Infrastructure Manager /
Infrastructure Manager for PRIMEFLEX V3.0.0

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.

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

#### **Product Manuals**

Manual Name	Description
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0 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."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0 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."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0	This manual describes the installation procedure and usages for the operations of this product.
Operating Procedures	In this manual, it is referred to as "Operating Procedures."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0 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."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0 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."
Infrastructure Manager for PRIMEFLEX V3.0.0 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."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0	This manual describes detailed information for the items set when creating profiles for managed devices.
Items for Profile Settings (for Profile Management)	In this manual, it is referred to as "Items for Profile Settings (for Profile Management)."
Infrastructure Manager for PRIMEFLEX V3.0.0 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."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0	This document defines the terms that you need to understand in order to use this product.
Glossary	In this manual, it is referred to as "Glossary."

Manual Name	Description
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V3.0.0 Plug-in and Management Pack Setup Guide	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.
	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 Appliance
	- Infrastructure Manager Plug-in for Microsoft Windows Admin Center
	In this manual, it is referred to as "ISM Plug-in/MP Setup Guide."

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	Abbrev	viation
Microsoft(R) Windows Server(R) 2022 Datacenter	Windows Server 2022 Datacenter	Windows Server 2022 or Windows
Microsoft(R) Windows Server(R) 2022 Standard	Windows Server 2022 Standard	
Microsoft(R) Windows Server(R) 2022 Essentials	Windows Server 2022 Essentials	
Red Hat Enterprise Linux 9.3 (for Intel64)	RHEL 9.3	Red Hat Enterprise Linux or Linux
SUSE Linux Enterprise Server 15 SP5 (for AMD64 & Intel64)	SUSE 15 SP5(AMD64) SUSE 15 SP5 (Intel64) or SLES 15 SP5 (AMD64) SLES 15 SP5 (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 ESXi™ 8.0	VMware ESXi 8.0	VMware ESXi
VMware Virtual SAN	vSAN	
Microsoft Storage Spaces Direct	S2D	

In this document, VMware by Broadcom is referred to as VMware.

#### Terms

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

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## **Modification History**

Edition	Issue Date	Modification Overview	Section	
01	September 2024	First edition	-	-
02	November 2024  Modification for ISM 3.0.0.010 patch application	Changed the function name from "profile/policy for each model" to "profile/policy for specific model"	-	-

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# Chapter 1 BIOS/iRMC Setting Items of Profiles for PRIMERGY/PRIMEQUEST 3000B/4000E Servers

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



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		
PO	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)	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 (Enable/Disable)	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.		
Cl	PU 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) (Note: not supported for PRIMERGY M7 series or later. This can be set with profile for specific model)	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 core 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	Enable = Enable the use of the function  Disable = Disable the use of the function
Adjacent Cache Line Prefetch (Enable/Disable)	reduced especially for applications using linear access to data.  This specifies whether to load the added adjacent 64 byte cache line when the processor sends cache requests.	Enable = The requested cache line and the adjacent cache line are loaded
	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.	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.	Enable = Enable the function  Disable = Disable the function
	By reading the contents from cache instead of the memory, latency is reduced especially for applications using linear access to data.	
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 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)	Enable = Function enabled  Disable = Function disabled
Override OS Energy Performance (Enable/Disable)	regardless of this setting.  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 sacrific 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 sacrification 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 w balanced energy performance Unbalanced = Optimizes for unbalance system use prioritizing performance
CPU C1E Support (Enable/Disable)	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/Power balanced)	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  Disable = To save power, the processor automatically controls the frequency within the range set in advance  Power balanced = To optimize the balance between power and performance the processor automatically controls the

Item Name	Description	Parameter
		frequency within the range defined in advance
LLC Dead Line Alloc (Enable/Disable)	This item specifies the dead line processing of LLC (Last Level Cache).	Enable = It easily meets the LLC data dead line
(Since Since	This affects the system performance.	Disable = It does not meet the LLC dead line
Stale AtoS	This item specifies the directory optimization of data that has become	Enable = Optimization enabled
(Enable/Disable)	obsolescent in Caching Agent.	Disable = Optimization disabled
COD Enable	This affects the system performance.  This item specifies whether the BIOS	Enable = Function enabled
(Enable/Auto/Disable)	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.	Auto = COD is enabled if this is allowed in the system configuration  Disable = Function disabled
Early Snoop	This setting specifies whether to enable	Enable = Function enabled
(Enable/Auto/Disable)	early snooping. It is not supported if COD is 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	This setting specifies whether to use Home Snoop Directory with plain OSB	Enable = Function enabled
(Enable/Auto/Disable)	(Opportunistic Snoop Broadcast) caching to optimize snooping processes.	Auto = It is selected automatically based on the CPU configuration
		Disable = Function disabled
Memory Configuration	T	
NUMA (Enable/Disable)	This specifies whether to use NUMA (Non-Uniform Memory Access) function.	Enable = NUMA function enabled  Disable = NUMA function disabled
	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.	
DDR Performance (Low-Voltage optimized/Energy optimized/Performance optimized/Power balanced)	Memory modules operate with different speeds (Frequencies). The faster the speed, the higher the performance. The slower the speed the more the power saved. The available memory speeds	Low-Voltage optimized = The fastest setting available with low voltage Energy optimized = The slowest setting available with power-saving

Item Name	Description	Parameter
	differ depending on the installed memory module configurations.	Performance optimized = The fastest setting available for achieving the highest performance
		Power balanced = The setting available with reduced speed for achieving balance between power and performance
Patrol Scrub (Enable/Disable)	This setting specifies whether to regularly screen all memories in the	Enable = Background memory screening enabled.
(Enable Disable)	background.	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	Auto = Interleaving is automatically selected in the BIOS depending on the memory configurations that can be used
	configuration.	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	Enable = Full Sub NUMA Clustering, in other words, 2 clusters of 1-Way interleaving is supported.
	the address range. It improves the average latency from the LLC to the	Disable = Sub NUMA Clustering disabled
	local memory.	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)	This specifies Onboard SAS/SATA	Enable = SCU enabled
(Enable/Disable)	storage controller unit (SCU) behavior.	Disable = SCU disabled
SAS/SATA OpROM	This item can be set up only when Onboard SAS/SATA (SCU) is Enable.	Enable = Option ROM enabled
(Enable/Disable)	It specifies the Option ROM behavior of SAS/SATA controller.	Disable = Option ROM disabled
SAS/SATA Driver (LSI MegaRAID/Intel RSTe)	This item can be set up only when SAS/SATA OpROM is Enable.	LSI MegaRAID = Option ROM for Embedded MegaRAID used
(BSI Megura IIS/IIIIO)	It specifies the Option ROM type of SAS/SATA controller.	Intel RSTe = Option ROM for Intel RSTe used
Flexible LOM	This specifies whether to use Flexible	Enable = Enable all Flexible LOM ports
(Enable/Disable)	LOM (OCP) ports.	Disable = Disable Flexible LOM ports
Flexible LOM Oprom	This specifies whether to boot Legacy	Enable = Boot Legacy Option ROM
(Enable/Disable)	Option ROM of a Flexible LOM adapter.	Disable = Do not boot Legacy Option ROM
	Only Legacy, that is, non-UEFI Option ROM can be used. UEFI Option ROM is not affected by this setting.	
LAN Controller	This specifies the LAN controllers to	LAN 1 = Enable LAN 1 controller and
(LAN 1/LAN 1 & 2/Disable)	use.	disable LAN 2 controller  LAN 1 & 2 = Enable both of the LAN controllers

Item Name	Description	Parameter
	<b>G</b> Note	Disable = Disable both of the LAN controllers
	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 "LAN 1" for this item.	
LAN 1 Oprom (Disable/PXE/iSCSI)	This specifies whether to boot Option ROM. If booting, specify a type of Option ROM.  If the appropriate Option ROM is booted during BIOS POST, LAN controller can be used as a boot device.	Disable = Do not boot Option ROM  PXE = Boot PXE Option ROM  iSCSI = Boot iSCSI Option ROM
	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.	
LAN 2 Oprom (Disable/PXE/iSCSI)	This specifies whether to boot Option ROM. If booting, specify a type of Option ROM.  If the appropriate Option ROM is booted during BIOS POST, LAN controller can be used as a boot device.	Disable = Do not boot Option ROM  PXE = Boot PXE Option ROM  iSCSI = Boot iSCSI Option ROM
	Depending on the model of the server, there may not be a LAN 2 controller. In this case, disable this item.  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.	
SATA Configuration		
SATA Mode (Disable/IDE/AHCI/RAID)	This specifies the operation mode of the SATA interface.	Disable = Disable the operation mode  IDE = Operate in IDE mode  AHCI = Operate in AHCI mode  RAID = Operate in RAID mode
SATA Controller (Enable/Disable)	This specifies whether to enable SATA controller.	Enable = Enable the SATA controller  Disable = Disable the SATA controller
SSATA Controller (Enable/Disable)	This specifies whether to enable SSATA controller.	Enable = Enable the SSATA controller  Disable = Disable the SSATA controller

Item Name	Description	Parameter		
Option ROM Configuration				
Launch Slot X OpROM (Enable/Disable)	This specifies the execution of extended ROM of the option card mounted on each PCI slot.  You can specify this for multiple slots in profile. Do not specify this for the slot that does not exist on an actual device.	Enable = Extended ROM executed  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				

Item Name	Description	Parameter
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
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.	Disable = Execute all boot loaders/ OpROM (Legacy/UEFI)  Enable = Only execute signed boot loaders/UEFI OpROM
	G Note	louders, our ropitori
	This setting may not be "Disabled" due to the hardware specifications. In this case, specify the value from the BIOS interface of the server.	
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.	Local Time = Time according to the time zone of the management server is specified
	This item can be set up only when Sync RTC with MMB is Disable.	UTC = Time converted to UTC from the time zone of the management server is specified
	<b>©</b> 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.	

[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 "Disable," OS installation fails.

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

#### iRMC tab

Item Name	Description	Parameter
iRMC GUI		
Default Language	This performs initial settings for	English = English by default
(English/German/Japanese)	languages.	German = German by default
	This is enabled from the next time iRMC Web interface is invoked.	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	Continue = Boot continued even after the occurrence of an error
(Continue/Hait on errors)	boot.	Halt on errors = 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.	OS Controlled = Control with OS followed
	<b>G</b> Note	Minimum Power = Operation where priority is placed on reduction in power consumption
	When you disable Enhanced SpeedStep on BIOS settings, this setting also becomes disabled.	(Schedule) = Setup with Profile Management unavailable
	••••	(Power Limit) = Setup with Profile Management unavailable
Power Monitoring (Enable/Disable)	This specifies enable/disable over time	Enable = Power consumption monitored
[Note 3]	of monitoring for power consumption.	Disable = Power consumption not monitored
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	(Selected) = Fan tests not conducted
	periodical fan diagnoses.	(Cleared) = 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.	Enable = Communication monitored  Disable = Communication not monitored
1-1	I	I

Item Name	Description	Parameter
	<b>G</b> Note	
	This setting becomes enabled after rebooting the server.	
Behavior	This specifies the behavior for the case when communication is disabled.	Select the item from the pull-down menu.  Continue = Nothing executed
	<b>G</b> Note	Reset = Server rebooted
	This setting becomes enabled after rebooting the server.	Power Cycle = Powered ON after powering OFF the server once
Timeout	This specifies the period for judging communication to be disabled.	Specify the value from 1 to 100 minutes.
	<b>©</b> Note	
	This setting becomes enabled after rebooting the server.	
Boot Watchdog	•	
Boot Watchdog	This specifies whether to monitor the	Enable = Period monitored
(Enable/Disable)	period between POST completion and OS start, with use of Boot Watchdog.	Disable = Period not monitored
	<b>G</b> Note	
	This setting becomes enabled after rebooting the server.	
Behavior	This specifies behavior for the case	Select the item from the pull-down menu.
	when an OS does not start within the specified time.	Continue = Nothing executed
		Reset = Server rebooted
	This setting becomes enabled after	Power Cycle = Powered ON after powering OFF the server once
	rebooting the server.	
Timeout	This specifies the period for judging that an OS has failed to start.	Specify the value from 1 to 100 minutes.
	<b>©</b> Note	
	This setting becomes enabled after rebooting the server.	
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

Item Name	Description	Parameter
		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  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
Session Drop Time (Enable/Disable) [Note 3]	This specifies the drop-out time.	Specify the value from 0 to 120 minutes.  0 = Session timeout disabled
SNMP Generic Configuration		
SNMP Enabled	This specifies whether to enable SNMP.  Note	Enable = SNMP enabled Disable = SNMP disabled
	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.	
SNMP Port (Default: 161)	This specifies a port number where an SNMP service is in an idle state.	Enter the port number.  UDP 161 by default
	You cannot set up the setting items that are not shown on the Web UI screen of	

Item Name	Description	Parameter
	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.	
SNMP Service Protocol	This specifies the protocol of SNMP services.	All (SNMPv1/v2c/v3) = All protocols (SNMPv1/v2c/v3) supported
(All (SNMPv1/v2c/v3)/ SNMPv3 only)	Note You cannot set up the setting items that	Only SNMPv3 = Only SNMPv3 supported
	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.	
SNMP v1/v2c Community	This specifies the community strings in the cases of SNMP v1/v2c.  Note	Enter the community name string
	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.	
SNMPv3 User Configuration		
SNMPv3 Enabled (Enable/Disable)	This specifies whether to enable SNMPv3 support for users.	Enable = SNMPv3 support enabled Disable = SNMPv3 support disabled
	<ul> <li>To create/change SNMPv3 users, it is required to enable SNMP with the [Network Settings] -&gt; [SNMP].</li> <li>To use SNMPv3, it is required to set a password with at least 8 characters.</li> <li>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</li> </ul>	

Item Name	Description	Parameter
	the setting items if you fail to assign a profile.	
Access Privileges	This specifies user's access privilege.	Always read-only.
	<ul> <li>To create/change SNMPv3 users, it is required to enable SNMP with the [Network Settings] -&gt; [SNMP].</li> <li>To use SNMPv3, it is required to set a password with at least 8 characters.</li> <li>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.</li> </ul>	
Authentication	This selects the authentication protocol	SHA = SHA used
(SHA/MD5/None/SHA256/SHA384/	that SNMPv3 uses for authentication.	MD5 = MD5 used
SHA512)	- To create/change SNMPv3 users, it is required to enable SNMP with	None = Authentication disabled SHA256 = SHA256 used SHA384 = SHA384 used SHA512 = SHA512 used
	the [Network Settings] -> [SNMP].  - To use SNMPv3, it is required to set a password with at least 8 characters.	SHAJ12 – SHAJ12 used
	- 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.	
Privacy (AES/DES/None)	This specifies a privacy protocol that SNMPv3 uses for encrypting SNMPv3 traffic.	AES = AES used  DES = DES used  None = Privacy disabled

Item Name	Description	Parameter
	- 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.	
SNMP Trap Destination		
SNMP Trap Community Name	This specifies an SNMP trap community.	Enter the SNMP trap community strings
SNMPv3 Selected User	This specifies an SNMPv3 user already defined as an SNMPv3 trap destination.	Enter the SNMP user strings
	<ul> <li>The user specified in this item must have been previously created on the iRMC.</li> <li>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</li> </ul>	
	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.	
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.	Select the item from the pull-down menu. SNMPv1, SNMPv2c, SNMPv3
	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.	
•••••••	
AIS Connect	
AIS Connect This specifies whether to enable AIS Enable = Enable AIS	S Connect
Connect. Disable = Disable A	IS Connect
Service Mode This specifies whether to enable Service Enable = Enable Ser	vice Mode
Mode. Disable = Disable Se	ervice Mode
Country This specifies Reverse Proxy country when using AIS Connect. Select a country name menu.	e from the pull down
Remote Session This specifies whether to allow Remote Allow = Remote session	sion is allowed
Session. Deny = Remote sess	ion is denied
Proxy Server This specifies whether to use HTTP (Selected) = Use Pro	oxy server
Proxy servers. (Cleared) = Do not u	ise Proxy server
Proxy Server	
Address This specifies an IP address of the proxy server name. Enter an IP address of the proxy server name.	_
Port Number (Default: 81)  This specifies the port number of the  Enter the port number	er
proxy service. Default: 81	
User Name This specifies a user name to be authenticated by the proxy server. Enter a character stri name.	ing of the proxy user
Password This specifies a password to be authenticated by the proxy server.	ing.
DNS	
DNS This specifies whether to enable DNS of (Selected) = Enable	DNS
iRMC. (Cleared) = Disable	DNS
DNS Configuration  This specifies whether to obtain DNS configuration from the DHCP server.  (Selected) = Obtain DNS from the DHCP server.	
Note (Cleared) = Do not of configuration from the	
If you set "DNS Domain" "DNS Search Path" "DNS server 1-3," specify (Cleared) for this item.	
When enabling this item, enable DHCP in advance.	
DNS Domain  This specifies a default domain name for the DNS server.  Enter a DNS domain	n string.
DNS Search Path  This specifies a list of DNS search paths.  Enter DNS search paths.	ath strings.
DNS Server 1 - 3 This specifies DNS server names. Enter the IP address	of a DNS server.
DNS Retries This specifies the number of times of Specify a number of	1 - 5.
DNS retry. Default: 2	

	Item Name	Description	Parameter
	DNS Timeout	This specifies the timeout value for the	Specify a value between 1 - 30 seconds.
		DNS response in seconds.	Default: 5
DNS	Name Registration		
Re	egister 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
U	se iRMC Name	The character string specified in "iRMC	(Selected) = Use iRMC name
		Name" is used instead of the server name.	(Cleared) = 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.
		<b>6</b> 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	
U	se MAC Address	Specify whether to add the last three bytes of the MAC address of iRMC to	(Selected) = Add MAC address to DNS name
		the DHCP name of iRMC.	(Cleared) = Do not add MAC address to DNS name
U	se Extension	This specifies whether to add an	(Selected) = Add an extension name
		extension name which is specified as "Extension" to the DHCP name of iRMC.	(Cleared) = Do not add an extension name
	Extension	This specifies an extension name for iRMC.	Enter an extension name string.
Simp	ble Service Discovery Protocol (SSDP)		
SS	SDP	This specifies whether to enable	(Selected) = Enable automatic discovery
		automatic discovery via SSDP.	(Cleared) = disable automatic discovery
Cent	ral Authentication Service (CAS)	ı	
C	AS Support	This specifies whether to enable CAS.	(Selected) = Enable CAS
			(Cleared) = Disable CAS
CAS	Server [Note 1]		

Item Name	Description	Parameter
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	Enter the Port number.
	CAS service is standing by.	Default: 3170
SSL Certificate Verification	This specifies whether to enable SSL	(Selected) = Verify SSL Certificate
	Certificate Verification.	(Cleared) = Do not verify SSL Certificate
Login Page Display	This specifies whether to always display the Login page.	(Selected) = Always display the login page.
		(Cleared) = 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
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.	(Selected) = Allow user account configuration
		(Cleared) = Do not allow user account configuration
iRMC Settings Configuration	This specifies whether to enable iRMC Settings Configuration.	(Selected) = Allow iRMC settings configuration
		(Cleared) = Do not allow iRMC settings configuration
Video Redirection Usage	This specifies whether to enable Video Redirection Usage.	(Selected) = Allow Video Redirection usage
		(Cleared) = Do not allow Video Redirection usage
Remote Storage Usage	This specifies whether to enable the	(Selected) = Allow remote storage usage
	Remote Storage Usage.	(Cleared) = Do not allow remote storage usage

Item Name	Description	Parameter	
BIOS Backup			
Automatic BIOS Parameter Backup	This specifies whether to enable Automatic BIOS Parameter Backup.	(Selected) = Automatic BIOS Parameter Backup enabled	
	<b>G</b> Note	(Cleared) = Automatic BIOS Parameter Backup disabled.	
	This setting becomes enabled after rebooting the server.		
Update [Note 2]			
Repository Location	This specifies the URL for the update	Enter the URL for the update repository.	
	repository that uses eLCM update.	Default:	
		"https://support.ts.fujitsu.com"	
Proxy Server	This specifies whether to use a proxy	(Selected) = Use proxy server	
	server to connect to the update repository.	(Cleared) = Do not use proxy server	
VMware HCL Verification	This specifies whether to skip VMware	(Selected) = Skip	
	hardware compatibility verification.	(Cleared) = Do not skip	
SSL/TLS Certificate Verification	This specifies whether to skip SSL/TLS	(Selected) = Skip	
	Certificate Verification.	(Cleared) = 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	(Selected) = Use proxy server	
	server to connect to the deployment repository.	(Cleared) = Do not use proxy server	
SSL/TLS Certificate Verification	This specifies whether to skip SSL/TLS	(Selected) = Skip	
	Certificate Verification.	(Cleared) = Do not skip	
Web Access [Note3]			
Force HTTPS (Enable/Disable)	This specifies the method to use	Enable = HTTPS connections only	
	HTTPS.	Disable = HTTP connections available	
Security Protocols	This specifies the security protocols.		
TLS 1.1 (Enable/Disable)	This specifies enable/disable TLS 1.1.	Enable = TLS 1.1 enabled	
		Disable = TLS 1.1 disabled	
TLS 1.2 (Enable/Disable)	This specifies enable/disable TLS 1.2.	Enable = TLS 1.2 enabled	
		Disable = TLS 1.2 disabled	
Advanced Video Redirection (AVR) [Note 3]			
KVM Redirection Type	This specifies KVM redirection type.	JViewer (JAVA) = Use AVR via JAVA	
		HTML5 Viewer = Use AVR via HTML5	
		VNC = Connect with VNC	

Item Name	Description	Parameter
Window Title	This specifies the AVR window title.	Enter the parameter to display in the window.
		Initial value is "%USER%@  %BMC_NAME% "
BIOS Console Redirection [Note 3]		
Console Redirection (Enable/Disable)	This specifies enable/disable of the	Enable = Enables the console redirection
	console redirection.	Disable = Disable the console redirection
Serial Port Baud Rate	This specifies the baud rate for serial	Specifies the following baud rate.
	port.	9600/19200/38400/57600/115200
Serial Port Flow Control	This specifies the flow control for serial port.	No flow control imposed = Do not execute flow control
		CTS/RTS (hardware) = Communication control is executed by hardware
Serial 1 Multiplexer	This specifies consistency with the	System = Serial
	multiplexer configuration.	iRMC = LAN
User Management [Note 3]		
Change Admin Password	This specifies an Admin user password.  Note	Enter a password string.
	Specify a user other than admin as the user specified during node registration (communication method). If admin is specified, communication to the node will be failed.	
LDAP (Enable/Disable)	This specifies the enable/disable of the LDAP.	Enable = enables LDAP
		Disable = disables LDAP
LDAP SSL/TLS (Enable/Disable)	This specifies the enable/disable of the LDAP SSL/TLS.	Enable = enables LDAP SSL/TLS
		Disable = disables LDAP SSL/TLS
Primary LDAP Server	This specifies the primary LDAP server.	Enter the primary LDAP server strings.
Authorization Type	This specifies the authorization type.	Select the following:
		ServerView LDAP Group with Authorization Settings on LDAP Server
		Standard LDAP Group with Authorization Settings on iRMC
Domain Name	This specifies the domain name.	Enter the domain name strings.
Groups Directory as Sub-tree from Base DN	This specifies the group directory under the base DN.	Enter the group directory strings.
Authorization LDAP Username	This specifies the authorization LDAP username	Enter the authorization LDAP username strings.
Authorization LDAP Password	This specifies the authorization LDAP password.	Enter the authorization LDAP user password strings.

	Item Name	Description	Parameter
	User Group Name	This specifies the LDAP user group name.	Enter the LDAP user group strings.
		This can be specified only if you specify "Standard LDAP Group with Authorization Settings on iRMC" for "Authorization Type".	
		<b>G</b> Note	
		Specify this option only when no user group has been created on the node. When a user group already exists, no user group is created on the node side.	
N	letwork Management [Note 3]		
	IPv6 Protocol (Enable/Disable)	This specifies enable/disable of the IPv6 protocol.	Enable = enables HP SIM Integration  Disable = disables HP SIM Integration
S	erver Management [Note3]		
	HP SIM Integration (Enable/Disable)	This specifies enable/disable of the HP System Insight Manager (HP SIM).	Enable = enables HP SIM Integration Disable = disables HP SIM Integration
	Get System GUID Response Format	This specifies the response format for the Get System GUID command.	Select the following:  IPMI specification compatible  SMBIOS 2.6 specification compatible

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

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

[Note 3]: PRIMERGY BX series are not supported.

# 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)		
Та	rgeted	Specify whether to set ASR (Automatic Server Restart)	(Selected) = Execute settings (Cleared) = 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 V	Vatchdog		
Та	rgeted	Specify whether to set the boot watchdog.	(Selected) = Execute settings
			(Cleared) = Do not execute settings
	Boot Watchdog	This means enable/disable of Boot Watchdog.	Enable = Time monitored
			Disable = Period not monitored
		Specify whether to monitor the time before OS start.	
	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	Continue = Continue processing
		start after the time specified has been exceeded.	Reset = Restart
			Power Cycle = The power is first turned OFF, then turned ON
Softwa	are Watchdog		
Та	rgeted	Specify whether to set the software	(Selected) = Execute settings
		watchdog.	(Cleared) = Do not execute settings
	Software Watchdog	This means enable/disable of Software	Enable = Communication checked
		Watchdog.	Disable = Communication not
		Specify whether to execute regular communication checks while the OS is running.	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		Item Name	Description	Parameter
		Action when watchdog expires	Specify the action taken if there is no	Continue = Continue processing
			communication after the time specified has been exceeded.	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 the 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  Installation Image	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.
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 13] [Note 14]	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.	(Selected) = 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 13]	This is entered if you specify "MAC address" in Method to specify.	Enter the MAC address of the network that you use.
В	oot m	ode specification	This specifies boot mode.	(Selected) = Specify the boot type
	Вос	ot 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.
RAI	D & I	Disk Configuration		
U	se Ar	ray Controller	This is selected when you use a server- built-in array controller as an OS installation destination.	(Selected) = Array controller used [Note 3]
		e existing RAID Volume elect it even though RAID is not used.)	This uses the volume already created on an array controller.	(Selected) = Existing array configuration used
	Cre	eate 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.
D	o 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]
Volu	ıme 1			
V	olume	e Label	This specifies a volume name. [Note 5]	Enter the volume name strings. [Note 6]
F	ile Sy	stem	This specifies the type of a file system.	Always NTFS
P	artitio	n Size (Automatic/Manual)	This specifies a partition size.	Automatic = Partition with appropriate size automatically created  Manual = Partition with the entered size created
Q	uick I	Format	This specifies whether to use Quick Format in formatting a partition.	Yes = Quick Format performed No = Usual formatting performed (It takes longer time.)
U	sage		This specifies the purpose of use of a partition.	Always Boot or OS.
Basi	c Sett	ings		
Т	ime Z	ione	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.
estem 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]
dding Role and Features		
Install SNMP Service	This specifies whether to install SNMP services.	(Selected) = SNMP services installed
SNMP Trap Setting	This specifies the community name and trap destination upon sending SNMP	Select the Add button to set up arbitrary value.
	traps.	[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 15]	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	(Selected) = Authentication traps sent
	authentication traps in response to the SNMP request from an unknown host or community.	(Cleared) = Authentication traps not sent
Acception of SNMP Packets	This specifies whether to accept SNMP	(Accept SNMP Packets from Default
(Accept SNMP Packets from Defaul (LocalHost)/Accept SNMP Packets		Host (LocalHost)) = SNMP packets accepted from Localhost
These Hosts)		(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	(Selected) = Remote Desktop enable
	is available.	(Cleared) = Remote Desktop disable
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	(Selected) = Firewall exception crea
	required in registering a target server with SCVMM.	(Cleared) = Firewall exception not created
	Access from the following applications is enabled.	
	- Windows Management Instrumentation(WMI)	
	- File and Printer Sharing	
Additional Application		
Java Runtime Environment	Specify whether to install Java Runtime Environment.	(Selected) = Install Application [No 8] [Note 9]
	You must specify this when you install ServerView RAID Manager.	
ServerView Agent	This specifies whether to install ServerView Agent.	(Selected) = Install Application [No 10]
	You can specify it when you install SNMP services.	
ServerView Update Agent	This specifies whether to install ServerView Update Agent.	(Selected) = Install Application [No 10]
	You can specify it when you install ServerView Agent.	
DSNAP (Japanese Version)	This specifies whether to install DSNAP.	(Selected) = Install Application [No 11]
Software Support Guide	This specifies whether to install Software Support Guide.	(Selected) = Install Application [No 11]
ServerView RAID Manager	This specifies whether to install ServerView RAID Manager.	(Selected) = Application installed
ecute Script after Installation		
Execute Script after Installation	This specifies whether to execute a script after installation.	(Selected) = Execute Script after Installation
The directory forwarded to OS	This specifies the directory forwarded to an OS after installation.	Specify the directory forwarded to t OS after installation.

Item Name	Description	Parameter
Execute Script after Installation	This specifies the script to be executed. [Note 12]	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. If the server to which the profile is assigned has more than one array controller, disable all but the array controller to be configured.

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

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

[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]: For ServerView Suite DVD V13.18.12 or later, this is not installed even if it is specified.

[Note 10]: The application is installed in Japanese when you select Japanese on "Region and Language" settings. Otherwise, the application is installed in English.

[Note 11]: This can be installed only when you select Japanese on "Region and Language" settings.

[Note 12]: The specified script is executed with Windows "cmd /c" command.

[Note 13]: Product keys and MAC addresses cannot be set with policies. Set these when creating profiles.

[Note 14]: 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 15]: If you selected "ServerView Agent" in the "Additional Applications" setting, automatically sets the SNMP community (Community Name: 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	Enter the character string.
	Domain.	[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]
Ne	etwo	rk		
	DI	НСР	This selects whether to specify a fixed IP	(Selected) = DHCP used
			address or use DHCP for the IP address of Management LAN.	(Cleared) = Fixed IP specified
			Hanagement 2.11 V	[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 (Selected) or "unspecified" to (Cleared), 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
	erverView Suite DVD nstall 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
Install	ation Information		
In	stallation 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	Select the item from the pulldown menu.
		PRIMEQUEST3000E-Partition.	
	gement LAN network port settings	T	T
N	etwork port specification	This specifies the port of the network used for Management LAN.	(Selected) = 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 1	mode specification		
В	oot mode	This specifies boot mode.	(Selected) = 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		
U	se 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.
De	o 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		
K	eyboard	This specifies the language and type of keyboard.	Select the item from the pull-down menu.
Netwo	ork		
Se	etup	This specifies whether to make a setup with VM Standard Network.	(Selected) = Standard Network created
V	LAN ID to Use	Enter VLAN ID. "0" is entered when you do not use VLAN.	Enter VLAN ID.
Regist	er to Cloud Management Software		
Re	egister to Cloud Management Software	This specifies whether to automatically	(Selected) = Register
		register on vCenter subsequently after completion of ESXi installation.	(Cleared) = Do not register
		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.	
	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.
Execu	te Script after Installation		
Ex	secute Script after Installation	This specifies whether to execute a script after installation.	(Selected) = 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. If the server to which the profile is assigned has more than one array controller, disable all but the array controller to be configured.

[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.	(Selected) = Agreement with VMware License	
	Make sure to check the box to show that you accept.	(Cleared) = 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.	
Network			
DHCP	This selects whether to specify a fixed IP	(Selected) = DHCP used	
	address or use DHCP for the IP address of Management LAN.	(Cleared) = Fixed IP specified	
	management 27 it v.	[Note 1]	
IP Address [Note 2]	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 3]	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.	(Selected) = Obtained from DNS (Cleared) = Arbitrary computer name	
	A computer name is retrieved from the DNS server when you use DHCP.	specified [Note 4]	
	An arbitrary computer name is specified when you do not use DHCP.		
Computer Name [Note 2]	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]: When using a policy to change "DHCP" from (Selected) or "unspecified" to (Cleared), set the IP address of a linked profile after deleting the link that the policy refers to.

[Note 2]: IP addresses and computer names cannot be set with policies. Set these when creating profiles.

[Note 3]: 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 4]: When using a policy to change "Get Computer Name from DNS Server" from (Selected) or "unspecified" to (Cleared), 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		with the specified version used		
Installation Method	This selects the installation method.	Select the item from the pulldown menu.		
	- 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.			
Management LAN network port settings				
Network port specification	This specifies the port of the network used for Management LAN.	(Selected) = 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.		

Item Name	Description	Parameter
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.	(Selected) = 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.	(Selected) = UTC used
	System Clock.	(Cleared) = Local time used
RAID & Disk Configuration	1	
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 10]
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	(Selected) = A new array configured
	volume in the array to use it.	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	(Selected) = Drive other than array controller used
	installation destination.	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	This specifies whether to create an	(Selected) = Partition created
point)	independent partition to a mount point.	(Cleared) = 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
Size (MB)	This specifies a partition size.	Enter a decimal value.

Item Name	Description	Parameter			
Fill to maximum allowable size	This specifies whether to allocate spare disk capacity to the specified partition.  Specifying this is not required when you	(Selected) = Spare capacity allocated to the specified partition to extend the capacity			
	create another partition on free space after installing Linux.	(Cleared) = 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	Minimal system = Minimum required packages			
	to be installed and a new package.	Install everything = all packages [Note 4]			
		Default package groups = Recommended packages [Note 4]			
Package Group	This specifies the package group to be	(Selected) = Installed			
	installed.	(Cleared) = 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	(Selected) = Start X Window System			
	System when the system boots.	(Cleared) = Do not start X Window System			
	<b>G</b> Note				
	If you are using ServerView Suite DVD V13.19.12 or earlier, X Window System is always started, regardless of this setting.				
Bootloader Options	• • • • • • • • • • • • • • • • • • • •				
Bootloader	This specifies whether to install a	(Selected) = Bootloader installed			
	bootloader.	This item is always checked.			
Install Bootloader on	This specifies the installation destination of	MBR = Installed on Master Boot Record			
	a bootloader.	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	<u> </u>				
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	(Selected) = Used			
passwords.		(Cleared) = Not used [Note 5]			
Use MD5	This specifies whether to use MD5 for password encryption.	(Selected) = Used			

Item Name	Description	Parameter	
		(Cleared) = Not used	
Enable nscd	This specifies whether to use Name Switch	(Selected) = Used	
	Cache Daemon.	(Cleared) = 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.	(Selected) = Application installed	
	The type of applications differs depending on distribution. [Note 6]		
Execute Script after Installation			
Execute Script after Installation	This specifies whether to execute a script after installation.	(Selected) = 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

Applications	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) (Note: No support for PRIMERGY or PRIMEQUEST models with iRMC S6 or later)	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 (Note: For ServerView Suite DVD V13.18.12 or later, this is not installed even if it is specified.)	Y	Y	Y	Y

Applications	RHEL 6.x (x86)	RHEL 6.x (Intel64)	RHEL 7.x	RHEL 8.x
Dynamic Reconfiguration utility For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	Y	Y	N
PRIMEQUEST REMCS Option For PRIMEQUEST 2000/PRIMEQUEST 3000E	N	Y	Y	N
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.

[Note 10]: If using an array controller, set it so that there are no inconsistencies with the "Onboard Device Configuration" settings for the BIOS. If the server to which the profile is assigned has more than one array controller, disable all but the array controller to be configured.

#### OS (for each node) tab

	Item Name	Description	Parameter
Туре	e 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.
Netv	vork	•	
	Get Computer Name Via DNS Server	This specifies whether to use the computer name obtained from DNS.	(Selected) = Obtained from DNS (Cleared) = 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.	(Selected) = DHCP used (Cleared) = 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 (Selected) or "unspecified" to (Cleared), 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 (Selected) or "unspecified" to (Cleared), 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	This selects the installation method.	Select the item from the pulldown menu.
	<b>Solution</b> Note	
	<ul> <li>An eLCM license must be registered, an SD card must be mounted, and eIM must be downloaded when selecting eLCM.</li> </ul>	
	- You cannot select eLCM for PRIMEQUEST2000-Partition, PRIMEQUEST2000B, or PRIMEQUEST3000E-Partition.	
Management LAN network port settings	,	1
Network port specification	This specifies the port of the network used for Management LAN.	(Selected) = 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 from the screen.  Enter the slot number in which the
	Select the type of network card that you use.	card is installed.
Port Number	This is entered if you specify "Port Number" in Method to specify.	Enter the port number that you use.

Item Name	Description	Parameter
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.	(Selected) = 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	(Selected) = UTC used
	System Clock.	(Cleared) = 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	This uses the volume already created on an	(Selected) = Existing array
(Select it even though RAID is not used.)	array controller.	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	(Selected) = Partition created
	independent partition to a mount point.	(Cleared) = 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.	(Selected) = Spare capacity allocated to the specified partition to extend the capacity

Item Name	Description	Parameter	
	Specifying this is not required when you create another partition on free space after installing Linux.	(Cleared) = 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	
Package Group [Note 6] [Note 11] [Note 14]	This specifies the package group to be installed.	(Selected) = Installed (Cleared) = 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.	(Selected) = Bootloader installed This item is always checked.	
Install Bootloader on	This specifies the installation destination of a bootloader.	MBR = Installed on Master Boot Record	
Kernel parameters	This specifies a kernel parameter.	This item is always set to "MBR."  Enter the character strings specified as the kernel parameter.	
Security-Enhanced Linux		[Omittable]	
SE Linux	This specifies whether to use SE Linux.	This item is always set to "Disabled."	
Authentication	This specifies whether to use 52 Zinda.	This tent is arways set to Bisacied.	
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	(Selected) = Application installed	
	on distribution. [Note 7]		
Executing Script after Installation [Note 8]		<u> </u>	
Execute Script after Installation	This specifies whether to execute a script after installation.	(Selected) = 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.	

Item Name		Description	Parameter
	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. If the server to which the profile is assigned has more than one array controller, disable all but the array controller to be configured.

[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	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 (Note: For ServerView Suite DVD V13.18.12 or later, this is not installed even if it is specified.)	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

Applications	SLES 11 SP4(x86)	SLES 11 SP4(Intel64)	SLES 12 type	SLES 15 type (1)	SLES 15 type (2)
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	(Selected) = Obtained from DNS
	name obtained from DNS.	(Cleared) = 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	(Selected) = DHCP used
	address or use DHCP for the IP address of Management LAN.	(Cleared) = Fixed IP specified
	Wanagement LAW.	[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 (Selected) or "unspecified" to (Cleared), 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 (Selected) or "unspecified" to (Cleared), 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/4000E Partitions

### 4.1 Card Settings

Set for each card that you want to use.

Item Name		Item Name	Description	Parameter
Number of Onboard Card Slots		er of Onboard Card Slots	Select the number of onboard.	Select the item from the pull-down menu.
N	umb	er of Card Slots	Select the number of cards to use.	Select the item from the pull-down menu.
Card Slot		Slot		
Onboard <number></number>		nboard <number></number>		
		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.
Card Slot <number></number>				
		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.



- 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.

- If there are multiple on-board slots with different slot numbers, specify them in the order in which the on-board slot numbers are counted from the beginning. The on-board slot numbers can be found on the [Component] tab in the node details.
- 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 "Server PRIMEQUEST 3000 Series Enterprise Model Administration Manual" "Appendix D Physical Locations and BUS Numbers of Builtin I/O, and PCI Slot Mounting Locations and Slot Numbers."

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

How to display the manual:

Select "Select a new Product" - [Product search]. Enter "PRIMEQUEST" and select [Continue].

Select the appropriate model for PRIMEQUEST and download the manual from [Documentation] - [Manuals].

- For the PCI card slot of the PRIMEQUEST4000E 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 correspondence, refer to "iRMC S6 - Web Interface" in PRIMEQUEST 4000.

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

How to display the manual:

Select "Select a new Product" - [Product search]. Enter "PRIMEQUEST" and select [Continue].

Select the appropriate model for PRIMEQUEST and download the manual from [Documentation] - [Manuals].

#### 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.	(Selected) = Use virtual address.
Use SR-IOV	Select if using SR-IOV.	(Selected) = Use SR-IOV
Disable Boot Menu (F12)	Select to not display the boot menu.	(Selected) = 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.	(Selected) = 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.	(Selected) = 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.	(Selected) = Enable SR-IOV
SMUX setting [Note 6]	Select SMUX setting	Select from the screen.

[Note 1]: For PRIMERGY M6 series or later, or for 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			Virtual IO [l	UEFI Boot]		
CSM Configuration		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, clear the "SR-IOV" checkbox.

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



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	If the function type is iSCSI				

Item Name	Description	Parameter
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.
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.
arget 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 b made up of less than 223 alphanumerica 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].

Item Name	Description	Parameter
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.	(Selected) = Assign Virtual Addresses
	Virtual Address [Note 1]		
	Auto assignment	Select if enabling automatic assignment from Pool Management.	(Selected) = 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 (-).

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



- 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)

# Chapter 5 RAID Setting Items of Profiles for PRIMERGY Servers

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

#### **RAID** tab

	Item Name	Description	Parameter
RA	AID & Disk Configuration [Note 1]		
	RAID Level	This configures a new RAID	Select the configuring RAID level from the pull-down menu.
	Set Number of Disks Manually	Selects when specifying the number of disks used for the RAID configuration	(Selected) = to specify number of disks
	Number of Disks [Note 2]	Specifies the number of disks to use for the RAID configuration	(when selecting other than RAID1+0)  Select the number of disks to be added in the RAID from the pull-down menu.  (when selecting RAID1+0)  Select the number of disks to be added in one disk group from the pull-down menu.
	Number of Disk Groups	Specifies the number of disk groups to use for the RAID configuration	(when selecting RAID1+0)  Select the number of disk groups from the pull-down menu.

[Note 1]: PRIMERGY BX series are not supported.

[Note 2]: RAID cannot be configured as specified for the number of disks depending on the RAID level. RAID is configured within the support range of the target server.

# Chapter 6 Setting Items of Profiles for Storages

This section describes the items that you can 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.

### **6.1 Profiles for ETERNUS DX**

#### **RAID & Disk Configuration tab**

Item Name	Description	Parameter
RAID Configuration		
RAID Group Name	This specifies a RAID group name.	Enter the RAID group names.
	<b>G</b> Note	You can enter 1 to 16 characters.
	You cannot specify the RAID group name already set up for a device.	
RAID Level	This specifies the RAID level of a disk	Select the item from the pull-down menu.
	array to be configured.	RAID1, RAID5, RAID6 or RAID1+0
Number of Disks	This specifies the number of disks built in	Specify the number of disks.
	a disk array.	The selectable number differs depending on the selected RAID level.
Disk Inch	This specifies the type of disk drive (drive	Select the item from the pull-down menu.
	outer size).	2.5 Inch or 3.5 Inch
Disk Type	This specifies the type of disk drive (interface type) built in a disk array.	Select the item from the pull-down menu.
		The selectable type differs depending on the models of ETERNUS and selected disk inch.
		SAS, NL-SAS, SED or SSD
Disk Size	This specifies the type of disk drive (disk size) built in a disk array.	Select the item from the pull-down menu.
		The selectable size differs depending on the selected disk inch and disk type.
		300 GB, 450 GB, 1 TB, etc.
Volume	<u></u>	<b>.</b>
Volume Name	This specifies the name of a volume to be created on a RAID group.	Specify the name of a volume to be created on the RAID group.
	You cannot specify the volume name	You can enter 1 to 16 characters.
	already set up for a device.	
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		
			Specifying "max" for the last volume size causes all the remaining size of the RAIL group to be allocated.		
			For ETERNUS DX60 S2, you cannot specify "max."		
			MB, GB or TB		
lobal	Hot Spare				
Di	sk Inch	This specifies the type of disk drive (drive	Select the item from the pull-down menu		
		outer size) defined as a hot spare.	2.5 Inch or 3.5 Inch		
Di	sk Type	This specifies the type of disk drive	Select the item from the pull-down menu		
		(interface type) defined as a hot spare.	The selectable type differs depending on the models of ETERNUS and selected disinch.		
			SAS, NL-SAS, SED or SSD		
Di	sk Size	This specifies the type of disk drive (disk	Select the item from the pull-down menu		
		size) defined as a hot spare.	The selectable size differs depending on the selected disk inch and disk type.		
			300 GB, 450 GB, 1 TB, etc.		
ost A	Affinity	·			
LU	JN Group				
	LUN Group Name	This specifies a LUN group name.	Specify the LUN group name strings.		
		<b>G</b> Note			
		You cannot specify the LUN group name already set up for a device.			
	Volumes				
	Volume Name	This specifies the name of a volume which belongs to a LUN group.	Enter the name of the volume which belongs to the LUN group.		
			Specify the volume created by a profile of the volume already created on a device.		
Po	rt Group				
Po	ort Group Port Group Name	This specifies a port group name.	Specify the port group name.		
Po		This specifies a port group name.  Note	Specify the port group name.  You can enter 1 to 16 characters.		
Po		You cannot specify the port group name already set up for a device.			
Po	Port Group Name	Note  You cannot specify the port group name			
Po		You cannot specify the port group name already set up for a device.  This specifies the port number which	You can enter 1 to 16 characters.  Specify the port number which belongs		
	Port Group Name  Ports  Port Number	You cannot specify the port group name already set up for a device.			
	Port Group Name  Ports	You cannot specify the port group name already set up for a device.  This specifies the port number which	You can enter 1 to 16 characters.  Specify the port number which belongs		

	Item Name	Description	Parameter	
		<b>G</b> 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	<u> </u>		
	Host Name	This specifies the host name which belongs to a host group.	Specify the name of the host which belongs to the host group.	
		You cannot specify the host name already set up for a device.	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	Enter iSCSI name.  Enter "iqn." or "eui." at the beginning.	
		group is iSCSI name.		
	Host WWN	This specifies the host WWN which defines a host name.	Enter the host WWN.  You can enter 16 hexadecimal characters.	
		You can enter it when the host type of a host group is FC.		
Detai	l Settings			
P	re Run Command	The control command to execute on ETERNUS before executing profile assignment (RAID/Hot Spare/Host Affinity settings) is described.	Refer to "CLI User Guide" of your device for the described contents.	
		Leave the checkbox cleared unless a special request is made.		
P	Post Run Command	The control command to execute on ETERNUS after completion of profile assignment (RAID/Hot Spare/Host Affinity settings) is described.	Refer to "CLI User Guide" of your device for the described contents.	
		Leave the checkbox cleared unless a special request is made.		

# 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.

# 6.2 Profiles for ETERNUS NR/ETERNUS AX/ETERNUS HX/ETERNUS AC

#### SNMP tab

Item Name		Description	Parameter
SNM	P Service	•	
S	NMP Service Setting	This specifies whether to use SNMP service settings.	(Selected) = Enabled (Cleared) = 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
Com	munity (for Host)		
C	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)		
Ţ	Jser Name	This specifies an SNMP user name.	Enter the user name as a character string with between 3 and 32 characters.
A	Authentication Setting	This specifies whether to enable SNMP authentication settings.	(Selected) = 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.
P	rivacy Setting	This specifies whether to enable SNMP privacy settings.	(Selected) = 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 H	ost	•	
Α	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.
Į	Jser 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.	(Selected) = Enabled
	Server Set	ting	This specifies whether to enable the settings for a time-provider server.	(Selected) = Enabled (Cleared) = 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.	3 = NTP protocol version 3, which is based on the RFC#1305 Internet standard
			4 = NTP protocol version 4, which is based on the RFC#5905 Internet standard
			auto(Default) = Select the NTP protocol version in Data ONTAP

# Chapter 7 Setting Items of Profiles for Switches

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

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

#### 7.1 Profiles for SR-X

#### SNMP tab

Item Name		Description	Parameter
SNMP S	Service		
SNI	MP Service Setting	This specifies whether to use SNMP service settings.	(Selected) = Enabled (Cleared) = Disabled
	SNMP Agent and Trap (ON/OFF)	This specifies whether to enable or disable SNMP agents and traps.	ON = Function enabled OFF = Function disabled
SNI	MP Agent Setting	This specifies whether to use SNMP agent settings.	(Selected) = Enabled (Cleared) = Disabled
	Agent Address	This specifies whether to enable an agent address.	(Selected) = Agent address enabled  Additionally, enter the agent address in IPv4 format.
	SNMP Engine ID	This specifies whether to enable an SNMP engine ID.	(Selected) = SNMP engine ID enabled Additionally, enter the SNMP engine ID.
SNMP l	Host (SNMPv1 or v2c)		
Nur	mber	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Add	dress	This specifies the IP address of an SNMP host.	Specify the IP address of the SNMP host in IPv4 format.
Cor	nmunity Name	This specifies the community name of an SNMP host.	Enter the community name of the SNMP host.
Traj	р Туре	This specifies whether to send SNMP traps.	Select the item from the pull-down menu.  Off, v1 or v2c
Wri	ite	This specifies whether to permit writing from an SNMP manager.	(Selected) = Enabled (Cleared) = Disabled
SNMP	User (SNMPv3)		
Nur	mber	This specifies an SNMP user definition number.	Select the item from the pull-down menu.
Use	er Name	This specifies an SNMP user name.	Enter the SNMP user name.
Add	dress Setting	This specifies whether to enable an SNMP host address.	(Selected) = Enabled (Cleared) = 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	(Selected) = Enabled
	trap settings.	(Cleared) = 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	(Selected) = Enabled
	authentication protocol.	(Cleared) = Disabled
Authentication Protocol	This specifies the SNMP authentication	Select the item from the pull-down menu.
	protocol.	None, MD5 or SHA
Authentication Password	This specifies an SNMP authentication password.	Enter the SNMP authentication password.
ivacy Setting	This specifies whether to enable SNMP	(Selected) = Enabled
	privacy settings.	(Cleared) = 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	(Selected) = Enabled
	MIB read.	Additionally, specify the item from the pull-down menu.
		none: Read not permitted
		all: Read permitted
Write	This specifies whether to enable SNMP	(Selected) = Enabled
	MIB write.	Additionally, specify the item from the pull-down menu.
		none: Write not permitted
		all: Write permitted
Notify	This specifies whether to enable SNMP	(Selected) = Enabled
	MIB trap notifications.	Additionally, specify the item from the pull-down menu.
		none: Read-out not permitted
		all: Read-out permitted

#### **Authentication tab**

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

#### NTP tab

	Item Name	Description	Parameter
Au	to Time Adjustment		
	Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Selected) = Enabled
	Server Setting	This specifies whether to enable the	(Selected) = Enabled
		settings for a time-provider server.	(Cleared) = Disabled
	Protocol	This specifies the protocol to be used.	Time = TCP used
	(Time/SNTP)		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.	(Selected) = Enabled
			(Cleared) = Disabled
	Interval Time	This specifies the interval of auto time	On Startup = Adjusted upon startup
	(On Startup/Period)	adjustment.	Period = Execute during arbitrary period. Additionally, enter the period on the screen.
	Time Zone Setting	This specifies whether to enable time	(Selected) = Enabled
		zone setting.	(Cleared) = 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		
Sī	STP (Spanning Tree Protocol) Setting				
	STP	This specifies whether to enable STP settings.	(Selected) = Enabled  Additionally, select the item from the pull-down menu.		

# 7.2 Profiles for VDX

#### SNMP tab

Item Name		Item Name	Description	Parameter	
Sì	SNMP Service				
	SNMP Service Setting		This specifies whether to use SNMP	(Selected) = Enabled	
			service settings.	(Cleared) = Disabled	
	SNMP Agent and Trap This spe	This specifies whether to enable or disable	ON = Function enabled		
		(ON/OFF) SNMP agents and traps.	SNMP agents and traps.	OFF = Function disabled	
Group (for Community and User)					
	Gı	roup Name	This specifies a group name.	Enter the group name.	
	Sì	NMP 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	(Selected) = Enabled
	SNMPv3.	Additionally, select the item from the pull-down menu.
		auth, noauth or priv
Read	This specifies whether to enable SNMP	(Selected) = Enabled
	MIB read.	Additionally, specify the item from the pull-down menu.
		none: Read not permitted
		all: Read permitted
Write	This specifies whether to enable SNMP	(Selected) = Enabled
	MIB write.	Additionally, specify the item from the pull-down menu.
		none: Write not permitted
		all: Write permitted
Notify	This specifies whether to enable SNMP	(Selected) = Enabled
	MIB trap notifications.	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	(Selected) = Enabled
	community belongs to.	Additionally, select a selected group from the pull-down menu.
Write	This specifies whether to enable SNMP	(Selected) = Enabled
	community write.	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	Enter the SNMP trap sending port number.
	number.	A value between "0" and "65535" can be specified.
User (for v3 Host)		specified.

	Item Name	Description	Parameter
U	ser Name	This specifies an SNMP user name.	Enter the user name between 1 and 16 characters.
G	roup	This specifies an SNMP group name.	Select the group already set up from the pull-down menu.
A	uthentication Setting	This specifies whether to enable SNMP authentication settings.	(Selected) = 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.
Pı	rivacy Setting	This specifies whether to enable SNMP privacy settings.	(Selected) = 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 Ho	st		
A	ddress	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.
U	ser Name	This specifies an SNMP user name.	Select the user already set up from the pull-down menu.
Se	everity Level	This specifies the SNMP trap level.	Select the item from the pull-down menu.
N	otify Type	This specifies an SNMP notification type.	Select the item from the pull-down menu. traps, informs
Е	ngine ID	This specifies an SNMP engine ID.	Specify the engine ID "0:0:0:0:0:0:0:0:0:0:0 to "FF:FF:FF:FF:FF:FF:FF:FF: with strings.
			Its character strings pattern is the same as that of MAC address.
U	DP 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		Item Name	Description	Parameter	
A	Account				
	Ch	nange Administrator Password	This specifies whether to change the administrator password.	(Selected) = Administrator password changed	
		Password	This specifies a new administrator password.	Enter the password between 8 and 32 characters.	

#### NTP tab

	Item Name	Description	Parameter
A	uto Time Adjustment		
		This specifies whether to enable auto time adjustment.	(Selected) = Enabled
		This specifies whether to enable the settings for a time-provider server.	(Selected) = Enabled (Cleared) = Disabled
	1 1 1	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.
	~ ~	This specifies whether to enable time zone setting.	(Selected) = Enabled (Cleared) = Disabled
	Region City	This specifies region information.	Enter the region information in the form of (Region)/(City).

# 7.3 Profiles for PSWITCH 2048P/T PSWITCH 4032P

#### SNMP tab

	Item Name	Description	Parameter
SN	MP Service		
	SNMP Service Setting	This specifies whether to use SNMP	(Selected) = Enabled
		service settings.	(Cleared) = Disabled
	SNMP Agent and Trap	This specifies whether to enable or disable	ON = Function enabled
	(ON/OFF)	SNMP agents and traps.	OFF = Function disabled
Gro	up (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	(Selected) = Enabled
		SNMPv3.	Additionally, select the item from the pull-down menu.
			auth, noauth or priv
	Read	This specifies whether to enable SNMP MIB read.	(Selected) = Enabled
			Additionally, specify the item from the pull-down menu.
			none: Read not permitted
			Default: Read permitted
	Write	This specifies whether to enable SNMP	(Selected) = Enabled
		MIB write.	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.	(Selected) = Enabled

Item Name	Description	Parameter
		Additionally, specify the item from the pull-down menu.
		none: Read-out not permitted
		Default: Read-out permitted
ommunity (for Host)		
Community Name	This specifies an SNMP community name.	Enter the community name strings.
Group	This specifies the group which a	(Selected) = Enabled
	community belongs to.	Additionally, select a selected group from the pull-down menu.
Write	This specifies whether to enable SNMP	(Selected) = Enabled
	community write.	Additionally, select the item from the pull-down menu.
		Enabled or Disabled
ost		
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	Enter the SNMP trap sending port number.
	number.	A value between "1" and "65535" can be specified.
ser (for v3 Host)	<u>'</u>	
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.	(Selected) = 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.	(Selected) = 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.
3 Host	l	

	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 pulldown 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.	(Selected) = Administrator password changed
		Password	This specifies a new administrator password.	Enter the password between 8 and 64 characters.

#### NTP tab

Item Name	Description	Parameter
uto Time Adjustment	•	
Auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Selected) = Enabled
Server Setting	This specifies whether to enable the	(Selected) = Enabled
	settings for a time-provider server.	(Cleared) = 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 of 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 SNTI server.
Interval Setting	This specifies whether to enable the	(Selected) = Enabled
	interval for auto time adjustment.	(Cleared) = 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	(Selected) = Enabled
	zone setting.	(Cleared) = 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

# 7.4 Profiles for CFX

#### SNMP tab

	Item Name	Description	Parameter
SNMP S	Service		
SNM	MP Service Setting	This specifies whether to use SNMP	(Selected) = Enabled
		service settings.	(Cleared) = Disabled
5	SNMP Agent and Trap	This specifies whether to enable or	ON = Function enabled
	(ON/OFF)	disable SNMP agents and traps.	OFF = Function disabled
SNM	MP Agent Setting	This specifies whether to use SNMP	(Selected) = Enabled
		agent settings.	(Cleared) = Disabled
	Domain ID	This specifies a domain ID.	Enter the domain ID.
	Agent Address	This specifies whether to enable an	(Selected) = Agent address enabled
		agent address.	Additionally, enter the IP address strings of the agent address.
S	SNMP Engine ID	This specifies whether to enable an	(Selected) = SNMP engine ID enabled
		SNMP engine ID.	Additionally, enter the SNMP engine ID.
SNMP H	Host (SNMPv1 or v2c)		
Num	aber	This specifies an SNMP host definition number.	Select the item from the pull-down menu.
Add	ress	This specifies the IP address of an SNMP host.	Enter the IP address of the SNMP host.
Com	nmunity Name	This specifies the community name of an SNMP host.	Enter the community name of the SNMP host.
Trap	Туре	This specifies whether to send SNMP	Select the item from the pull-down menu.
		traps.	Off, v1 or v2c
Writ	re	This specifies whether to permit writing	(Selected) = Enabled
		from an SNMP manager.	(Cleared) = Disabled
SNMP U	Jser (SNMPv3)		
Num	ber	This specifies an SNMP user definition number.	Select the item from the pull-down menu.
User	Name	This specifies an SNMP user name.	(Selected) = Enabled
			Additionally, enter the SNMP user name strings.
Add	ress Setting	This specifies whether to enable an	(Selected) = Enabled
		SNMP host address.	(Cleared) = 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	(Selected) = Enabled
		trap settings.	(Cleared) = 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	(Selected) = Enabled
	authentication protocol.	(Cleared) = Disabled
Authentication Protocol	This specifies the SNMP authentication	Select the item from the pull-down menu.
	protocol.	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	(Selected) = Enabled
	privacy settings.	(Cleared) = Disabled
Privacy Protocol	This specifies the SNMP privacy	Select the item from the pull-down menu.
	protocol.	None or DES
	This specifies an SNMP privacy password.	Enter the SNMP privacy password.
Read	This specifies whether to enable SNMP MIB read.	(Selected) = 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.	(Selected) = Enabled
		Additionally, specify the item from the pull-down menu.
		none: Write not permitted
		all: Write permitted
Notify	This specifies whether to enable SNMP	(Selected) = Enabled
	MIB trap notifications.	Additionally, specify the item from the pull-down menu.
		none: Notifications not permitted
		all: Notifications permitted

#### Interface tab

	Item Name	Description	Parameter
In	terface 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.	(Selected) = Endpoint
	LLDP	This specifies whether to enable LLDP.	(Selected) = 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.	(Selected) = 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
Accou	nt		
Cl	nange Administrator Password	This specifies whether to change the administrator password.	(Selected) = Administrator password changed
	Password	This specifies a new administrator password.	Enter the password.
AAA	Configuration		
A	AA Group ID	This specifies AAA Group ID.	Select the item from the pull-down menu. 0-9
Li	DAP Function	This specifies whether to enable LDAP function.	Enable = Function enabled  Disable = Function disabled
Li	DAP Setting	This specifies whether to enable LDAP client setting.	(Selected) = Enabled (Cleared) = 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.	(Selected) = Enabled (Cleared) = 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.	(Selected) = Enabled (Cleared) = 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.	(Selected) = Enabled
		Additionally, enter the RDN.
		Ex.:CN
Bind Name except RDN	This specifies whether to enable bind	(Selected) = Enabled
	names other than RDN.	Additionally, enter a bind name other than RDN.
		Ex.: CN=user, DC=local
Admin	This specifies whether to enable	(Selected) = Enabled
	administrator class information.	(Cleared) = 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	Auto Time Adjustment				
A	auto Time Adjustment	This specifies whether to enable auto time adjustment.	(Selected) = Enabled		
	Server Setting	This specifies whether to enable the settings for a time-provider server.	(Selected) = Enabled (Cleared) = Disabled		
	Protocol (Time/SNTP)	This specifies the protocol to be used.	Time = TCP used SNTP = UDP used		
	Address  Interval Setting	This specifies the IP address of a time-provider server.	Enter the IP address of the time-provider server.		
		This specifies whether to enable the interval for auto time adjustment.	(Selected) = Enabled (Cleared) = 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	Time Zone Setting	This specifies whether to enable time zone setting.	(Selected) = Enabled (Cleared) = 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 8 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.

# **8.1 Monitoring Policy**

Item Name	Description	Parameter
Enable the monitoring policy	This specifies whether to enable the	(Selected) = Enable
	monitoring policy.	(Cleared) = Disable
	<b>G</b> Note	
	If you are going to use a Monitoring Policy when creating profiles or policies, select	
	(Selected) for this item.	
Assign the monitoring policy when registering	This specifies whether to assign the	(Selected) = Enable
discovered nodes	monitoring policy when registering discovered nodes.	(Cleared) = Disable
	<b>G</b> Note	
	For nodes to which monitoring policy is	
	assigned cannot assign the profile for specific model. To use profile for specific	
	model, do not assign the monitoring policy.	
SNMP Generic Configuration	T	
SNMP Enabled	This specifies whether to enable SNMP.	Enable = SNMP enabled
		Disable = SNMP disabled
SNMP Port (Default: 161)	This specifies a port number where an SNMP service is in an idle state.	Enter the port number.
		UDP 161 by default
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.	Select the item from the pull-down menu.
		SNMPv1, SNMPv2c
Time		
Time Mode	This specifies whether to obtain the time	System RTC = Time is obtained from
	setting from a managed server or to obtain it from an NTP server.	the system clock
		NTP Server = Time is synchronized with that of an NTP server which
		operates based on specific time as its

Item Name	Description	Parameter
		reference time source by using Network Time Protocol (NTP)
RTC Time Mode	You can select whether to display time in UTC (Coordinated Universal Time) format or in local time format.	Local Time = time displayed in local time format  UTC = time displayed in UTC (Coordinated Universal Time) format
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.

Туре	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