted Legacy only = Legacy Storage Option ROM only booted Do not launch = Storage Option ROM not booted
Other PCI Device ROM Priority (UEFI only/Legacy only)	This specifies the Option Rom booted with the devices other than a network, mass storage device and video.	UEFI only = UEFI Option ROM only booted Legacy only = Legacy Option ROM only booted
USB Configuration		
Onboard USB Controllers (Enable/Disable)	The USB controller of the system board can be enabled and disabled. If the onboard USB controller is disabled, none of the connected USB devices can be used. Locally connected keyboard, mouse, large volume storage, including keyboards, mice, and large volume storage using iRMC, as well as internally connected USB cannot be used.	Disable = Disable Onboard USB Controllers Enable = Enable Onboard USB Controllers
Network Stack		
Network Stack (Enable/Disable)	This sets up whether UEFI Network Stack can be used for network access on UEFI.	Disable = Use of UEFI network stack not permitted [Note 2] [Note 4] Enable = Use of UEFI network stack permitted

Item Name		Description	Parameter
	IPv4 PXE Support (Enable/Disable)	This specifies whether PXE UEFI Boot with IPv4 can be used with UEFI mode.	Disable = Use of PXE UEFI Boot with IPv4 not permitted Enable = Use of PXE UEFI Boot with IPv4 permitted
	IPv6 PXE Support (Enable/Disable)	This specifies whether PXE UEFI Boot with IPv6 can be used with UEFI mode.	Disable = Use of PXE UEFI Boot with IPv6 not permitted Enable = Use of PXE UEFI Boot with IPv6 permitted
Secure Boot Configuration			
	Secure Boot Control (Enable/Disable)	This specifies whether to allow boot loaders that have not been signed/UEFI OpROM boot.  Note This setting may not be "Disabled" due to the hardware specifications. In this case, specify the value from the BIOS interface of the server.	Disable = Execute all boot loaders/OpROM (Legacy/UEFI) Enable = Only execute signed boot loaders/UEFI OpROM
Server Mgmt			
	Sync RTC with MMB (Enable/Disable) (Only PRIMERGY BX series)	This specifies whether to synchronize Real Time Clock with the management blade.	Disable = Does not synchronize Enable = Synchronizes
	Adjust Date Time (Local Time / UTC)	This modifies the time of the server based on the time of management server when the profile is applied. This item can be set up only when Sync RTC with MMB is Disable.  Note This is not a setting item of the BIOS setup utility of the server. This does not change the BIOS setting, but change the time (RTC) of the target server only one time, and this can be used for all PRIMERGY BX series.	Local Time = Time according to the time zone of the management server is specified UTC = Time converted to UTC from the time zone of the management server is specified

[Note 1]: Depending on the server model, PXE Boot may fail if Launch Slot X OpROM is "Disabled" for the PCI card slot used for PXE Boot.



[Note 2]: When both Launch CSM and Network Stack are "Disabled," OS installation fails.






[Note 3]: When Boot Option Filter is "UEFI only" or "Legacy only" and Boot Option Filter does not match Launch PXE OpRom Policy, OS installation fails.



[Note 4]: When Launch PXE OpRom Policy is "UEFI only" and Network Stack is "Disabled," OS installation fails.





[Note 5]: When PXE OpRom Policy is "Do not launch," OS installation fails.



iRMC tab



Item Name	Description	Parameter
iRMC GUI		
Default Language (English/German/Japanese)	This performs initial settings for languages. This is enabled from the next time iRMC Web interface is invoked.	English = English by default German = German by default Japanese = Japanese by default
Power Management		
POST Error Halt (Continue/Halt on errors)	This sets up the operation in response to the occurrence of an error upon server boot.	Continue = Boot continued even after the occurrence of an error Halt on error = Boot interrupted until the key entry when an error occurs
Power Restore Policy (Restore to powered state prior to power loss/ Always power off/Always power on)	This sets up the power source operation upon power restore operation after interruption of AC power source input.	Restore to powered state prior to power loss = State upon power source interruption maintained (Powered on if a server is powered on upon interruption/ Not powered on if the server is powered off.) Always power off = Always powered off Always power on = Always powered on
Power Control Mode (OS Controlled/Minimum Power)	This sets up the power-saving and noise canceling operations for a server.  Note When you disable Enhanced SpeedStep on BIOS settings, this setting also becomes disabled.	OS Controlled = Control with OS followed Minimum Power = Operation where priority is placed on reduction in power consumption (Schedule) = Setup with Profile Management unavailable (Power Limit) = Setup with Profile Management unavailable
Fan Test		
Fan Check Time	This becomes enabled when executing fan tests.	Enter the start time of fan test.
Disable Fan Test	This sets up whether to conduct periodical fan diagnoses.	(Checked) = Fan tests not conducted (Unchecked) = Tests conducted every day at the specified time
Software Watchdog		
Software Watchdog (Enable/Disable)	This specifies whether to use software watchdog to perform periodic communication confirmations while an OS is running.  Note This setting becomes enabled after rebooting the server.	Enable = Communication monitored Disable = Communication not monitored
Behavior	This specifies the behavior for the case when communication is disabled.	Select the item from the pull-down menu. Continue = Nothing executed


Item Name	Description	Parameter
	 Note This setting becomes enabled after rebooting the server.	Reset = Server rebooted Power Cycle = Powered ON after powering OFF the server once
After Timeout Delay	This specifies the period for judging communication to be disabled.  Note This setting becomes enabled after rebooting the server.	Specify the value from 1 to 100 minutes.
Boot Watchdog		
Boot Watchdog (Enable/Disable)	This specifies whether to monitor the period between POST completion and OS start, with use of Boot Watchdog.  Note This setting becomes enabled after rebooting the server.	Enable = Period monitored Disable = Period not monitored
Behavior	This specifies behavior for the case when an OS does not start within the specified time.  Note This setting becomes enabled after rebooting the server.	Select the item from the pull-down menu. Continue = Nothing executed Reset = Server rebooted Power Cycle = Powered ON after powering OFF the server once
After Timeout Delay	This specifies the period for judging that an OS has failed to start.  Note This setting becomes enabled after rebooting the server.	Specify the value from 1 to 100 minutes.
Time		
Time Mode (System RTC/NTP Server)	This specifies whether to obtain the time setting of iRMC from a managed server or to obtain it from an NTP server.	System RTC = Time of iRMC obtained from the system clock of a managed server NTP Server = Time of iRMC synchronized with that of an NTP server which operates based on specific time as its reference time source by using Network Time Protocol (NTP)
RTC Time Mode (Local Time/UTC)	You can select whether to display iRMC time in UTC (Coordinated Universal Time) format or in local time format.	Local Time = iRMC time displayed in local time format


Item Name	Description	Parameter
		UTC = iRMC time displayed in UTC (Coordinated Universal Time) format
NTP Server 0	This specifies the IP address or the DNS name of the primary NTP server.	Enter the IP address or DNS strings.
NTP Server 1	This specifies the IP address or the DNS name of the secondary NTP server.	Enter the IP address or DNS strings.
Time Zone	You can set up the time zone corresponding to the location where the server is placed.	Select the item from the pull-down menu.
Ports and Network Services Settings		
Telnet Enabled (Enable/Disable)	This specifies whether to enable Telnet connection.	Enable = Telnet connection enabled Disable = Telnet connection disabled
Telnet Port (Default: 3172)	This specifies Telnet port number of iRMC.	Enter the port number. 3172 by default
SSH Enabled (Enable/Disable)	This specifies whether to enable ssh connection.	Enable = ssh connection enabled Disable = ssh connection disabled
SSH Port (Default: 22)	This specifies Telnet port number of ssh.	Enter the port number. 22 by default
SNMP Generic Configuration		
SNMP Enabled	<p>This specifies whether to enable SNMP.</p> <p> Note</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p> <p>.....</p>	Enable = SNMP enabled Disable = SNMP disabled
SNMP Port (Default: 161)	<p>This specifies a port number where an SNMP service is in an idle state.</p> <p> Note</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p> <p>.....</p>	Enter the port number. UDP 161 by default
SNMP Service Protocol (All (SNMPv1/v2c/v3)/ SNMPv3 only)	This specifies the protocol of SNMP services.	All (SNMPv1/v2c/v3) = All protocols (SNMPv1/v2c/v3) supported

Item Name	Description	Parameter
	 Note You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.	Only SNMPv3 = Only SNMPv3 supported
SNMP v1/v2c Community	This specifies the community strings in the cases of SNMP v1/v2c.  Note You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.	Enter the community name string
SNMPv3 User Configuration		
SNMPv3 Enabled (Enable/Disable)	This specifies whether to enable SNMPv3 support for users.  Note <ul style="list-style-type: none"> - To create/change SNMPv3 users, it is required to enable SNMP with the [Network Settings] -> [SNMP]. - To use SNMPv3, it is required to set a password with at least 8 characters. You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.	Enable = SNMPv3 support enabled Disable = SNMPv3 support disabled
SNMPv3 Access Privacy	This specifies user's access privilege.  Note <ul style="list-style-type: none"> - To create/change SNMPv3 users, it is required to enable SNMP with the [Network Settings] -> [SNMP]. 	Always read-only.

Item Name	Description	Parameter
	<p>- To use SNMPv3, it is required to set a password with at least 8 characters.</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p>	
<p>Authentication (SHA/MD5/None)</p>	<p>This selects the authentication protocol that SNMPv3 uses for authentication.</p> <p> Note</p> <p>.....</p> <p>- To create/change SNMPv3 users, it is required to enable SNMP with the [Network Settings] -> [SNMP].</p> <p>- To use SNMPv3, it is required to set a password with at least 8 characters.</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p>	<p>SHA = SHA used</p> <p>MD5 = MD5 used</p> <p>None = Authentication disabled</p>
<p>Privacy (AES/DES/None)</p>	<p>This specifies a privacy protocol that SNMPv3 uses for encrypting SNMPv3 traffic.</p> <p> Note</p> <p>.....</p> <p>- To create/change SNMPv3 users, it is required to enable SNMP with the [Network Settings] -> [SNMP].</p> <p>- To use SNMPv3, it is required to set a password with at least 8 characters.</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p>	<p>AES = AES used</p> <p>DES = DES used</p> <p>None = Privacy disabled</p>
SNMP Trap Destination		

Item Name	Description	Parameter
SNMP Trap Community Name	This specifies an SNMP trap community.	Enter the SNMP trap community strings
SNMPv3 Selected User	<p>This specifies an SNMPv3 user already defined as an SNMPv3 trap destination.</p> <p> Note</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p> <p>.....</p>	Enter the SNMP user strings
Destination SNMP Server 1 to 7	This specifies the DNS name or the IP address of a server which belongs to the community set up as "Trap destination."	Enter the IP address or the DNS strings of an SNMP server.
Protocol	<p>This specifies the Version of SNMP protocol used for receiving traps.</p> <p> Note</p> <p>.....</p> <p>You cannot set up the setting items that are not shown on the Web UI screen of iRMC. Depending on the firmware versions, you cannot set up some setting items even though the setting items are shown on the Web UI screen of iRMC. Disable the setting items if you fail to assign a profile.</p> <p>.....</p>	Select the item from the pull-down menu. SNMPv1, SNMPv2c, SNMPv3
AIS Connect		
AIS Connect	This specifies whether to enable AIS Connect.	Enable = Enable AIS Connect Disable = Disable AIS Connect
Service Mode	This specifies whether to enable Service Mode.	Enable = Enable Service Mode Disable = Disable Service Mode
Country	This specifies Reverse Proxy country when using AIS Connect.	Select a country name from the pull down menu.
Remote Session	This specifies whether to allow Remote Session.	Allow = Remote session is allowed Deny = Remote session is denied
Proxy Server	This specifies whether to use HTTP Proxy servers.	(Checked) = Use Proxy server (Unchecked) = Do not use Proxy server
Proxy Server		
Address	This specifies an IP address of the proxy server or the proxy server name.	Enter an IP address or the character string of the proxy server name.
Port Number (Default: 81)	This specifies the port number of the proxy service.	Enter the port number

Item Name	Description	Parameter
		Default: 81
User Name	This specifies a user name to be authenticated by the proxy server.	Enter a character string of the proxy user name.
Password	This specifies a password to be authenticated by the proxy server.	Enter a password string.
DNS		
DNS	This specifies whether to enable DNS of iRMC.	(Checked) = Enable DNS (Unchecked) = Disable DNS
DNS Configuration	This specifies whether to obtain DNS configuration from the DHCP server.  Note If you set "DNS Domain" "DNS Search Path" "DNS server 1-3," specify (Unchecked) for this item. When enabling this item, enable DHCP in advance.	(Checked) = Obtain DNS configuration from the DHCP server (Unchecked) = Do not obtain DNS configuration from the DHCP server
DNS Domain	This specifies a default domain name for the DNS server.	Enter a DNS domain string.
DNS Search Path	This specifies a list of DNS search paths.	Enter DNS search path strings.
DNS Server 1 - 3	This specifies DNS server names.	Enter the IP address of a DNS server.
DNS Retry	This specifies the number of times of DNS retry.	Specify a number of 1 - 5. Default: 2
DNS Timeout	This specifies the timeout value for the DNS response in seconds.	Specify a value between 1 - 30 seconds. Default: 5
DNS Name Registration		
Register DNS Name	This specifies the setting method for the DNS names of iRMC.	None = Do not register a name on iRMC Register DHCP Address in DNS via DHCP Server = Enable transfer a DHCP name to the DHCP server Register Fully Domain Name (FQDN) via DHCP in DNS = Enable transfer FQDN to the DHCP server DNS Update enabled = Enable updates DNS records using the dynamic DNS
Use iRMC Name	The character string specified in "iRMC Name" is used instead of the server name.	(Checked) = Use iRMC name (Unchecked) = Do not use iRMC name
iRMC Name	This specifies the iRMC name which is used as a part of the DNS name.	Enter an iRMC name string.

Item Name	Description	Parameter
	 Note This specifies the iRMC name which is used as a part of the DNS name. Do not use a dot (".") except in the following cases because it may cause unexpected behavior. PRIMERGY RX/TX/CX M4 or later, and PRIMEQUEST 3000B	
Use MAC Address	Specify whether to add the last three bytes of the MAC address of iRMC to the DHCP name of iRMC.	(Checked) = Add MAC address to DNS name (Unchecked) = Do not add MAC address to DNS name
Use Extension	This specifies whether to add an extension name which is specified as "Extension" to the DHCP name of iRMC.	(Checked) = Add an extension name (Unchecked) = Do not add an extension name
Extension	This specifies an extension name for iRMC.	Enter an extension name string.
Simple Service Discovery Protocol (SSDP)		
SSDP	This specifies whether to enable automatic discovery via SSDP.	(Checked) = Enable automatic discovery (Unchecked) = disable automatic discovery
Central Authentication Service (CAS)		
CAS Support	This specifies whether to enable CAS.	(Checked) = Enable CAS (Unchecked) = Disable CAS
CAS Server [Note 1]		
Server	This specifies the DNS name or the IP address of the CAS server.	Enter the IP address or the DNS name string.
Network Port	This specifies the Port number which CAS service is standing by.	Enter the Port number. Default: 3170
SSL Certificate Verification	This specifies whether to enable SSL Certificate Verification.	(Checked) = Verify SSL Certificate (Unchecked) = Do not verify SSL Certificate
Login Page Display	This specifies whether to always display the Login page.	(Checked) = Always display the login page. (Unchecked) = Do not always display the login page.
Login URL	This specifies a Login URL.	Enter a login URL. Default: /cas/login
Logout URL	This specifies a Logout URL.	Enter a logout URL. Default: /cas/logout
Validate URL	This specifies Validate URL.	Enter the Validate URL. Default: /cas/validate

Item Name	Description	Parameter
Assign Permission from	This specifies an access permission.	It will always be set to Local.
User Access Configuration [Note 1]		
Privilege Level	This specifies the privilege level of the user.	User = Use User privilege Operator = Use Operator privilege Administrator = Use Administrator privilege OEM = Use OEM privilege
Redfish Role	This specifies a Redfish role.	Administrator = Use Administrator role Operator = Use Operator role ReadOnly = Use ReadOnly role No Access = Do not use Redfish
User Account Configuration	This specifies whether to enable User Account Configuration.	(Checked) = Allow user account configuration (Unchecked) = Do not allow user account configuration
iRMC Settings Configuration	This specifies whether to enable iRMC Settings Configuration.	(Checked) = Allow iRMC settings configuration (Unchecked) = Do not allow iRMC settings configuration
Video Redirection Usage	This specifies whether to enable Video Redirection Usage.	(Checked) = Allow Video Redirection usage (Unchecked) = Do not allow Video Redirection usage
Remote Storage Usage	This specifies whether to enable the Remote Storage Usage.	(Checked) = Allow remote storage usage (Unchecked) = Do not allow remote storage usage
Automatic BIOS Parameter Backup		
Automatic BIOS Parameter Backup	This specifies whether to enable Automatic BIOS Parameter Backup.  Note This setting becomes enabled after rebooting the server.	(Checked) = Automatic BIOS Parameter Backup enabled (Unchecked) = Automatic BIOS Parameter Backup disabled.
Update [Note 2]		
Repository Location	This specifies the URL for the update repository that uses eLCM update.	Enter the URL for the update repository. Default: "https://support.ts.fujitsu.com"
Proxy Server	This specifies whether to use a proxy server to connect to the update repository.	(Checked) = Use proxy server (Unchecked) = Do not use proxy server
VMware HCL Verification	This specifies whether to skip VMware hardware compatibility verification.	(Checked) = Skip (Unchecked) = Do not skip

Item Name	Description	Parameter
SSL/TLS Certificate Verification	This specifies whether to skip SSL/TLS Certificate Verification.	(Checked) = Skip (Unchecked) = Do not skip
Deployment [Note 2]		
Repository Location	This specifies the URL for the deployment repository that uses eLCM update.	Enter the URL of the deployment repository. Default: "https://webdownloads.ts.fujitsu.com"
Proxy Server	This specifies whether to use a proxy server to connect to the deployment repository.	(Checked) = Use proxy server (Unchecked) = Do not use proxy server
SSL/TLS Certificate Verification	This specifies whether to skip SSL/TLS Certificate Verification.	(Checked) = Skip (Unchecked) = Do not skip

[Note 1]: If you specify "CAS Server" and "User Access Configuration," select (Checked) for this item.

[Note 2]: An eLCM license must be registered on the target server and an SD card must be mounted when setting "Update" or "Deployment."

Chapter 2 MMB Setting Items of Profiles for PRIMEQUEST 2000 (Partition)/PRIMEQUEST 2000B/ PRIMEQUEST 3000E Series Partitions

This section describes the items that you can set up in the MMB tab in profiles.

MMB Tab

Item Name	Description	Parameter
ASR (Automatic Server Restart)		
Targeted	Specify whether to set ASR (Automatic Server Restart)	(Checked) = Execute settings (Unchecked) = Do not execute settings
Number of Restart Tries	Set the number of retries to restart the OS if the OS shuts down because of watchdog or a hardware error.	Select whether to use restart and the number of restarts (1 - 10).
Action after exceeding Restart Tries	Set the action to take after the number of retries set above.	Power OFF = Stop reboot and turn the power of the partitions OFF (Stop rebooting and Power Off) Stop = Stop reboot and stop partitions (Stop rebooting) NMI Interruption = Stop reboot and assert NMI interruption for the partitions (Diagnostic Interrupt assert)
Boot Watchdog		
Targeted	Specify whether to set the boot watchdog.	(Checked) = Execute settings (Unchecked) = Do not execute settings
Boot Watchdog	This means enable/disable of Boot Watchdog. Specify whether to monitor the time before OS start.	Enable = Time monitored Disable = Period not monitored
Timeout time (seconds)	If the time set here is exceeded and the OS does not start it is judged to be an error.	Specify a value between 1 - 6000 seconds.
Action when watchdog expires	Specify the action taken if the OS does not start after the time specified has been exceeded.	Continue = Continue processing Reset = Restart Power Cycle = The power is first turned OFF, then turned ON
Software Watchdog		
Targeted	Specify whether to set the software watchdog.	(Checked) = Execute settings (Unchecked) = Do not execute settings
Software Watchdog	This means enable/disable of Software Watchdog. Specify whether to execute regular communication checks while the OS is running.	Enable = Communication checked Disable = Communication not checked
Timeout time (seconds)	If the time set here is exceeded and there is no communication it is judged to be an error.	Specify a value between 1 - 6000 seconds.

Item Name				Description	Parameter
			Action when watchdog expires	Specify the action taken if there is no communication after the time specified has been exceeded.	Continue = Continue processing Reset = Restart Power Cycle = The power is first turned OFF, then turned ON NMI = Make NMI occur

Chapter 3 OS Setting Items of Profiles for Servers

This section describes the items that you can set up with OS / OS (for each node) tabs, in profiles. When it comes to the items with "Omittable", you can install the Oses without setup on the profiles. If omitted, no setting is applied, or the default settings of Oses are applied.

By creating policies in advance, you can use them for profile creation, however, you cannot specify items described as "cannot be set by policy setting" by using a policy. Execute setting when you create a profile.

3.1 Profiles for Windows Server

For information on which OSs can be specified in the profile, refer to "Support Matrix."


<https://support.ts.fujitsu.com/index.asp>

Select [Select a new Product] on the above site and enter "Infrastructure Manager" in [Product Search:].

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

OS tab

Item Name	Description	Parameter
Installation Form		
Installation Method	This selects the installation method.  Note - An eLCM license must be registered, an SD card must be mounted, and eIM must be downloaded when selecting eLCM. - You cannot select eLCM for PRIMEQUEST2000-Partition, PRIMEQUEST2000B, or PRIMEQUEST3000E-Partition.	Select the item from the pulldown menu.
Installation Image		
Type of Installation	This specifies to install an OS with core installation or with full installation.	Select from the screen.
Type of Installation Media [Note 12] [Note 13]	This selects the type of media used for installation.	Select the item from the pull-down menu. When you select Microsoft Media, then it is required to enter its product key.
ServerView Suite DVD (Install Latest Version/Specify Version)	This specifies the version of ServerView Suite DVD used for installation.	Install Latest Version = The latest version of ServerView Suite registered in the repository used. Specify Version = ServerView Suite with the specified version used
Management LAN network port settings		
Network port specification	This specifies the port of the network used for Management LAN.	(Checked) = Specify the network port for Management LAN.

Item Name		Description	Parameter
	Method to specify	This selects the method of specifying the network port for Management LAN. [Note 1] [Note 2]	Select the item from the pull-down menu.
	Network Card	This is set if you specify "Port Number" in Method to specify. Select the type of network card that you use.	Select from the screen. Enter the slot number in which the card is installed.
	Port Number	This is entered if you specify "Port Number" in Method to specify.	Enter the port number that you use.
	MAC Address [Note 12]	This is entered if you specify "MAC address" in Method to specify.	Enter the MAC address of the network that you use.
Boot mode specification		This specifies boot mode.	(Checked) = Specify the boot type
	Boot Type	This is selected when the boot mode of the server was changed or when specifying it explicitly.	Select the boot type used from the screen.
RAID & Disk Configuration			
Use Array Controller		This is selected when you use a server-built-in array controller as an OS installation destination.	(Selected) = Array controller used [Note 3]
	Use existing RAID Volume (Select it even though RAID is not used.)	This uses the volume already created on an array controller.	(Selected) = Existing array configuration used
	Create new RAID Volume	This configures a new array and creates a volume in the array to use it.	(Selected) = A new array configured Additionally, select the type of array controller, RAID level and the number of disks installed in the RAID, from the pull-down menu.
Do not use Array Controller		This is selected when you use a drive other than the array controller as an OS installation destination.	(Selected) = Drive other than array controller used Additionally, select the type of the drive that you use from the screen. [Note 4]
Volume 1			
Volume Label		This specifies a volume name. [Note 5]	Enter the volume name strings. [Note 6]
File System		This specifies the type of a file system.	Always NTFS
Partition Size (Automatic/Manual)		This specifies a partition size.	Automatic = Partition with appropriate size automatically created Manual = Partition with the entered size created
Quick Format		This specifies whether to use Quick Format in formatting a partition.	Yes = Quick Format performed No = Usual formatting performed (It takes longer time.)
Usage		This specifies the purpose of use of a partition.	Always Boot or OS.
Basic Settings			
Time Zone		This specifies a time zone.	Select the item from the pull-down menu.

Item Name	Description	Parameter
Region and Language	This specifies a region and language.	Select the item from the pull-down menu.
Keyboard	This specifies the language and type of keyboard.	Select the item from the pull-down menu.
System Settings		
Display Resolution [px]	This specifies the display resolution immediately after OS installation.	Select the item from the pull-down menu. [Note 7] Example: 600x480, 800x600, 1024x768 or 1280x1024
Refresh Rate [Hz]	This specifies the display refresh rate immediately after OS installation.	Select the item from the pull-down menu. [Note 7]
# of Colors [bit]	This specifies the number of colors displayed on a screen immediately after OS installation, with bit count.	Select the item from the pull-down menu. [Note 7]
Adding Role and Features		
Install SNMP Service	This specifies whether to install SNMP services.	(Checked) = SNMP services installed
SNMP Trap Setting	This specifies the community name and trap destination upon sending SNMP traps.	Select the Add button to set up arbitrary value. [Omittable]
Community Name	This specifies community name when sending SNMP traps.	Enter the community name strings when sending.
Trap Destination	This specifies the destination to send SNMP traps.	Enter the character strings of IP address for the destination.
SNMP Security Service [Note 14]	This specifies the name of an acceptable SNMP community and its privilege.	Select the Add button to set up arbitrary value. [Omittable]
Accepted Community Name	This specifies the name of an acceptable SNMP community.	Enter the community name strings of acceptable community.
Community Grant	This specifies the privilege of acceptable SNMP community grant.	Select the item from the pull-down menu. None = None Read Create = Read, Create Read Write = Read Write Read Only = Read Only Notify = Notification
Send Authentication Trap	This specifies whether to send authentication traps in response to the SNMP request from an unknown host or community.	(Checked) = Authentication traps sent (Unchecked) = Authentication traps not sent
Acceptance of SNMP Packets (Accept SNMP Packets from Default Host (LocalHost)/Accept SNMP Packets from These Hosts)	This specifies whether to accept SNMP packets from Localhost.	(Accept SNMP Packets from Default Host (LocalHost)) = SNMP packets accepted from Localhost (Accept SNMP Packets from These Hosts) = SNMP packets accepted from the following specified host name.

Item Name	Description	Parameter
		Additionally, the host names are described.
SNMP Setting Agent	Enter a contact and its physical location.	You can use character strings that contain Japanese. [Omittable]
Service	This specifies the information about SNMP hosts from 5 options.	Arbitrary service checked
Remote Desktop	This specifies whether Remote Desktop is available.	(Checked) = Remote Desktop enabled (Unchecked) = Remote Desktop disabled
Remote Assistance (Only when the type of installation is full installation)	This specifies whether Remote Assistance is available.	Specify the permissible scope on the screen. Specify Invitation Ticket Time as required.
Firewall Settings	This creates a firewall exception required in registering a target server with SCVMM. Access from the following applications is enabled. - Windows Management Instrumentation(WMI) - File and Printer Sharing	(Checked) = Firewall exception created (Unchecked) = Firewall exception not created
Additional Application		
Java Runtime Environment	Specify whether to install Java Runtime Environment. You must specify this when you install ServerView RAID Manager.	(Checked) = Install Application [Note 8]
ServerView Agent	This specifies whether to install ServerView Agent. You can specify it when you install SNMP services.	(Checked) = Install Application [Note 9]
ServerView Update Agent	This specifies whether to install ServerView Update Agent. You can specify it when you install ServerView Agent.	(Checked) = Install Application [Note 9]
DSNAP (Japanese Version)	This specifies whether to install DSNAP.	(Checked) = Install Application [Note 10]
Software Support Guide	This specifies whether to install Software Support Guide.	(Checked) = Install Application [Note 10]
ServerView RAID Manager	This specifies whether to install ServerView RAID Manager.	(Checked) = Application installed
Execute Script after Installation		
Execute Script after Installation	This specifies whether to execute a script after installation.	(Checked) = Execute Script after Installation

Item Name	Description	Parameter
The directory forwarded to OS	This specifies the directory forwarded to an OS after installation.	Specify the directory forwarded to the OS after installation.
Execute Script after Installation	This specifies the script to be executed. [Note 11]	Specify the script to be executed.

[Note 1]: If the Universal Multi-Channel (UMC) function of the CNA card is enabled, set the MAC address and not the port number.

[Note 2]: For the PRIMEQUEST 2000 (Partition)/PRIMEQUEST 2000B/PRIMEQUEST 3000E series, it cannot be set depending on the port number. If specifying the network port, specify the MAC address.

[Note 3]: If using an array controller, set it so that there are no inconsistencies with the "Onboard Device Configuration" settings for the BIOS.

[Note 4]: Refer to the manuals for the servers and the ServerView Suite DVD for iSCSI support.

[Note 5]: If using ServerView Suite DVD V11.16.04 or later, the volume name might not be set. In this case, set the volume name manually.

[Note 6]: Volume names must be set with one-byte alphanumeric characters/symbols for Windows Server 2016.

[Note 7]: This is installed with default settings when you set up a value unsupported by the OS.

[Note 8]: This is only possible to install when Full Installation has been selected in the "Type of Installation" setting.

[Note 9]: The application is installed in Japanese when you select Japanese on "Region and Language" settings. Otherwise, the application is installed in English.

[Note 10]: This can be installed only when you select Japanese on "Region and Language" settings.

[Note 11]: The specified script is executed with Windows "cmd /c" command.

[Note 12]: Product keys and MAC addresses cannot be set with policies. Set these when creating profiles.

[Note 13]: When you log in to the OS after installing Windows Server 2019, the following pop-up window is displayed. Select "This program installed correctly" since the installation completed successfully.

Message: This program might not have installed correctly.

Program: SVIM Messenger

[Note 14]: If you selected "ServerView Agent" in the "Additional Applications" setting, automatically sets the SNMP community (Community Name: public) required for ServerView agent operation. If the community name is "public," set only the specified public.

OS (for each node) tab

Item Name	Description	Parameter
Type of Installation Media	This selects the type of media used for installation.	Always the installation media specified on OS tab
User Name	A user name is entered.	Enter the user name.
Organization	The organization to which a user belongs is entered.	Enter the organization.
Computer Name [Note 5]	The name of a computer for identifying it on the network is entered.	Enter the computer name.
Administrator Password	A password is entered.	Enter the password.
Work Group/Domain		
Work Group/Domain	You select one of Work Group or Domain to participate in.	Work Group = Participation in Work Group Domain = Participation in Domain [Note 1]
Work Group/Domain Name	This specifies the name of Work Group or Domain.	Enter the character string. [Note 2]

Item Name		Description	Parameter
	Domain User Name	A domain user name for the case of Domain is entered.	Enter the character string.
	Domain Password	A password for the case of Domain is entered.	Enter the character string. [Note 3]
Network			
	DHCP	This selects whether to specify a fixed IP address or use DHCP for the IP address of Management LAN.	(Checked) = DHCP used (Unchecked) = Fixed IP specified [Note 4]
	IP Address [Note 5]	A fixed IP address is specified when you do not use DHCP.	Enter the IP address in IPv4 format.
	Subnet Mask	A subnet mask is specified when you do not use DHCP.	Enter the subnet mask in IPv4 format.
	Default Gateway	A gateway is specified when you do not use DHCP.	Enter the IP address of the gateway in IPv4 format.
	DNS Server 1	The IP address of DNS server 1 is specified when you do not use DHCP.	Enter the IP address of the DNS server in IPv4 format.
	DNS Server 2	The IP address of DNS server 2 is specified after setting up DNS server 1 when you do not use DHCP.	Enter the IP address of the DNS server in IPv4 format.
	DNS Domain Name	An arbitrary domain name is specified when you do not use DHCP.	Enter the domain name.

[Note 1]: This is set up for Work Group when you are unable to connect to the domain server.

[Note 2]: Set a work group name within 15 characters. A double-byte character is counted as 2 characters and single-byte character is counted as 1 character.

[Note 3]: If the domain user name/domain password are specified incorrectly, the profile assignment ends normally, but domain participation fails. In this case, execute domain participation again.

[Note 4] When using a policy to change "DHCP" from (Checked) or "unspecified" to (Unchecked), set the IP address of a linked profile after deleting the link that the policy refers to.

[Note 5]: Computer names and IP addresses cannot be set with policies. Set these when creating profiles.

3.2 Profiles for VMware ESXi

For information on which OSs can be specified in the profile, refer to "Support Matrix."

<https://support.ts.fujitsu.com/index.asp>


Select [Select a new Product] on the above site and enter "Infrastructure Manager" in [Product Search:].

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

OS tab

Item Name		Description	Parameter
Installation Image			
	Type of Installation Media	This selects the type of media used for installation.	Select the item from the pull-down menu.

Item Name		Description	Parameter
ServerView Suite DVD (Install Latest Version/Specify Version)		This specifies the version of ServerView Suite DVD used for installation.	Install Latest Version = The latest version of ServerView Suite registered in the repository used. Specify Version = ServerView Suite with the specified version used
Installation Information			
Installation Method		This selects the installation method.  Note - An eLCM license must be registered, an SD card must be mounted, and eIM must be downloaded when selecting eLCM. - You cannot select eLCM for PRIMEQUEST2000-Partition, PRIMEQUEST2000B, or PRIMEQUEST3000E-Partition.	Select the item from the pulldown menu.
Management LAN network port settings			
Network port specification		This specifies the port of the network used for Management LAN.	(Checked) = Specify the network port for Management LAN.
Method to specify		This selects the method of specifying the network port for Management LAN. [Note 1] [Note 2]	Select the item from the pull-down menu.
Network Card		This is set if you specify "Port Number" in Method to specify. Select the type of network card that you use.	Select from the screen. Enter the slot number in which the card is installed.
Port Number		This is entered if you specify "Port Number" in Method to specify.	Enter the port number that you use.
MAC Address [Note 7]		This is entered if you specify "MAC address" in Method to specify.	Enter the MAC address of the network that you use.
Boot mode specification			
Boot mode		This specifies boot mode.	(Checked) = Specify the boot type
Boot Type		This is selected when the boot mode of the server was changed or when specifying it explicitly.	Select the boot type used from the screen.
RAID & Disk Configuration			
Use Array Controller		This is selected when you use a server-built-in array controller as an OS installation destination.	(Selected) = Array controller used [Note 3] [Note 4]
Use existing RAID Volume (Select it even though RAID is not used.)		This uses the volume already created on an array controller.	(Selected) = Existing array configuration used
Create new RAID Volume		This configures a new array and creates a volume in the array to use it.	(Selected) = A new array configured

Item Name		Description	Parameter
			Additionally, select the type of array controller, RAID level and the number of disks installed in the RAID, from the pull-down menu.
	Do not use Array Controller	This is selected when you use a drive other than the array controller as an OS installation destination.	(Selected) = Drive other than array controller used Additionally, select the type of the drive that you use from the screen. [Note 5]
Basic Settings			
	Keyboard	This specifies the language and type of keyboard.	Select the item from the pull-down menu.
Network			
	Setup	This specifies whether to make a setup with VM Standard Network.	(Checked) = Standard Network created
	VLAN ID to Use	Enter VLAN ID. "0" is entered when you do not use VLAN.	Enter VLAN ID.
Register to Cloud Management Software			
	Register to Cloud Management Software	This specifies whether to automatically register on vCenter subsequently after completion of ESXi installation. Set a fixed IP address as the IP address set by using [OS (for each node)] tab if you perform the automatic registration. Additionally, specify "0" to VLAN ID on the [OS] tab. If you specified the computer name and the DNS domain name in the [OS (for each node)] tab, use FQDN and register it to the Cloud Management Software. If you are using FQDN to register to the Cloud Management Software, it will be registered in all lower case letters.	(Checked) = Register (Unchecked) = Do not register
	Cloud Management Software Name to register host with	This specifies the vCenter of the registration destination.	Select [Settings] - [General] - [Cloud Management Software], and then select from the registered destinations on the screen.
	Folder Name or Cluster Name to register host with	This specifies the folder name or the cluster name of the registration destination.	Specify the folder name or the cluster name of the registration destination.
Execute Script after Installation			
	Execute Script after Installation	This specifies whether to execute a script after installation.	(Checked) = Execute Script after Installation
	The directory of Script	This specifies the directory in which the script executed after installation is stored.	Specify the directory in which the script executed after installation is stored.
	Execute Script after Installation	This specifies the script executed after installation. [Note 6]	Specify the script executed after installation.

[Note 1]: If the Universal Multi-Channel (UMC) function of the CNA card is enabled, set the MAC address and not the port number.

[Note 2]: For the PRIMEQUEST 2000 (Partition)/PRIMEQUEST 2000B/PRIMEQUEST 3000E series, it might not be possible to specify this depending on the port number. If specifying the network port, specify the MAC address.

[Note 3]: If using an array controller, set it so that there are no inconsistencies with the "Onboard Device Configuration" settings for the BIOS.

[Note 4]: "Onboard SATA array controllers" cannot be used in VMware ESXi.

[Note 5]: Refer to the manuals for the servers and the ServerView Suite DVD for iSCSI support.

[Note 6]: Describe the script with plain text format in the file. This is executed as %post processing during automatic installation (kickStart). %firstboot --interpreter=busybox description allows it to be executed as %firstboot --interpreter=busybox processing.

[Note 7]: MAC addresses cannot be set with policies. Set these when creating profiles.

OS (for each node) tab

Item Name	Description	Parameter
License Agreement	This selects whether to agree with VMware License Agreement. Make sure to check the box to show that you accept.	(Checked) = Agreement with VMware License (Unchecked) = Not in agreement with VMware License
Type of Installation Media	This selects the type of media used for installation.	It is always the installation media specified in the OS tab
Root Password	A password is entered.	Enter the password. [Note 1]
Network		
DHCP	This selects whether to specify a fixed IP address or use DHCP for the IP address of Management LAN.	(Checked) = DHCP used (Unchecked) = Fixed IP specified [Note 2]
IP Address [Note 3]	A fixed IP address is specified when you do not use DHCP.	Enter the IP address in IPv4 format.
Subnet Mask	A subnet mask is specified when you do not use DHCP.	Enter the subnet mask in IPv4 format.
Default Gateway	A gateway is specified when you do not use DHCP.	Enter the IP address of the gateway in IPv4 format.
DNS Server [Note 4]	The IP address of the DNS server is specified when you do not use DHCP.	Enter the IP address of the DNS server in IPv4 format.
DNS Domain Name	An arbitrary domain name is specified when you do not use DHCP.	Enter the domain name.
Get Computer Name Via DNS Server	This specifies whether to use the computer name obtained from DNS. A computer name is retrieved from the DNS server when you use DHCP. An arbitrary computer name is specified when you do not use DHCP.	(Checked) = Obtained from DNS (Unchecked) = Arbitrary computer name specified [Note 5]
Computer Name [Note 3]	Arbitrary computer name (host name) is specified when you do not obtain a computer name (host name) from DNS.	Enter the host name.

[Note 1]: A hash mark (#) cannot be used. If a hash mark (#) is used, the OS installer will fail.

[Note 2]: When using a policy to change "DHCP" from (Checked) or "unspecified" to (Unchecked), set the IP address of a linked profile after deleting the link that the policy refers to.

[Note 3]: IP addresses and computer names cannot be set with policies. Set these when creating profiles.

[Note 4]: If you want to set multiple DNS servers, set these with the script executed after the installation.

Setup can be made by entering "esxcli network ip dns server add --server=<IP address of the DNS server>."

Example of script entry:

```
#!/bin/sh
%firstboot --interpreter=busybox
esxcli network ip dns server add --server=<IP address of the DNS server>
```

[Note 5]: When using a policy to change "Get Computer Name from DNS Server" from (Checked) or "unspecified" to (Unchecked), set the computer name of a linked profile after deleting the link that the policy refers to.

3.3 Profiles for Red Hat Enterprise Linux

For information on which OSs can be specified in the profile, refer to "Support Matrix."


<https://support.ts.fujitsu.com/index.asp>

Select [Select a new Product] on the above site and enter "Infrastructure Manager" in [Product Search:].


Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

OS tab

Item Name	Description	Parameter
Installation Image		
Type of Installation Media	This selects the type of media used for installation.	Select the item from the pull-down menu.
ServerView Suite DVD (Install Latest Version/Specify Version)	This specifies the version of ServerView Suite DVD used for installation.	Install Latest Version = The latest version of ServerView Suite registered in the repository used. Specify Version = ServerView Suite with the specified version used
Installation Information		
Installation Method	This selects the installation method.  Note - An eLCM license must be registered, an SD card must be mounted, and eIM must be downloaded when selecting eLCM. - You cannot select eLCM for PRIMEQUEST2000-Partition, PRIMEQUEST2000B, or PRIMEQUEST3000E-Partition.	Select the item from the pulldown menu.
Management LAN network port settings		
Network port specification	This specifies the port of the network used for Management LAN.	(Checked) = Specify the network port for Management LAN.

Item Name		Description	Parameter
	Method to specify	This selects the method of specifying the network port for Management LAN. [Note 1] [Note 2]	Select the item from the pull-down menu.
	Network Card	This is set if you specify "Port Number" in Method to specify. Select the type of network card that you use.	Select from the screen. Enter the slot number in which the card is installed.
	Port Number	This is entered if you specify "Port Number" in Method to specify.	Enter the port number that you use.
	MAC Address [Note 9]	This is entered if you specify "MAC address" in Method to specify.	Enter the MAC address of the network that you use.
Boot mode specification		This specifies boot mode.	(Checked) = Specify the boot type
	Boot Type	This is selected when the boot mode of the server was changed or when specifying it explicitly.	Select the boot type used from the screen.
Basic Settings			
Region and Language		This specifies a language.	Select the item from the pull-down menu.
Keyboard		This specifies the type of a keyboard.	Select the item from the pull-down menu.
Time Zone		This specifies a time zone.	Select the item from the pull-down menu.
	System clock uses UTC	This specifies the type of time used as System Clock.	(Checked) = UTC used (Unchecked) = Local time used
RAID & Disk Configuration			
Use Array Controller		This is selected when you use a server-built-in array controller as an OS installation destination.	(Selected) = Array controller used
	Use existing RAID Volume (Select it even though RAID is not used.)	This uses the volume already created on an array controller.	(Selected) = Existing array configuration used
	Create new RAID Volume	This configures a new array and creates a volume in the array to use it.	(Selected) = A new array configured Additionally, select the type of array controller, RAID level and the number of disks installed in the RAID, from the screen.
Do not use Array Controller		This is selected when you use a drive other than the array controller as an OS installation destination.	(Selected) = Drive other than array controller used Additionally, select the type of the drive that you use from the screen. [Note 3]
Partition		Specify the items below to each mount point, such as /boot, /var, shown on "Profile" screen.	
	(Checkbox on the left side of each mount point)	This specifies whether to create an independent partition to a mount point.	(Checked) = Partition created (Unchecked) = Partition not created
	File System	This specifies the type of file systems.	Select the item from the pull-down menu.

Item Name	Description	Parameter
		Ex.: ext2, ext3 or ext4
Size (MB)	This specifies a partition size.	Enter a decimal value.
Fill to maximum allowable size	This specifies whether to allocate spare disk capacity to the specified partition. Specifying this is not required when you create another partition on free space after installing Linux.	(Checked) = Spare capacity allocated to the specified partition to extend the capacity (Unchecked) = Partition with the specified capacity created
Select Package		
Initialize package selection	This changes the initial choice of a package group shown on the screen as the packages to be installed and a new package.	Minimal system = Minimum required packages Install everything = all packages [Note 4] Default package groups = Recommended packages [Note 4]
Package Group	This specifies the package group to be installed.	(Checked) = Installed (Unchecked) = Not installed
New Package	This individually specifies the package name to be installed.	Enter the package name with the appropriate strings of characters. Description with more than one line is allowed per one line for one package.
Basic Information		
X Window System	This specifies whether to start X Window System when the system boots.  Note If you are using ServerView Suite DVD V13.19.12 or earlier, X Window System is always started, regardless of this setting.	(Checked) = Start X Window System (Unchecked) = Do not start X Window System
Bootloader Options		
Bootloader	This specifies whether to install a bootloader.	(Checked) = Bootloader installed This item is always checked.
Install Bootloader on	This specifies the installation destination of a bootloader.	MBR = Installed on Master Boot Record This item is always set to "MBR."
Kernel parameters	This specifies a kernel parameter.	Enter the character strings specified as the kernel parameter. [Omittable]
Security-Enhanced Linux		
SE Linux	This specifies whether to use SE Linux.	Select the item from the pull-down menu. Enforcing, Disabled or Permissive
Authentication		
Use Shadow Passwords	This specifies whether to use shadow passwords.	(Checked) = Used (Unchecked) = Not used [Note 5]

Item Name	Description	Parameter
Use MD5	This specifies whether to use MD5 for password encryption.	(Checked) = Used (Unchecked) = Not used
Enable nscd	This specifies whether to use Name Switch Cache Daemon.	(Checked) = Used (Unchecked) = Not used
Application Wizard	Specify the application automatically installed after OS installation.	
Select Application Wizard (a variety of applications)	This specifies the application to be installed. The type of applications differs depending on distribution. [Note 6]	(Checked) = Application installed
Execute Script after Installation		
Execute Script after Installation	This specifies whether to execute a script after installation.	(Checked) = Execute Script after Installation
The directory forwarded to OS	This specifies the directory forwarded to an OS after installation.	Specify the directory forwarded to the OS after installation.
Execute Script after Installation	This specifies the script to be executed. [Note 7] [Note 8]	Specify the script to be executed.

[Note 1]: If the Universal Multi-Channel (UMC) function of the CNA card is enabled, set the MAC address and not the port number.

[Note 2]: For the PRIMEQUEST 2000 (Partition)/PRIMEQUEST 2000B/PRIMEQUEST 3000E series, it cannot be specified depending on the port number. If specifying the network port, specify the MAC address.

[Note 3]: Refer to the manuals for the servers and the ServerView Suite DVD for iSCSI support.

[Note 4]: If you use ServerView Suite DVD V11.16.04 or later, some package groups are not installed. In such cases, manually install them.

[Note 5]: "Shadow Passwords" is always enabled regardless of profile settings.

[Note 6]: The applications in the table below show the case where ServerView Suite DVD V11.16.04, V12.16.10 is used. These may be modified in the future in response to the update of ServerView Suite DVD.

Y = Can be specified with ISM, N = Cannot be specified with ISM

Application Wizard	RHEL 6.x (x86)	RHEL 6.x (Intel64)	RHEL 7.x	RHEL 8.x
ServerView Agentless Service	N	Y	Y	Y
ServerView SNMP Agents	Y	Y	Y	Y
ServerView CIM Providers	N	Y	Y	Y
ServerView Update Agent (online flash)	Y	Y	Y	Y
ServerView Operations Manager (Note: Set SELinux to Disabled when you install it)	Y	Y	Y	Y
ServerView RAID Manager	Y	Y	Y	Y
AIS Connect (Note: This cannot be set up for ServerView Suite DVD V12.16.10 or later)	Y	Y	N	N
Java Runtime Environment	Y	Y	Y	Y
Dynamic Reconfiguration utility For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	Y	Y	N
PRIMEQUEST REMCS Option For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	Y	Y	N

Application Wizard	RHEL 6.x (x86)	RHEL 6.x (Intel64)	RHEL 7.x	RHEL 8.x
HBA blockage function For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	Y	Y	N
SIRMS Agent For PRIMEQUEST 2000/PRIMEQUEST 3000E	Y	Y	Y	N
ServerView Mission Critical Option For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	Y	Y	N

[Note 7]: When you execute a script from another script, assign execution privilege to invoke it.

[Note 8]: This executes the specified script with the sh command.

[Note 9]: MAC address cannot be set with policies. Set it when creating profiles.

OS (for each node) tab

Item Name	Description	Parameter
Type of Installation Media	This selects the type of media used for installation.	It is always the installation media specified in the OS tab
Root Password	A password is entered.	Enter the password.
Network		
Get Computer Name Via DNS Server	This specifies whether to use the computer name obtained from DNS.	(Checked) = Obtained from DNS (Unchecked) = Arbitrary computer name specified [Note 1]
Computer Name [Note 3]	Arbitrary computer name (host name) is specified when you do not obtain a host name from DNS.	Enter the host name.
DHCP	This selects whether to specify a fixed IP address or use DHCP for the IP address of Management LAN.	(Checked) = DHCP used (Unchecked) = Fixed IP specified [Note 2]
IP Address [Note 3]	A fixed IP address is specified when you do not use DHCP.	Enter the IP address in IPv4 format.
Subnet Mask	A subnet mask is specified when you do not use DHCP.	Enter the subnet mask in IPv4 format.
Default Gateway	The default gateway is specified when you do not use DHCP.	Enter the IP address of the gateway in IPv4 format.
DNS Server	The IP address of the DNS server is specified when you do not use DHCP.	Enter the IP address of the DNS server in IPv4 format.

[Note 1]: When using a policy to change "Get Computer Name from DNS Server" from (Checked) or "unspecified" to (Unchecked), set the computer name of a linked profile after deleting the link that the policy refers to.

[Note 2]: When using a policy to change "DHCP" from (Checked) or "unspecified" to (Unchecked), set the IP address of a linked profile after deleting the link that the policy refers to.

[Note 3]: Computer names and IP addresses cannot be set with policies. Set these when creating profiles.

3.4 Profiles for SUSE Linux Enterprise Server

For information on which OSs can be specified in the profile, refer to "Support Matrix."


<https://support.ts.fujitsu.com/index.asp>

Select [Select a new Product] on the above site and enter "Infrastructure Manager" in [Product Search:].

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

OS tab

Item Name	Description	Parameter
Installation Image		
Type of Installation Media	This selects the type of media used for installation.	Select the item from the pull-down menu.
ServerView Suite DVD (Install Latest Version/Specify Version)	This specifies the version of ServerView Suite DVD used for installation.	Install Latest Version = The latest version of ServerView Suite registered in the repository used. Specify Version = ServerView Suite with the specified version used
Installation Information		
Installation Method	<p>This selects the installation method.</p> <p> Note</p> <p>.....</p> <ul style="list-style-type: none"> - An eLCM license must be registered, an SD card must be mounted, and eIM must be downloaded when selecting eLCM. - You cannot select eLCM for PRIMEQUEST2000-Partition, PRIMEQUEST2000B, or PRIMEQUEST3000E-Partition. <p>.....</p>	Select the item from the pulldown menu.
Management LAN network port settings		
Network port specification	This specifies the port of the network used for Management LAN.	(Checked) = Specify the network port for Management LAN.
Method to specify	This selects the method of specifying the network port for Management LAN. [Note 1] [Note 2]	Select the item from the pull-down menu.
Network Card	This is set if you specify "Port Number" in Method to specify. Select the type of network card that you use.	Select from the screen. Enter the slot number in which the card is installed.
Port Number	This is entered if you specify "Port Number" in Method to specify.	Enter the port number that you use.
MAC Address [Note 12]	This is entered if you specify "MAC address" in Method to specify.	Enter the MAC address of the network that you use.
Boot mode specification	This specifies boot mode.	(Checked) = Specify the boot type
Boot Type	This is selected when the boot mode of the server was changed or when specifying it explicitly.	Select the boot type used from the screen.
Basic Settings		

Item Name	Description	Parameter
Region and Language	This specifies a language.	Select the item from the pull-down menu.
Keyboard	This specifies the type of a keyboard.	Select the item from the pull-down menu.
Time Zone	This specifies a time zone.	Select the item from the pull-down menu.
System clock uses UTC	This specifies the type of time used as System Clock.	(Checked) = UTC used (Unchecked) = Local time used
RAID & Disk Configuration		
Use Array Controller	This is selected when you use a server-built-in array controller as an OS installation destination.	(Selected) = Array controller used [Note 3]
Use existing RAID Volume (Select it even though RAID is not used.)	This uses the volume already created on an array controller.	(Selected) = Existing array configuration used
Create new RAID Volume	This configures a new array and creates a volume in the array to use it.	(Selected) = A new array configured Additionally, select the type of array controller, RAID level and the number of disks installed in the RAID, from the screen.
Do not use Array Controller	This is selected when you use a drive other than the array controller as an OS installation destination.	(Selected) = Drive other than array controller used Additionally, select the type of the drive that you use from the screen. [Note 4]
Partition	Specify the items below to each mount point, such as /boot, /var, shown on "Profile" screen.	
(Checkbox on the left side of each mount point)	This specifies whether to create an independent partition to a mount point.	(Checked) = Partition created (Unchecked) = Partition not created
File System	This specifies the type of file systems.	Select the item from the pull-down menu. Ex.: ext2, ext3 or ext4 [Note 5] [Note 13]
Size (MB)	This specifies a partition size.	Enter a decimal value.
Fill to maximum allowable size	This specifies whether to allocate spare disk capacity to the specified partition. Specifying this is not required when you create another partition on free space after installing Linux.	(Checked) = Spare capacity allocated to the specified partition to extend the capacity (Unchecked) = Partition with the specified capacity created
Select Package		
Initialize package selection	This changes the initial choice of a package group shown on the screen as the packages to be installed and a new package.	Minimal system = Minimum required packages Install everything = All the packages Default package groups = Recommended packages

Item Name	Description	Parameter
Package Group [Note 6] [Note 11] [Note 14]	This specifies the package group to be installed.	(Checked) = Installed (Unchecked) = Not installed
New Package	This individually specifies the package name to be installed.	Enter the package name with the appropriate strings of characters. Description with more than one line is allowed per one line for one package.
Bootloader Options		
Bootloader	This specifies whether to install a bootloader.	(Checked) = Bootloader installed This item is always checked.
Install Bootloader on	This specifies the installation destination of a bootloader.	MBR = Installed on Master Boot Record This item is always set to "MBR."
Kernel parameters	This specifies a kernel parameter.	Enter the character strings specified as the kernel parameter. [Omittable]
Security-Enhanced Linux		
SE Linux	This specifies whether to use SE Linux.	This item is always set to "Disabled."
Authentication		
Use Shadow Passwords	This specifies whether to use shadow passwords.	This item is always set to "Checked (Used)."
Use MD5	This specifies whether to use MD5 for password encryption.	This item is always set to "Unchecked (Not Used)."
Enable nscd	This specifies whether to use Name Switch Cache Daemon.	This item is always set to "Checked (Used)."
Application Wizard	Specify the application automatically installed after OS installation.	
Select Application Wizard (a variety of applications)	This specifies the application to be installed. The type of applications differs depending on distribution. [Note 7]	(Checked) = Application installed
Executing Script after Installation [Note 8]		
Execute Script after Installation	This specifies whether to execute a script after installation.	(Checked) = Execute Script after Installation
The directory forwarded to OS	This specifies the directory forwarded to an OS after installation.	Specify the directory forwarded to the OS after installation.
Execute Script after Installation	This specifies the script to be executed. [Note 9] [Note 10]	Specify the script to be executed.

[Note 1]: If the Universal Multi-Channel (UMC) function of the CNA card is enabled, set the MAC address and not the port number.

[Note 2]: For the PRIMEQUEST 2000 (Partition)/PRIMEQUEST 2000B/PRIMEQUEST 3000E series, it cannot be set depending on the port number. If specifying the network port, specify the MAC address.

[Note 3]: If using an array controller, set it so that there are no inconsistencies with the "Onboard Device Configuration" settings for the BIOS.

[Note 4]: Refer to the manuals for the servers and the ServerView Suite DVD for iSCSI support.

[Note 5]: In SLES 11 SP4, ext4 only supports Read. In SLES 12, ext4 can support both the Read/Write. Note, however, that these are not the official support by SLES.

[Note 6]: In SLES 12, even in the case where "X-Windows System" is not specified for the package group, you cannot start it with the console. Pressing [Ctrl] + [Alt] + [F1] allows you to log in from the console.

[Note 7]: The applications in the table below show the case where ServerView Suite DVD V11.16.04, V12.16.10, V12.18.08 is used. These may be changed in the future version upgrades of ServerView Suite DVD.

SLES 15 (1) is for when ServerView Suite DVD V13.19.01 or earlier is used, and SLES 15 (2) is for when ServerView Suite DVD V13.19.04 or later is used.

Y = Can be specified with ISM, N = Cannot be specified with ISM

Applications (For SLES)	SLES 11 SP4(x86)	SLES 11 SP4(Intel64)	SLES 12 type	SLES 15 type (1)	SLES 15 type (2)
ServerView Agentless Service	N	Y	Y	N	N
ServerView SNMP Agents	Y	Y	Y	N	Y
ServerView CIM Providers	N	N	N	N	Y
ServerView Update Agent (online flash)	Y	Y	Y	N	Y
ServerView Operations Manager	N	N	N	N	N
ServerView RAID Manager	Y	Y	Y	Y	Y
AIS Connect (Note: This cannot be set up for ServerView Suite DVD V12.16.10 or later)	N	N	N	N	N
Java Runtime Environment	Y	Y	Y	Y	Y
Dynamic Reconfiguration utility For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	N	Y	N	N
PRIMEQUEST REMCS Option For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	N	N	N	N
HBA blockage function For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	N	N	N	N
SIRMS Agent For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	N	N	N	N
ServerView Mission Critical Option For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	N	N	N	N

[Note 8]: In SLES 12, this does not support the script execution after installation.

[Note 9]: When you execute a script from another script, assign execution privilege to invoke it.

[Note 10]: This executes the specified script with the sh command.

[Note 11]: When using ISM to manage the server that installed SLES, specify "GNOME Basic" and "SAP Application Server Base."

[Note 12]: MAC addresses cannot be set with policies. Set these when creating profiles.

[Note 13]: In SLES 12, you cannot specify "vfat" for the file systems of partition /, /home, /var, /user, /opt, or /tmp. In SLES 15, you cannot specify "vfat" for the file systems of partition /, /var, or /tmp.

[Note 14]: In SLES 12, if you specify "KVM Server" for the package group, an unexpected IP address may be set. In this case, set an IP address manually.

OS (for each node) tab

Item Name	Description	Parameter
Type of Installation Media	This selects the type of media used for installation.	It is always the installation media specified in the OS tab
Root Password	A password is entered.	Enter the password.
Network		
Get Computer Name Via DNS Server	This specifies whether to use the computer name obtained from DNS.	(Checked) = Obtained from DNS (Unchecked) = Arbitrary computer name specified [Note 1]
Computer Name [Note 3]	Arbitrary computer name (host name) is specified when you do not obtain a host name from DNS.	Enter the host name.
DHCP	This selects whether to specify a fixed IP address or use DHCP for the IP address of Management LAN.	(Checked) = DHCP used (Unchecked) = Fixed IP specified [Note 2] [Note 4]
IP Address [Note 3]	A fixed IP address is specified when you do not use DHCP.	Enter the IP address in IPv4 format.
Subnet Mask	A subnet mask is specified when you do not use DHCP.	Enter the subnet mask in IPv4 format.
Default Gateway	The default gateway is specified when you do not use DHCP.	Enter the IP address of the gateway in IPv4 format.
DNS Server	The IP address of the DNS server is specified when you do not use DHCP.	Enter the IP address of the DNS server in IPv4 format.

[Note 1]: When using a policy to change "Get Computer Name from DNS Server" from (Checked) or "unspecified" to (Unchecked), set the computer name of a linked profile after deleting the link that the policy refers to.

[Note 2]: When using a policy to change "DHCP" from (Checked) or "unspecified" to (Unchecked), set the IP address of a linked profile after deleting the link that the policy refers to.

[Note 3]: Computer names and IP addresses cannot be set with policies. Set these when creating profiles.

[Note 4]: In SLES 12, if you specify "KVM Server" for the package group, an unexpected IP address may be set. In this case, set an IP address manually.

Chapter 4 Virtual IO Setting Items of Profiles for PRIMERGY Servers/PRIMEQUEST 3000E Partitions

4.1 Card Settings

Set for each card that you want to use.

Item Name	Description	Parameter
Number of Onboard Card Slots	Select the number of onboard.	Select the item from the pull-down menu.
Number of PCI Card Slots	Select the number of cards to use.	Select the item from the pull-down menu.
Card Slot		
Onboard Slot		
Card Type	Select the type to use.	Select from the screen.
Number of Ports	Select the number of ports to use.	Select the item from the pull-down menu.
PCI Card Slot		
Card Type	Select the type to use.	Select from the screen.
Number of Ports	Select the number of ports to use.	Select the item from the pull-down menu.

Note

- Assign virtual addresses and to the virtual IO settings for the LAN, FC, CNA cards/boards mounted on the server. Operation where only one part of the cards/boards or one part of the ports has been assigned virtual addresses is not supported.
- Virtual IO settings cannot be used for cards and boards (including items where the number of cards/boards is set to 0) that were removed from the settings when profiles were edited. It will normally not be recognized from the OS (depending on the OS and the drivers it might be recognized and displayed).
- The virtual IO settings are available when the power of the iRMC is on, because they are stored in the iRMC.

When the iRMC loses electrical power (all power cables are disconnected or the data center loses electrical power), the iRMC loses the virtual IO settings. When the AC power is restored and the iRMC is re-booted, assign the virtual IO settings again. If the iRMC loses the electric power, the virtual IO settings in the iRMC are also lost. To make the virtual IO settings effective again, assign the profile again.

- For the PCI card slot of the PRIMEQUEST3000E partition, the actual mounting location of the slot and the slot number are different. For virtual IO settings, specify the slot number instead of the actual mounting location. For their correspondence, refer to "PRIMEQUEST 3000 Series Enterprise Model Administration Guide" - "Appendix D Physical Locations and BUS Numbers of Built-in I/O, and PCI Slot Mounting Locations and Slot Numbers."

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

How to display the "MANUALS" page:

1. From the "MANUALS" menu on the left side of the screen, select [x86 Servers] - [PRIMEQUEST Servers].
2. From the pull-down menu for "SELECT" in the middle of the screen, select [PRIMEQUEST 3000 Series] - [Enterprise Model].
The following guide will be displayed.

FUJITSU Server PRIMEQUEST 3000 Series Enterprise Model Administration Guide

[Appendix D Physical Locations and BUS Numbers of Built-in I/O, and PCI Slot Mounting Locations and Slot Numbers]

4.2 Port Settings

It is required to set it up for the number of cards set in "4.1 Card Settings."

The following settings for each card are described separately for each card type.

Item Name	Description	Parameter
Enter Port Information		
Use Virtual Address	Select if using a virtual address.	(Checked) = Use virtual address.
Use SR-IOV	Select if using SR-IOV.	(Checked) = Use SR-IOV
Disable Boot Menu (F12)	Select to not display the boot menu.	(Checked) = Do not display boot menu
UEFI Boot	Select the boot mode to use. [Note 1]	Select from the screen. [Note 2]
If the card type is CNA		
Function Type	Select the Function of CNA.	Select the item from the pull-down menu.
Boot	Select boot method.	Select the item from the pull-down menu.
SR-IOV	Select if enabling SR-IOV.	(Checked) = Enable SR-IOV
RoCE	Select the RoCE support. [Note 3] [Note 4] [Note 5]	Select the item from the pull-down menu.
If the card type is LAN		
Function Type	Select the Function of LAN.	It will always be set to LAN.
Boot	Select boot method.	Select the item from the pull-down menu.
SR-IOV	Select if enabling SR-IOV.	(Checked) = Enable SR-IOV
RoCE	Select the RoCE support. [Note 4] [Note 5]	Select the item from the pull-down menu.
If the card type is FC		
Function Type	Select the Function of FC	It will always be set to FC.
Boot	Set boot method.	Select the item from the pull-down menu.
SR-IOV	Select if enabling SR-IOV.	(Checked) = Enable SR-IOV
SMUX setting [Note 6]	Select SMUX setting	Select from the screen.

[Note 1]: For PRIMERGY M6 series or a PRIMEQUEST 3000E partition, select "UEFI Only."

[Note 2]: The values in this setting will be reflected to the settings for CMS Configuration of BIOS. For detailed settings, refer to the following.

BIOS Settings CSM Configuration	Virtual IO [UEFI Boot]			
	Legacy first	Legacy Only	UEFI First	UEFI Only
Boot option filter	"UEFI and Legacy" or "Legacy Only" (when "UEFI and Legacy" does not exist in the options)	Legacy only	"UEFI and Legacy" or "UEFI Only" (when "UEFI and Legacy" does not exist in the options)	UEFI only
Launch PXE OpROM Policy	Legacy only	Legacy only	UEFI only	UEFI only
Launch Storage	Legacy only	Legacy only	UEFI only	UEFI only
Other PCI device ROM priority	Legacy only	Legacy only	UEFI only	UEFI only

[Note 3]: This can be set only when the "Function Type" is "LAN."

[Note 4]: If you set this item, select the "Use Virtual Address" checkbox.

[Note 5]: If you set this item, uncheck the "SR-IOV" checkbox.

[Note 6]: Can only be set if the server is PRIMERGY BX.

 **Note**

If installing OS on a local disk (SATA or SAS) the Boot setting cannot be used for the virtual IO. Before assigning profiles, manually change the server boot order so that the server PXE boot is prioritized.

4.3 Boot Settings

Use the arrow button to the right of each item when changing the boot priority.

Set for the same number of onboard cards or PCI cards/ports that you set in "4.1 Card Settings" and "4.2 Port Settings."

The following describes the parameters for the various functions, not regarding whether they are onboard or PCI cards.

Item Name	Description	Parameter
If the function type is LAN		
Internet Protocol	Selections for Internet protocol	Select from the screen.
If the function type is FCoE		
Connection speed	Select connection speed.	Select the item from the pull-down menu. Auto, 1 Gbit/s, 2 Gbit/s, 4 Gbit/s, 8 Gbit/s, 16 Gbit/s [Note 1]
Connection type	Select connection form.	Select from the screen.
1st Target		
Port Name (WWPN)	Enter WWPN of the storage to start with SAN boot.	Enter WWPN.
LUN	Enter LUN of the storage to start with SAN boot.	Enter LUN.
2nd Target		
Port Name (WWPN)	Enter WWPN of the storage to start with SAN boot.	Enter WWPN.
LUN	Enter LUN of the storage to start with SAN boot.	Enter LUN.
If the function type is iSCSI		
Initiator Parameters		
Address Settings	Select the procedure for retrieving the address of the initiator.	Select from the screen.
Initiator Name	Enter IQN of the initiator.	Enter IQN. The character string entered require to start and end with alphanumerical characters, and except for this it should be made up of less than 223 alphanumerical characters or symbols (period ".", colon ":", or hyphen "-").
VLAN ID	Enter the VLAN ID that HBA uses to send requests.	Enter VLAN ID.

Item Name	Description	Parameter
IPv4	Enter the IP address used for the initiator if you selected "Fixed" in the address settings.	Enter the IP address.
Subnet Mask	Enter the subnet mask if you selected "Fixed" in the address settings.	Enter the subnet mask.
Gateway Address	Enter the address of the gateway if you selected "Fixed" in the address settings.	Enter the gateway address.
Target Parameters		
IP Address	Select the procedure for retrieving the address of the target.	Select from the screen.
Target Name	Enter the IQN of the target.	Enter IQN. The character string entered require to start and end with alphanumerical characters, and except for this it should be made up of less than 223 alphanumerical characters or symbols (period ".", colon ":", or hyphen "-").
IPv4	Enter the IP address used by the target if you selected "Fixed" in the IP address settings.	Enter the IP address.
Port [opt]	Enter the target port number if you selected "Fixed" in the IP address settings.	Enter the port number.
LUN	Enter the LUN number of the target if you selected "Fixed" in the IP address settings.	Enter LUN number.
Authentication Method	Select authentication method.	Select from the screen.
Chap Username	Enter authentication user name if you selected "CHAP" or "Mutual CHAP" for the authentication method.	Enter the authentication user name. The character string entered should consist of less than 127 alphanumerical characters or symbols [Note 2].
Chap Secret	Enter the password used for CHAP authentication if you selected "CHAP" or "Mutual CHAP" for the authentication method.	Enter the password. The character string entered should consist of between 12 and 16 alphanumerical characters or symbols [Note 2].
Mutual Chap Secret	Enter the password used for Mutual CHAP authentication if you selected "Mutual CHAP" for the authentication method.	Enter the password. The character string entered should consist of between 12 and 16 alphanumerical characters or symbols [Note 2].

[Note 1]: Select "Auto" for the setting value when the connection speed you want to set is not included among the setting values.

[Note 2]: Depending on the hardware model it might not be possible to use symbols. It is recommended that you only use alphanumerical characters.

4.4 CNA Settings

Set if you specified "CNA" for onboard or PCI card type in "4.1 Card Settings."

Set for the number of CNA function types set in "4.2 Port Settings."

The following describes the parameters for the various card types.

Item Name	Description	Parameter
If the function type is FCoE		
Min. Bandwidth[%]	Enter the minimum bandwidth value.	Enter the minimum bandwidth value. [Note 1]
Max. Bandwidth[%]	Enter the maximum bandwidth value.	Enter the maximum bandwidth value. [Note 1]
If the function is LAN or iSCSI type		
Min. Bandwidth[%]	Enter the minimum bandwidth value.	Enter the minimum bandwidth value. [Note 1]
Max. Bandwidth[%]	Enter the maximum bandwidth value.	Enter the maximum bandwidth value. [Note 1]
VLAN ID	Enter VLAN ID.	Enter VLAN ID.

[Note 1]: Set so that all the totals of one IO channel equals 100.

If the total bandwidth for one IO channel is not 100, internally adjust the bandwidth values accordingly.

4.5 Virtual Address Settings

Set it up for the number of card information entered in "4.1 Card Settings."

The following describes the parameters for each card type.

Item Name	Description	Parameter
If the card type is LAN		
Assign Virtual Address	Select if using virtual address assignment.	(Checked) = Assign Virtual Addresses
Virtual Address [Note 1]		
Auto assignment	Select if enabling automatic assignment from Pool Management.	(Checked) = Enable Auto assignment
MAC [Note 2]	Enter virtual MAC address.	Enter virtual MAC address. Two rows each of alphanumerical letters separated by a colon (:) or a hyphen (-).
If the card type is FC		
Assign Virtual Address	Select if using virtual address assignment.	(Checked) = Assign Virtual Addresses
Virtual Address [Note 1]		
Auto assignment	Select if enabling automatic assignment from Pool Management.	(Checked) = Enable Auto assignment
WWNN [Note 2]	Enter virtual WWNN.	Enter virtual WWNN. Two rows each of alphanumerical letter separated by a colon (:).
WWPN [Note 2]	Enter virtual WWPN.	Enter virtual WWPN.

Item Name	Description	Parameter
		Two rows each of alphanumerical letter separated by a colon (:).
If the card type is CNA		
Assign Virtual Address	Select if using virtual address assignment.	(Checked) = Assign Virtual Addresses
Virtual Address [Note 1]		
Auto assignment	Select if enabling automatic assignment from Pool Management.	(Checked) = Enable Auto assignment
WWNN [Note 2]	Enter the virtual WWNN if the application type is "FCoE."	Enter virtual WWNN. Two rows each of alphanumerical letter separated by a colon (:).
WWPN [Note 2]	Enter the virtual WWPN if the application type is "FCoE."	Enter virtual WWPN. Two rows each of alphanumerical letter separated by a colon (:).
E-MAC [Note 2]	Enter the virtual E-MAC address if the application type is "FCoE."	Enter virtual E-MAC address. Two rows each of alphanumerical letters separated by a colon (:) or a hyphen (-).
MAC [Note 2]	Enter the virtual MAC address if the function type is "iSCSI" or "LAN."	Enter virtual MAC address. Two rows each of alphanumerical letters separated by a colon (:) or a hyphen (-).

[Note 1]: Only set if "Assign Virtual Address" was checked.

[Note 2]: Only set if "Auto assignment" was not checked.

Note

- It is required that the IQN, WWPN and virtual MAC address are unique across the system.

Except for the same card, it is required that the WWNN is unique across the system.

There is a risk that the volume is damaged if overlapping IQN, WWPN or WWNN access the same volume at the same time.

Network communication is not possible if virtual MAC addresses overlap.

- Multicast MAC addresses cannot be used as virtual MAC addresses.

If you set virtual IP addresses arbitrarily, there is a risk that they might overlap with the factory shipping values of other cards.

It is recommended that you set the virtual address within the following range.

- MAC address (00:19:99:3E:D2:A1 - 00:19:99:3F:CC:A1)
- WWN (50:01:99:93:ED:2A:10:00 - 50:01:99:93:FC:C9:FF:FF)



Chapter 5 Setting Items of Profiles for Storages



This section describes the items that you set up in the profiles for storage. Some of selectable items may differ depending on the type of your storage.



For details of each item, refer to the manual for your storage.

5.1 Profiles for ETERNUS DX

RAID & Disk Configuration tab

Item Name	Description	Parameter
RAID Configuration		
RAID Group Name	<p>This specifies a RAID group name.</p> <p> Note</p> <p>.....</p> <p>You cannot specify the RAID group name already set up for a device.</p> <p>.....</p>	<p>Enter the RAID group names.</p> <p>You can enter 1 to 16 characters.</p>
RAID Level	This specifies the RAID level of a disk array to be configured.	<p>Select the item from the pull-down menu.</p> <p>RAID1, RAID5, RAID6 or RAID1+0</p>
Number of Disks	This specifies the number of disks built in a disk array.	<p>Specify the number of disks.</p> <p>The selectable number differs depending on the selected RAID level.</p>
Disk Inch	This specifies the type of disk drive (drive outer size).	<p>Select the item from the pull-down menu.</p> <p>2.5 Inch or 3.5 Inch</p>
Disk Type	This specifies the type of disk drive (interface type) built in a disk array.	<p>Select the item from the pull-down menu.</p> <p>The selectable type differs depending on the models of ETERNUS and selected disk inch.</p> <p>SAS, NL-SAS, SED or SSD</p>
Disk Size	This specifies the type of disk drive (disk size) built in a disk array.	<p>Select the item from the pull-down menu.</p> <p>The selectable size differs depending on the selected disk inch and disk type.</p> <p>300 GB, 450 GB, 1 TB, etc.</p>
Volume		
Volume Name	<p>This specifies the name of a volume to be created on a RAID group.</p> <p> Note</p> <p>.....</p> <p>You cannot specify the volume name already set up for a device.</p> <p>.....</p>	<p>Specify the name of a volume to be created on the RAID group.</p> <p>You can enter 1 to 16 characters.</p>
Volume Size	This specifies volume size to be created on a RAID group.	Specify the volume size on the text box to select the item from pull-down menu.

Item Name		Description	Parameter
			<p>Specifying "max" for the last volume size causes all the remaining size of the RAID group to be allocated.</p> <p>For ETERNUS DX60 S2, you cannot specify "max."</p> <p>MB, GB or TB</p>
Global Hot Spare			
	Disk Inch	This specifies the type of disk drive (drive outer size) defined as a hot spare.	<p>Select the item from the pull-down menu.</p> <p>2.5 Inch or 3.5 Inch</p>
	Disk Type	This specifies the type of disk drive (interface type) defined as a hot spare.	<p>Select the item from the pull-down menu.</p> <p>The selectable type differs depending on the models of ETERNUS and selected disk inch.</p> <p>SAS, NL-SAS, SED or SSD</p>
	Disk Size	This specifies the type of disk drive (disk size) defined as a hot spare.	<p>Select the item from the pull-down menu.</p> <p>The selectable size differs depending on the selected disk inch and disk type.</p> <p>300 GB, 450 GB, 1 TB, etc.</p>
Host Affinity			
LUN Group			
	LUN Group Name	<p>This specifies a LUN group name.</p> <p> Note</p> <p>.....</p> <p>You cannot specify the LUN group name already set up for a device.</p> <p>.....</p>	Specify the LUN group name strings.
Volumes			
	Volume Name	This specifies the name of a volume which belongs to a LUN group.	<p>Enter the name of the volume which belongs to the LUN group.</p> <p>Specify the volume created by a profile or the volume already created on a device.</p>
Port Group			
	Port Group Name	<p>This specifies a port group name.</p> <p> Note</p> <p>.....</p> <p>You cannot specify the port group name already set up for a device.</p> <p>.....</p>	<p>Specify the port group name.</p> <p>You can enter 1 to 16 characters.</p>
Ports			
	Port Number	This specifies the port number which belongs to a port group.	Specify the port number which belongs to the port group with a triple-digit number.
Host Group			
	Host Group Name	This specifies a host group name.	<p>Specify the host group name.</p> <p>You can enter 1 to 16 characters.</p>

Item Name	Description	Parameter
	 Note You cannot specify the host group name already set up for a device.	
Host Type	This specifies the type of a host group.	Select the item from the pull-down menu. iSCSI or FC
Host		
Host Name	This specifies the host name which belongs to a host group.  Note You cannot specify the host name already set up for a device.	Specify the name of the host which belongs to the host group. You can enter 1 to 16 characters.
iSCSI Name	This specifies the iSCSI name which defines a host name. Can be entered when the host type of a host group is iSCSI name.	Enter iSCSI name. Enter "iqn." or "eui." at the beginning.
Host WWN	This specifies the host WWN which defines a host name. You can enter it when the host type of a host group is FC.	Enter the host WWN. You can enter 16 hexadecimal characters.
Detail Settings		
Pre Run Command	The control command to execute on ETERNUS before executing profile assignment (RAID/Hot Spare/Host Affinity settings) is described. Leave the checkbox unchecked unless a special request is made.	Refer to "CLI User Guide" of your device for the described contents.
Post Run Command	The control command to execute on ETERNUS after completion of profile assignment (RAID/Hot Spare/Host Affinity settings) is described. Leave the checkbox unchecked unless a special request is made.	Refer to "CLI User Guide" of your device for the described contents.

 **Point**

-
- You cannot specify the position of a mounted slot on the disk drive used for the array configuration.
 - You cannot specify the position of a mounted slot on the disk drive used for the hot spare configuration.
-

5.2 Profiles for ETERNUS NR/ETERNUS AX/ETERNUS HX

SNMP tab

Item Name	Description	Parameter
SNMP Service		
SNMP Service Setting	This specifies whether to use SNMP service settings.	(Checked) = Enabled (Unchecked) = Disabled
SNMP Agent (ON/OFF)	This specifies whether to enable or disable SNMP agents.	ON = Enable the function OFF = Disable the function
SNMP Trap (ON/OFF)	This specifies whether to enable or disable SNMP traps.	ON = Enable the function OFF = Disable the function
Community (for Host)		
Community Name	This specifies an SNMP community name.	Enter the community name as a character string with 3 to 32 characters.
User (for v3 Host)		
User Name	This specifies an SNMP user name.	Enter the user name as a character string with between 3 and 32 characters.
Authentication Setting	This specifies whether to enable SNMP authentication settings.	(Checked) = Enabled
Authentication Protocol	This specifies the SNMP authentication protocol.	Select the following from the pull-down menu. MD5, SHA, SHA2, NoAuth
Authentication Password	Enter an SNMP authentication password.	Enter the password as a character string with between 8 and 30 characters.
Privacy Setting	This specifies whether to enable SNMP privacy settings.	(Checked) = Enabled
Privacy Protocol	This specifies SNMP privacy protocol.	Select the following from the pull-down menu. DES, AES, NoPriv
Privacy Password	This specifies an SNMP privacy password.	Enter the password as a character string with between 3 and 30 characters.
v3 Host		
Address	This specifies the IP address of an SNMP host.	Enter the IP address of the host with the strings based on IPv4 or IPv6 address notations.
User Name	This specifies an SNMP user name.	Select the user already set up from the pull-down menu.

NTP

Item Name	Description	Parameter
Auto Time Adjustment		
Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Checked) = Enabled
Server Setting	This specifies whether to enable the settings for a time-provider server.	(Checked) = Enabled (Unchecked) = Disabled

Item Name				Description	Parameter
			Address	This specifies the IP address of a time-provider server.	Enter the IP address of the time-provider server with the character strings based on IPv4 or IPv6 address notations.
			Protocol version	This specifies the NTP protocol version.	<p>3 = NTP protocol version 3, which is based on the RFC#1305 Internet standard</p> <p>4 = NTP protocol version 4, which is based on the RFC#5905 Internet standard</p> <p>auto(Default) = Select the NTP protocol version in Data ONTAP</p>

Chapter 6 Setting Items of Profiles for Switches

This section describes the items that you set up, in the profiles for switches.

For details of each item, refer to the manual of your switch.

6.1 Profiles for SR-X

SNMP tab

Item Name	Description	Parameter
SNMP Service		
SNMP Service Setting	This specifies whether to use SNMP service settings.	(Checked) = Enabled (Unchecked) = Disabled
SNMP Agent and Trap (ON/OFF)	This specifies whether to enable or disable SNMP agents and traps.	ON = Function enabled OFF = Function disabled
SNMP Agent Setting	This specifies whether to use SNMP agent settings.	(Checked) = Enabled (Unchecked) = Disabled
Agent Address	This specifies whether to enable an agent address.	(Checked) = Agent address enabled Additionally, enter the agent address in IPv4 format.
SNMP Engine ID	This specifies whether to enable an SNMP engine ID.	(Checked) = SNMP engine ID enabled Additionally, enter the SNMP engine ID.
SNMP Host (SNMPv1 or v2c)		
Number	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Address	This specifies the IP address of an SNMP host.	Specify the IP address of the SNMP host in IPv4 format.
Community Name	This specifies the community name of an SNMP host.	Enter the community name of the SNMP host.
Trap Type	This specifies whether to send SNMP traps.	Select the item from the pull-down menu. Off, v1 or v2c
Write	This specifies whether to permit writing from an SNMP manager.	(Checked) = Enabled (Unchecked) = Disabled
SNMP User (SNMPv3)		
Number	This specifies an SNMP user definition number.	Select the item from the pull-down menu.
User Name	This specifies an SNMP user name.	Enter the SNMP user name.
Address Setting	This specifies whether to enable an SNMP host address.	(Checked) = Enabled (Unchecked) = Disabled
Host Number	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Host Address	This specifies the IP address of an SNMP host.	Enter the IP address strings of the SNMP host.

Item Name	Description	Parameter
Trap Setting	This specifies whether to enable SNMP trap settings.	(Checked) = Enabled (Unchecked) = Disabled
Host Number	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Host Address	This specifies the IP address of an SNMP host.	Enter the IP address strings of the SNMP host.
Authentication Setting	This specifies whether to enable SNMP authentication protocol.	(Checked) = Enabled (Unchecked) = Disabled
Authentication Protocol	This specifies the SNMP authentication protocol.	Select the item from the pull-down menu. None, MD5 or SHA
Authentication Password	This specifies an SNMP authentication password.	Enter the SNMP authentication password.
Privacy Setting	This specifies whether to enable SNMP privacy settings.	(Checked) = Enabled (Unchecked) = Disabled
Privacy Protocol	This specifies the SNMP privacy protocol.	Select the item from the pull-down menu. None or DES
Privacy Password	This specifies an SNMP privacy password.	Enter the SNMP privacy password.
Read	This specifies whether to enable SNMP MIB read.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Read not permitted all: Read permitted
Write	This specifies whether to enable SNMP MIB write.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Write not permitted all: Write permitted
Notify	This specifies whether to enable SNMP MIB trap notifications.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Read-out not permitted all: Read-out permitted

Authentication tab

Item Name	Description	Parameter
Account		
Change Administrator Password	This specifies whether to change the administrator password.	(Checked) = Administrator password changed
Password	This specifies a new administrator password.	Enter the password.

NTP tab

Item Name	Description	Parameter
Auto Time Adjustment		
Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Checked) = Enabled
Server Setting	This specifies whether to enable the settings for a time-provider server.	(Checked) = Enabled (Unchecked) = Disabled
Protocol (Time/SNTP)	This specifies the protocol to be used.	Time = TCP used SNTP = UDP used
Address	This specifies the IP address of a time-provider server.	Enter the IP address of the time-provider server.
Interval Setting	This specifies whether to enable the interval for auto time adjustment.	(Checked) = Enabled (Unchecked) = Disabled
Interval Time (On Startup/Period)	This specifies the interval of auto time adjustment.	On Startup = Adjusted upon startup Period = Execute during arbitrary period. Additionally, enter the period on the screen.
Time Zone Setting	This specifies whether to enable time zone setting.	(Checked) = Enabled (Unchecked) = Disabled
Time Zone from GMT	This specifies the time difference the device uses from the Greenwich Mean Time.	Select the item from the pull-down menu.

STP tab

Item Name	Description	Parameter
STP (Spanning Tree Protocol) Setting		
STP	This specifies whether to enable STP settings.	(Checked) = Enabled Additionally, select the item from the pull-down menu.

6.2 Profiles for VDX

SNMP tab

Item Name	Description	Parameter
SNMP Service		
SNMP Service Setting	This specifies whether to use SNMP service settings.	(Checked) = Enabled (Unchecked) = Disabled
SNMP Agent and Trap (ON/OFF)	This specifies whether to enable or disable SNMP agents and traps.	ON = Function enabled OFF = Function disabled
Group (for Community and User)		
Group Name	This specifies a group name.	Enter the group name.
SNMP Version	This specifies the SNMP version.	Select the item from the pull-down menu.

Item Name	Description	Parameter
		V1, v2c, v3
v3 Security Level	This specifies the security level for SNMPv3.	(Checked) = Enabled Additionally, select the item from the pull-down menu. auth, noauth or priv
Read	This specifies whether to enable SNMP MIB read.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Read not permitted all: Read permitted
Write	This specifies whether to enable SNMP MIB write.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Write not permitted all: Write permitted
Notify	This specifies whether to enable SNMP MIB trap notifications.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Read-out not permitted all: Read-out permitted
Community (for Host)		
Community Name	This specifies an SNMP community name.	Enter the community name strings.
Group	This specifies the group which a community belongs to.	(Checked) = Enabled Additionally, select a selected group from the pull-down menu.
Write	This specifies whether to enable SNMP community write.	(Checked) = Enabled Additionally, select the item from the pull-down menu. Enabled or Disabled
Host		
Address	This specifies the IP address of an SNMP host.	Enter the IP address of the host with the strings based on IPv4 or IPv6 address notations.
Community Name	This specifies an SNMP community name.	Select the community name already set up from the pull-down menu.
Severity Level	This specifies the SNMP trap level.	Select the item from the pull-down menu.
Trap Version	This specifies the SNMP trap version.	Select the item from the pull-down menu. v1 or v2c
UDP Port	This specifies an SNMP trap sending port number.	Enter the SNMP trap sending port number. A value between "0" and "65535" can be specified.
User (for v3 Host)		

Item Name	Description	Parameter
User Name	This specifies an SNMP user name.	Enter the user name between 1 and 16 characters.
Group	This specifies an SNMP group name.	Select the group already set up from the pull-down menu.
Authentication Setting	This specifies whether to enable SNMP authentication settings.	(Checked) = Enabled
Authentication Protocol	This specifies the SNMP authentication protocol.	Select the item from the pull-down menu. MD5, SHA or NoAuth
Authentication Password	An SNMP authentication password is entered.	Enter the authentication password between 1 and 32 characters.
Privacy Setting	This specifies whether to enable SNMP privacy settings.	(Checked) = Enabled
Privacy Protocol	This specifies SNMP privacy protocol.	Select the item from the pull-down menu. DES, AES128 or NoPriv
Privacy Password	This specifies an SNMP privacy password.	Enter the privacy password strings between 1 and 32 characters.
v3 Host		
Address	This specifies the IP address of an SNMP host.	Enter the IP address of the host with the strings based on IPv4 or IPv6 address notations.
User Name	This specifies an SNMP user name.	Select the user already set up from the pull-down menu.
Severity Level	This specifies the SNMP trap level.	Select the item from the pull-down menu.
Notify Type	This specifies an SNMP notification type.	Select the item from the pull-down menu. traps, informs
Engine ID	This specifies an SNMP engine ID.	Specify the engine ID "0:0:0:0:0:0:0:0" to "FF:FF:FF:FF:FF:FF:FF:FF" with strings. Its character strings pattern is the same as that of MAC address.
UDP Port	This specifies an SNMP trap sending port number.	Enter the SNMP trap sending port number. A value between "0" and "65535" can be specified.

Authentication tab

Item Name	Description	Parameter
Account		
Change Administrator Password	This specifies whether to change the administrator password.	(Checked) = Administrator password changed
Password	This specifies a new administrator password.	Enter the password between 8 and 32 characters.

NTP tab

Item Name	Description	Parameter
Auto Time Adjustment		
Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Checked) = Enabled
Server Setting	This specifies whether to enable the settings for a time-provider server.	(Checked) = Enabled (Unchecked) = Disabled
Address	This specifies the IP address of a time-provider server.	Enter the IP address of the time-provider server with the character strings based on IPv4 or IPv6 address notations.
Time Zone Setting	This specifies whether to enable time zone setting.	(Checked) = Enabled (Unchecked) = Disabled
Region City	This specifies region information.	Enter the region information in the form of (Region)/(City).

6.3 Profiles for PSWITCH 2048P/T PSWITCH 4032P

SNMP tab

Item Name	Description	Parameter
SNMP Service		
SNMP Service Setting	This specifies whether to use SNMP service settings.	(Checked) = Enabled (Unchecked) = Disabled
SNMP Agent and Trap (ON/OFF)	This specifies whether to enable or disable SNMP agents and traps.	ON = Function enabled OFF = Function disabled
Group (for Community and User)		
Group Name	This specifies a group name.	Enter the group name.
SNMP Version	This specifies the SNMP version.	Select the item from the pull-down menu. V1, v2c, v3
v3 Security Level	This specifies the security level for SNMPv3.	(Checked) = Enabled Additionally, select the item from the pull-down menu. auth, noauth or priv
Read	This specifies whether to enable SNMP MIB read.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Read not permitted Default: Read permitted
Write	This specifies whether to enable SNMP MIB write.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Write not permitted Default: Write permitted
Notify	This specifies whether to enable SNMP MIB trap notifications.	(Checked) = Enabled

Item Name	Description	Parameter
		<p>Additionally, specify the item from the pull-down menu.</p> <p>none: Read-out not permitted</p> <p>Default: Read-out permitted</p>
Community (for Host)		
Community Name	This specifies an SNMP community name.	Enter the community name strings.
Group	This specifies the group which a community belongs to.	(Checked) = Enabled Additionally, select a selected group from the pull-down menu.
Write	This specifies whether to enable SNMP community write.	(Checked) = Enabled Additionally, select the item from the pull-down menu. Enabled or Disabled
Host		
Address	This specifies the IP address of an SNMP host.	Enter the IP address of the host with the strings based on IPv4 or IPv6 address notations.
Community Name	This specifies an SNMP community name.	Select the community name already set up from the pull-down menu.
Trap Version	This specifies the SNMP trap version.	Select the item from the pull-down menu. v1 or v2c
UDP Port	This specifies an SNMP trap sending port number.	Enter the SNMP trap sending port number. A value between "1" and "65535" can be specified.
User (for v3 Host)		
User Name	This specifies an SNMP user name.	Enter the user name between 1 and 30 characters.
Group	This specifies an SNMP group name.	Select the group already set up from the pull-down menu.
Authentication Setting	This specifies whether to enable SNMP authentication settings.	(Checked) = Enabled
Authentication Protocol	This specifies the SNMP authentication protocol.	Select the item from the pull-down menu. MD5, SHA or NoAuth
Authentication Password	An SNMP authentication password is entered.	Enter the authentication password between 1 and 32 characters.
Privacy Setting	This specifies whether to enable SNMP privacy settings.	(Checked) = Enabled
Privacy Protocol	This specifies SNMP privacy protocol.	Select the item from the pull-down menu. DES, NoPriv
Privacy Password	This specifies an SNMP privacy password.	Enter the privacy password strings between 1 and 32 characters.
v3 Host		

Item Name	Description	Parameter
Address	This specifies the IP address of an SNMP host.	Enter the IP address of the host with the strings based on IPv4 or IPv6 address notations.
User Name	This specifies an SNMP user name.	Select the user already set up from the pull-down menu.
Notify Type	This specifies an SNMP notification type.	Select the item from the pull-down menu. traps, informs
UDP Port	This specifies an SNMP trap sending port number.	Enter the SNMP trap sending port number. A value between "1" and "65535" can be specified.

Authentication tab

Item Name	Description	Parameter
Account		
Change Administrator Password	This specifies whether to change the administrator password.	(Checked) = Administrator password changed
Password	This specifies a new administrator password.	Enter the password between 8 and 64 characters.

NTP tab

Item Name	Description	Parameter
Auto Time Adjustment		
Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Checked) = Enabled
Server Setting	This specifies whether to enable the settings for a time-provider server.	(Checked) = Enabled (Unchecked) = Disabled
Address	This specifies the IP address of a time-provider server.	Enter the IP address of the time-provider server with the character strings based on IPv4 or IPv6 address notations.
Mode	Set mode.	Broadcast = Time is synchronized by requesting broadcast information from the SNTP server Unicast = The SNTP client operates in a point to point relationship with the SNTP server.
Interval Setting	This specifies whether to enable the interval for auto time adjustment.	(Checked) = Enabled (Unchecked) = Disabled
Interval Time[s]	This specifies the interval[s] of auto time adjustment.	Enter the period on the screen.
Time Zone Setting	This specifies whether to enable time zone setting.	(Checked) = Enabled (Unchecked) = Disabled
Time Zone from GMT	This specifies the time difference the device uses from the Greenwich Mean Time.	Select the item from the pull-down menu.

6.4 Profiles for CFX

SNMP tab

Item Name	Description	Parameter
SNMP Service		
SNMP Service Setting	This specifies whether to use SNMP service settings.	(Checked) = Enabled (Unchecked) = Disabled
SNMP Agent and Trap (ON/OFF)	This specifies whether to enable or disable SNMP agents and traps.	ON = Function enabled OFF = Function disabled
SNMP Agent Setting	This specifies whether to use SNMP agent settings.	(Checked) = Enabled (Unchecked) = Disabled
Domain ID	This specifies a domain ID.	Enter the domain ID.
Agent Address	This specifies whether to enable an agent address.	(Checked) = Agent address enabled Additionally, enter the IP address strings of the agent address.
SNMP Engine ID	This specifies whether to enable an SNMP engine ID.	(Checked) = SNMP engine ID enabled Additionally, enter the SNMP engine ID.
SNMP Host (SNMPv1 or v2c)		
Number	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Address	This specifies the IP address of an SNMP host.	Enter the IP address of the SNMP host.
Community Name	This specifies the community name of an SNMP host.	Enter the community name of the SNMP host.
Trap Type	This specifies whether to send SNMP traps.	Select the item from the pull-down menu. Off, v1 or v2c
Write	This specifies whether to permit writing from an SNMP manager.	(Checked) = Enabled (Unchecked) = Disabled
SNMP User (SNMPv3)		
Number	This specifies an SNMP user definition number.	Select the item from the pull-down menu.
User Name	This specifies an SNMP user name.	(Checked) = Enabled Additionally, enter the SNMP user name strings.
Address Setting	This specifies whether to enable an SNMP host address.	(Checked) = Enabled (Unchecked) = Disabled
Host Number	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Host Address	This specifies the IP address of an SNMP host.	Enter the IP address strings of the SNMP host.
Trap Setting	This specifies whether to enable SNMP trap settings.	(Checked) = Enabled (Unchecked) = Disabled

Item Name	Description	Parameter
Host Number	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Host Address	This specifies the IP address of an SNMP host.	Enter the IP address strings of the SNMP host.
Authentication Setting	This specifies whether to enable SNMP authentication protocol.	(Checked) = Enabled (Unchecked) = Disabled
Authentication Protocol	This specifies the SNMP authentication protocol.	Select the item from the pull-down menu. None, MD5 or SHA
Authentication Password	This specifies an SNMP authentication password.	Enter the SNMP authentication password.
Privacy Setting	This specifies whether to enable SNMP privacy settings.	(Checked) = Enabled (Unchecked) = Disabled
Privacy Protocol	This specifies the SNMP privacy protocol.	Select the item from the pull-down menu. None or DES
Privacy Password	This specifies an SNMP privacy password.	Enter the SNMP privacy password.
Read	This specifies whether to enable SNMP MIB read.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Read not permitted all: Read permitted
Write	This specifies whether to enable SNMP MIB write.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Write not permitted all: Write permitted
Notify	This specifies whether to enable SNMP MIB trap notifications.	(Checked) = Enabled Additionally, specify the item from the pull-down menu. none: Notifications not permitted all: Notifications permitted

Interface tab

Item Name	Description	Parameter
Interface Settings		
Targets	This specifies an ether port.	Specify "chassis ID / ether port number" or "domain ID / switch ID / chassis ID / ether port number."
Port Type	This specifies whether to set Endpoint.	(Checked) = Endpoint
LLDP	This specifies whether to enable LLDP.	(Checked) = Enabled Additionally, select the item from the pull-down menu.

Item Name	Description	Parameter
		Disable = LLDP function does not operate Enable = LLDP information is sent and received Send = LLDP information is only transmitted Receive = LLDP information is only received
Cfab Port Mode	This specifies whether to enable Cfab Port Mode.	(Checked) = Enabled Additionally, select the item from the pull-down menu. Auto = Run with the port type automatically detected External = Run compulsorily as an external port

Authentication tab

Item Name	Description	Parameter
Account		
Change Administrator Password	This specifies whether to change the administrator password.	(Checked) = Administrator password changed
Password	This specifies a new administrator password.	Enter the password.
AAA Configuration		
AAA Group ID	This specifies AAA Group ID.	Select the item from the pull-down menu. 0-9
LDAP Function	This specifies whether to enable LDAP function.	Enable = Function enabled Disable = Function disabled
LDAP Setting	This specifies whether to enable LDAP client setting.	(Checked) = Enabled (Unchecked) = Disabled
Client		
Number	This specifies a client number.	Select the item from the pull-down menu. 0-3
Server Info Settings	This specifies whether to enable Server Info Settings.	(Checked) = Enabled (Unchecked) = Disabled
LDAP Server Address	This specifies the IP address of an LDAP server.	Enter the IP address of the LDAP server.
Source	This specifies whether to enable the information on a sender.	(Checked) = Enabled (Unchecked) = Disabled
Domain ID	This specifies the Domain ID of a sender.	Select the item from the pull-down menu. 1-32
Address	This specifies the IP address of a sender.	Enter the IP address strings of the sender.

Item Name		Description	Parameter
	RDN	This specifies whether to enable RDN.	(Checked) = Enabled Additionally, enter the RDN. Ex.:CN
	Bind Name except RDN	This specifies whether to enable bind names other than RDN.	(Checked) = Enabled Additionally, enter a bind name other than RDN. Ex.: CN=user, DC=local
	Admin	This specifies whether to enable administrator class information.	(Checked) = Enabled (Unchecked) = Disabled
	Class ID	This specifies Class ID.	Select the item from the pull-down menu. 0-3
	Class Value	This specifies administrator class value.	Enter the character strings of the administrator class value. Ex.: user


NTP tab

Item Name		Description	Parameter
Auto Time Adjustment			
	Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Checked) = Enabled
	Server Setting	This specifies whether to enable the settings for a time-provider server.	(Checked) = Enabled (Unchecked) = Disabled
	Protocol (Time/SNTP)	This specifies the protocol to be used.	Time = TCP used SNTP = UDP used
	Address	This specifies the IP address of a time-provider server.	Enter the IP address of the time-provider server.
	Interval Setting	This specifies whether to enable the interval for auto time adjustment.	(Checked) = Enabled (Unchecked) = Disabled
	Interval Time (On Startup/Period)	This specifies the interval of auto time adjustment.	On Startup = Adjusted upon startup Period = Execute during arbitrary period. Additionally, enter the period on the screen.
	Time Zone Setting	This specifies whether to enable time zone setting.	(Checked) = Enabled (Unchecked) = Disabled
	Time Zone from GMT	This specifies the time difference the device uses from the Greenwich Mean Time.	Select the item from the pull-down menu.

Chapter 7 Setting Items of Common Policy

This section describes the items that can be set in Common Policy that can be created without depending on the target server type.

7.1 Monitoring Policy

Item Name	Description	Parameter
Enable the monitoring policy	<p>This specifies whether to enable the monitoring policy.</p> <p> Note</p> <p>.....</p> <p>If you are going to use a Monitoring Policy when creating profiles or policies, select (Checked) for this item.</p> <p>.....</p>	<p>(Checked) = Enable</p> <p>(Unchecked) = Disable</p>
Assign the monitoring policy when registering discovered nodes	This specifies whether to assign the monitoring policy when registering discovered nodes.	<p>(Checked) = Enable</p> <p>(Unchecked) = Disable</p>
SNMP Generic Configuration		
SNMP Enabled	This specifies whether to enable SNMP.	<p>Enable = SNMP enabled</p> <p>Disable = SNMP disabled</p>
SNMP Port (Default: 161)	This specifies a port number where an SNMP service is in an idle state.	<p>Enter the port number.</p> <p>UDP 161 by default</p>
SNMP v1/v2c Community	This specifies the community strings in the cases of SNMP v1/v2c.	Enter the community strings
SNMP Trap Destination		
SNMP Trap Community Name	This specifies the community name of the SNMP trap sending destination.	Enter the SNMP trap community strings
Destination SNMP Server 1 to 7	This specifies the DNS name or the IP address of a server which belongs to the community set up as "Trap destination."	Enter the IP address or the DNS strings of an SNMP server.
Protocol	This specifies the Version of SNMP protocol used for receiving traps.	<p>Select the item from the pull-down menu.</p> <p>SNMPv1, SNMPv2c</p>
Time		
Time Mode	This specifies whether to obtain the time setting from a managed server or to obtain it from an NTP server.	<p>System RTC = Time is obtained from the system clock</p> <p>NTP Server = Time is synchronized with that of an NTP server which operates based on specific time as its reference time source by using Network Time Protocol (NTP)</p>
RTC Time Mode	You can select whether to display time in UTC (Coordinated Universal Time) format or in local time format.	<p>Local Time = time displayed in local time format</p> <p>UTC = time displayed in UTC (Coordinated Universal Time) format</p>

Item Name		Description	Parameter
	NTP Server 1	This specifies the IP address or the DNS name of the NTP server.	Enter the IP address or DNS strings.
	NTP Server 2	This specifies the IP address or the DNS name of the NTP server.	Enter the IP address or DNS strings.
	Time Zone	You can set up the time zone corresponding to the location where the server is placed.	Select the item from the pull-down menu.

The following table describes the profile settings associated with Monitoring Policy.

Type	Association with Monitoring Policy
BIOS	-
iRMC	Y
OS	-

Item Name of Monitoring Policy	Item Name of iRMC Setting
SNMP Generic Configuration	SNMP Generic Configuration
SNMP Enabled	SNMP Enabled
SNMP Port	SNMP Port
SNMP v1/v2c Community	SNMP v1/v2c Community
SNMP Trap Destination	SNMP Trap Destination
SNMP Trap Community Name	SNMP Trap Community Name
Destination SNMP Server 1 to 7	Destination SNMP Server 1 to 7
Protocol	Protocol
Time	Time
Time Mode	Time Mode
RTC Time Mode	RTC Time Mode
NTP Server 1	NTP Server 0
NTP Server 2	NTP Server 1
Time Zone	Time Zone