

FUJITSU Software Infrastructure Manager for PRIMEFLEX V2.3

A decorative horizontal band with a dark red background and glowing, swirling white and light red lines that create a sense of motion and depth.

Parameter List

CA92344-2531-03
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Preface

Purpose

This manual describes of the parameters to be set for each function of FUJITSU Software Infrastructure Manager for PRIMEFLEX (hereafter referred to as "ISM for PRIMEFLEX"), which adds functions for expanding virtualized platforms to FUJITSU Software Infrastructure Manager (hereafter referred to as "ISM"). ISM is operation and management software that manages and operates ICT devices, such as servers and storages, and facility devices, such as PDUs, comprehensively.



Note

"Infrastructure Manager for PRIMEFLEX" is available only in Japan, APAC, and North America.

Product Manuals

| Manual Name | Description |
|---|--|
| FUJITSU Software Infrastructure Manager V2.3 Infrastructure Manager for PRIMEFLEX V2.3 User's Manual | 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 the manual, it is written as "User's Manual." |
| FUJITSU Software Infrastructure Manager V2.3 Infrastructure Manager for PRIMEFLEX V2.3 Operating Procedures | This manual describes the installation procedure, and usages for the operations of this product. In the manual, it is written as "Operating Procedures." |
| FUJITSU Software Infrastructure Manager V2.3 Infrastructure Manager for PRIMEFLEX V2.3 REST API Reference Manual | This manual describes how to use required API, samples and parameter information when cooperating application created by customer with ISM. In the manual, it is written as "REST API Reference Manual." |
| FUJITSU Software Infrastructure Manager V2.3 Infrastructure Manager for PRIMEFLEX V2.3 Messages | This manual describes each type of message output when using ISM and ISM for PRIMEFLEX, and the actions to take for these messages. In the manual, it is written as "ISM Messages." |
| FUJITSU Software Infrastructure Manager for PRIMEFLEX V2.3 Messages | This manual describes each type of message output when using ISM for PRIMEFLEX and the actions to take for these messages. In the manual, it is written as "ISM for PRIMEFLEX Messages." |
| FUJITSU Software Infrastructure Manager V2.3 Infrastructure Manager for PRIMEFLEX V2.3 Items for Profile Settings (for Profile Management) | This manual describes detailed information for the items set when creating profiles for managed devices. In the manual it is written as "Items for Profile Settings (for Profile Management)." |
| FUJITSU Software Infrastructure Manager for PRIMEFLEX V2.3 Parameter List | This manual describes the automatic setting contents for Cluster Creation and Cluster Expansion, which are functions available for ISM for PRIMEFLEX, and Cluster Definition Parameters used for these functions. In the manual, it is written as "ISM for PRIMEFLEX Parameter List." |
| FUJITSU Software Infrastructure Manager V2.3 Infrastructure Manager for PRIMEFLEX V2.3 Glossary | The glossary describes definitions of the terminology that you require to understand for using this product. In the manual, it is written as "Glossary." |

| Manual Name | Description |
|--|---|
| FUJITSU Software Infrastructure Manager Plug-in for Microsoft System Center Operations Manager 1.2 Setup Guide (Windows Server 2012 R2 version) | This manual describes the precautions and reference information for ISM Plug-in for Microsoft System Center Operations Manager 1.2 (Windows Server 2012 R2 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager 1.2 Setup Guide (Windows Server 2012 R2 version) | This manual describes the precautions and reference information for ISM Plug-in for Microsoft System Center Virtual Machine Manager 1.2 (Windows Server 2012 R2 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for Microsoft System Center Operations Manager 1.2 Setup Guide (Windows Server 2016 version) | This manual describes the precautions and reference information for ISM Plug-in for Microsoft System Center Operations Manager 1.2 (Windows Server 2016 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager 1.2 Setup Guide (Windows Server 2016 version) | This manual describes the precautions and reference information for ISM Plug-in for Microsoft System Center Virtual Machine Manager 1.2 (Windows Server 2016 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for Microsoft System Center Operations Manager 1.2 Setup Guide (Windows Server 2019 version) | This manual describes the precautions and reference information for ISM Plug-in for Microsoft System Center Operations Manager 1.2 (Windows Server 2019 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager 1.2 Setup Guide (Windows Server 2019 version) | This manual describes the precautions and reference information for ISM Plug-in for Microsoft System Center Virtual Machine Manager 1.2 (Windows Server 2019 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for VMware vCenter Server 1.2 Setup Guide (vCenter Server 6.0 version) | This manual describes the precautions and reference information for ISM Plug-in for VMware vCenter Server 1.2 (vCenter Server 6.0 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for VMware vCenter Server Appliance 1.2 Setup Guide (vCenter Server Appliance 6.0 version) | This manual describes the precautions and reference information for ISM Plug-in for VMware vCenter Server 1.2 (vCenter Server Appliance 6.0 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for VMware vCenter Server 1.2 Setup Guide (vCenter Server 6.5/6.7 version) | This manual describes the precautions and reference information for ISM Plug-in for VMware vCenter Server 1.2 (vCenter Server 6.5/6.7 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Plug-in for VMware vCenter Server Appliance 1.2 Setup Guide (vCenter Server Appliance 6.5/6.7 version) | This manual describes the precautions and reference information for ISM Plug-in for VMware vCenter Server 1.2 (vCenter Server Appliance 6.5/6.7 version), from installation to operation. |
| FUJITSU Software Infrastructure Manager Management Pack for VMware vRealize Operations 1.0 Setup Guide | This manual describes the precautions and reference information for ISM Management Pack for VMware vRealize Operations 1.0, from installation to operation. |

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 respective hardware products for management, refer to the manuals of the relevant hardware.

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

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

Intended Readers

This manual is intended for readers who consider using the product for comprehensive management and operation of such ICT devices and possess basic knowledge about hardware, operating systems, 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 key labeled "Enter"; [Ctrl]+[B] means hold down the key labeled "Ctrl" or "Control" and then press the B key.

Symbols

Items that require your special caution are preceded by the following symbols.



.....
Describes the content of an important subject.
.....



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

Variables: <xxx>

Represents variables that require replacement by numerical values or text strings in accordance with the environment you are using.

Example: <IP address>

Terms

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

High Risk Activity

The Customer acknowledges and agrees that the Product is designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use, household use, and ordinary industrial use, but is not designed, developed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter "High Safety Required Use"), including without limitation, nuclear reaction control in nuclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system. The Customer, shall not use the Product without securing the sufficient safety required for the High Safety Required Use. In addition, Fujitsu (or other affiliate's name) shall not be liable against the Customer and/or any third party for any claims or damages arising in connection with the High Safety Required Use of the Product.

To Use This Product Safely

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

Modifications

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

Disclaimers

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Modification History

| Edition | Publication Date | Section | Modification Overview |
|---|--|---|---|
| 01 | August 2018 | - | First edition |
| 02 | October 2018 | 1.2 PRIMEFLEX for Microsoft Storage Spaces Direct Automatic Setting Values List | New addition (ISM 2.3.0.b or later) |
| | | 3.1 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX for VMware vSAN V1 (Cluster Creation) | Added precautions (ISM 2.3.0.b or later) |
| | | | Added setting items of the following parameters - Basic Information |
| | | | Added notes of the following parameters (ISM 2.3.0.b or later) - Cluster Details - DNS tab - Cluster Details - LDAP tab - Node Details - iRMC tab - Node Details - OS tab |
| 3.2 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX for Microsoft Storage Spaces Direct (Cluster Creation) (ISM 2.3.0.b or later) | New addition (ISM 2.3.0.b or later) | | |
| 3.3 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX HS V1.0/V1.1/ | Added precautions (ISM 2.3.0.b or later) | | |

| Edition | Publication Date | Section | Modification Overview |
|---------|------------------|--|--|
| | | PRIMEFLEX for VMware vSAN V1 (Cluster Expansion) | Added notes of the following parameters (ISM 2.3.0.b or later) <ul style="list-style-type: none"> - Cluster Details - DNS tab - Cluster Details - LDAP tab - Node Details - iRMC tab - Node Details - OS tab |
| | | 3.4 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX for Microsoft Storage Spaces Direct version (Cluster Expansion) | Added precautions (ISM 2.3.0.b or later) Added the following parameters (ISM 2.3.0.b or later) <ul style="list-style-type: none"> - Cluster Details - Storage Pool tab Added notes of the following parameters (ISM 2.3.0.b or later) <ul style="list-style-type: none"> - Cluster Details - LDAP tab - Cluster Details - Network tab - Node Details - iRMC tab - Node Details - OS tab - Node Details - Virtual Switch tab |
| 03 | December 2018 | Chapter 1 Automatic Setting Values Lists for Cluster Creation Chapter 2 Automatic Setting Values Lists for Cluster Expansion Chapter 3 Setting Items Lists for Cluster Definition Parameters | Modified words |

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Chapter 1 Automatic Setting Values Lists for Cluster Creation

This chapter describes the setting values automatically set by executing the Cluster Creation.

1.1 PRIMEFLEX for VMware vSAN V1 Automatic Setting Values List

This section describes the automatic setting values for PRIMEFLEX for VMware vSAN V1.

The notation in the "Modification" column of the following table shows whether Cluster Creation can be executed if the setting values of the existing cluster have been changed from the settings of the PRIMEFLEX configuration. (Y: Changeable, N: Not changeable)

ISM-[Management]-[Nodes]-[<Node name for creating a new cluster>]-[Node List]

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| [Communication methods] of [Edit] Wizard | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' user] - [New Password]* | - |
| [Properties] tab | | |
| Web i/f URL | https://<IP address of iRMC>/ | - |
| [Log Collection Settings] tab | | |
| Retention Period | | |
| Event Log (days) | 7 | - |
| Operation Log (days) | 7 | - |
| Security Log (days) | 7 | - |
| Archived Log (generations) | 7 | - |
| Log Collection Target | | |
| Hardware Log | Enable | - |
| Operating System Log | Enable | - |
| Schedule | | |
| Enable schedule execution | Enable | - |
| Schedule Type | Specify day of the week | - |
| Day of the week | Every week | - |
| Day of the week | Saturday | - |
| Time | 0:00 | - |

ISM-[Management]-[Cluster]

| Setting Item | Setting Value | Modification |
|---------------------|--|--------------|
| Virtual Resource | | |
| VMware Virtual SAN | Add information of the created cluster | - |
| Other | | |
| Cluster Information | Add information of the created cluster | - |

ISM-[Settings]-[General]

| Setting Item | Setting Value | Modification |
|---------------------------|--|--------------|
| Cloud Management Software | | |
| Cloud Management Software | Add information of the created cluster | - |

ADVM of PRIMEFLEX for VMware vSAN configuration

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [DNS Manager]-[<Domain name>] | | |
| Host record for forward lookup zones [Note 1] | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* | - |
| Host code for reverse lookup zones [Note 1] | ESXi IP address of servers for creating a new cluster [Note 2] | - |

[Note 1]: It is not registered if not using an ADVM configured for PRIMEFLEX. When using an Active Directory currently configured in your environment, register it in "6.6.1.2 Register host records in DNS" In "Operating Procedures."

[Note 2]: For ESXi IP address of servers for creating a new cluster, the value corresponding to [Cluster Nodes Selection] - [Target nodes selection] - [Node Name] of Cluster Definition Parameters in the node information registered in ISM is searched and set.

User management for iRMC of servers for creating a new cluster

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [iRMC S4 user information]-[Create new user] | | |
| Name | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [User Name]* | - |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [Password]* | - |
| IPMI User Enabled | true | - |
| LAN Access Privilege | OEM | - |
| Serial Access Privilege | OEM | - |
| Privilege to Change User Accounts | true | - |
| Privilege to Change iRMC S4 Settings | true | - |
| AVR Use Privilege | true | - |
| Remote Storage Use Privilege | true | - |
| [iRMC S4 user information]-['admin' user] | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' User] - [New Password]* | - |

LDAP configuration for iRMC of servers for creating a new cluster

| Setting Item | Setting Value | Modification |
|---|--|--------------|
| [User management]-[LDAP configuration] [Note 1] | | |
| Enable LDAP | true | - |
| Enable LDAP SSL connection | false | - |
| Forbid log in for local users | [Cluster Details] - [LDAP] tab - [Local User Login]* | - |
| Always use SSL Login false | [Cluster Details] - [LDAP] tab - [Always use TLS/SSL Login]* | - |

| Setting Item | Setting Value | Modification |
|-----------------------|---|--------------|
| Directory Server Type | Active Directory [Cluster Details] - [LDAP] tab - [Directory Server Type]* | - |
| Domain name | [Cluster Details] - [LDAP] tab - [Domain Name]* | - |
| Department name | [Cluster Details] - [LDAP] tab - [Division]* | - |
| Primary | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Primary Host)]* | - |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Primary Host)]* | - |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Primary Host)]* | - |
| Backup | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Backup Host)]* | - |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Backup Host)]* | - |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Backup Host)]* | - |

[Note 1]: Not set if the check was removed for [Cluster Details] - [LDAP] tab - [Activate LDAP Settings] of Cluster Definition Parameters.

Setting for ESXi of servers for creating a new cluster

| Setting Item | Setting Value | Modification |
|---|---|--------------|
| OS | | |
| VMware ESXi | Install | - |
| ESXi Patch | Apply if a file is uploaded to ISM | - |
| SMI-S Provider | | |
| VMware SMIS Provider | Apply if a file is uploaded to ISM [Note 1] | - |
| Driver | | |
| ixgben driver | Enable | - |
| [Host Client]-[Management]-[System]-[Date and Time] | | |
| Current date and time | UTC (Coordinated Universal Time) | - |
| IP address of NTP server 1 | [Cluster Details] - [NTP] tab - [NTP Server1 (Host Name or Host IP Address)]* | - |
| IP address of NTP server 2 | [Cluster Details] - [NTP] tab - [NTP Server2 (Host Name or Host IP Address)]* | - |
| NTP decentralization | [Cluster Details] - [NTP] tab - [Max Interval between NTP Peer]* | - |
| Settings for NTP client firewall | Enable | - |
| Enabling of NTP client services | Enable | - |
| [Host Client]-[Management]-[Service] | | |
| Enable ESXi shell | Enable | - |
| Start ESXi shell | Start | - |
| Enable SSH service | Enable | - |
| Start SSH service | Start | - |
| Enable ESXi shell | Enable | - |

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| TSM | Stop | - |
| TSM-SSH | Stop | - |
| Start Likewise service | Start [Note 2] | - |
| [Host Client]-[Management]-[Security and user] | | |
| User Name | [Node Details] - [OS] tab - [Local User Settings] - [Administrator User ID]* | - |
| Password | [Node Details] - [OS] tab - [Local User Settings] - [Password]* | - |
| Authentication | Enable | - |
| Join domain [Note 3] | | |
| [Host Client]-[Storage]-[Datastore] | | |
| Renaming the local datastore | [Cluster Nodes Selection]-[Target nodes selection]-[Node Name]* [Note 4] | - |
| [Host Client]-[Network]-[TCP/IP stack]-[Default TCP/IP stack]* | | |
| IP address of secondary DNS server | [Cluster Details] - [DNS] tab - [IP Address (Secondary DNS Server)]* | - |
| DNS suffix | [Cluster Details] - [DNS] tab - [Domain Name]* | - |
| [Host Client]-[Host]-[Action]-[Privilege]-[Addition of user] | | |
| Role settings | Adding Admin privilege for Host/virtual machine | - |
| Other | | |
| FQDN settings | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]. [Cluster Details] - [DNS] tab - [Domain Name]* | - |
| IPv6 | Disable | - |
| Existing VM Network port group | Delete | - |
| SSL v3 | Enable | - |

[Note 1]: Setting value set if you are using VMware ESXi 6.5.0.5310538.

[Note 2]: Not started if the check was removed for [Cluster Details] - [LDAP] tab - [Activate LDAP Settings] of Cluster Definition Parameters.

[Note 3]: Not set if the check was removed for [Cluster Details] - [LDAP] tab - [Activate LDAP Settings] of Cluster Definition Parameters.

[Note 4]: Rename from datastore1.

Setting for the cluster vCSA

| Setting Item | Setting Value | Modification |
|----------------------------|---|--------------|
| Clusters | | |
| Data Center Name | [Basic Information] - [Data Center Name]* | - |
| Cluster Name | [Basic Information] - [Cluster Name]* | - |
| vSphere DRS | Disable | - |
| VMware EVC | Disable | - |
| vSphere HA | | |
| vSphere HA | Enable | - |
| Host failure response | Restart the virtual machine | - |
| Action for host quarantine | Power off the virtual machine then restart it | - |

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| Host failure response for the datastore in PDL (Permanent Device Loss) | Disable | - |
| Host failure response for APD (All Paths Down) | Disable | - |
| Monitor the virtual machine | Enable | - |
| Monitor an application | Disable | - |
| Detailed option das.registerRestartDisabledVMs | false | - |
| Detailed option das.useDefaultIsolationAddress | false | - |
| Detailed option das.isolationAddress0 | [Cluster Details] - [Function] tab - [vSphere HA Settings] - [Isolation Response Address 1]* | - |
| Detailed option das.isolationAddress1 | [Cluster Details] - [Function] tab - [vSphere HA Settings] - [Isolation Response Address 2]* | - |
| Virtual SAN | | |
| Virtual SAN | Enable | - |
| Add disk to storage | [Cluster Details] - [Function] tab - [vSAN Settings] - [Add Disks to Storage]* | - |
| Deduplication or compression | [Cluster Details] - [Function] tab - [vSAN Settings] - [Deduplication and Compression]* | - |
| vDS Settings [Note 1] | | |
| Number of vDS | Number of vDS specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings]* | - |
| vDS Name | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [vDS Name]* | - |
| Version | 6.5.0 | - |
| NIOC | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [NIOC]* | - |
| MTU | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [MTU]* | - |
| Multicast Filtering Mode | Basic | - |
| Switch Discovery Protocol Type | LLDP | - |
| Switch Discovery Protocol Operation | Standby | - |
| Number of uplink | Number of uplink names specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Uplink Name]* | - |
| Uplink name | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Uplink Name]* | - |
| vDS Settings - Port Group [Note 1] | | |
| Number of port groups | Number of port groups specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group]* | - |

| Setting Item | Setting Value | Modification |
|---|--|--------------|
| Port Group Name | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Port Group Name]* | - |
| Type | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Type]* | - |
| Port bindings | Static binding | - |
| Port allocation | Elastic | - |
| Number of Ports | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Number of Ports]* | - |
| Network resource pools | Default | - |
| VLAN Type | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [VLAN Type]* | - |
| VLAN ID | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [VLAN ID]* | - |
| NIOC Traffic | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [NIOC Settings] - [Traffic]* | - |
| NIOC Shares | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [NIOC Settings] - [Shares]* | - |
| NIOC Reservation | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [NIOC Settings] - [Reservation]* | - |
| NIOC Limit | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [NIOC Settings] - [Limit]* | - |
| Failover Priority Uplink Name | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Uplink Name]* | - |
| Failover Priority How to Distribute | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Failover Priority] - [How to Distribute]* | - |
| Failover Priority | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Failover Priority Settings] - [Priority Order]* | - |
| Policy Settings Security Promiscuous mode | Reject | - |
| Policy Settings Security MAC address change | Reject | - |
| Policy Settings Security Forged Transmits | Reject | - |
| Policy Settings Traffic shaping Status | Disable | - |
| Policy Settings Traffic shaping Average Bandwidth | - | - |
| Policy Settings Traffic shaping Peak Bandwidth | - | - |

| Setting Item | Setting Value | Modification |
|---|---|--------------|
| Policy Settings Traffic shaping Burst size | - | - |
| Policy Settings Failover and load balancing Load balancing | Root based on the virtual port source | - |
| Policy Settings Failover and load balancing Network fault detection | Link status only | - |
| Policy Settings Failover and load balancing Notification to switch | Yes | - |
| Policy Settings Failover and load balancing Failback | Enable | - |
| Datastore | | |
| Datastore name | [Cluster Details] - [Storage Pool] tab - [Storage Pool Name]* | - |
| Type | vsan | - |
| Default Storage Policy | Virtual SAN Default Storage Policy | - |

[Note 1]: Not set if vDS of the existing cluster was set.

Setting for hosts for creating a new cluster vCSA in the configuration of PRIMERGY RX series

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| Virtual Standard Switch (vSS) - vSwitch0 (Built-in Virtual Switch) | | |
| vSwitch0 | Delete | - |
| All vmnic | Delete | - |
| Management Network | Delete | - |
| Virtual Distribution Switch (vDS) - Virtual switch for Workload | | |
| Management traffic | - | - |
| VLANID | - | - |
| MTU | - | - |
| Management IP address | - | - |
| subnet mask | - | - |
| Failback | - | - |
| uplink1 | - | - |
| uplink2 | - | - |
| vmk0 | - | - |
| Virtual Distribution Switch (vDS) - Virtual switch for management | | |
| uplink1 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic2>]* | - |
| uplink2 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>]- [vmnic name<vmnic4>]* | - |

| Setting Item | | Setting Value | Modification |
|--|---|--|--------------|
| | vmk0 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings]-[vDS-2] - [Port Group<Network Port Group for Management>] - [Port Group Name]* | - |
| | vmk1 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group< Network Port Group for vSAN >] - [Port Group Name]* | - |
| | vmk2 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group< Network Port Group for vMotion >] - [Port Group Name]* | - |
| | IP address of vSAN network | [Node Details] - [vDS] tab - [vDS] - [Port Group< Network Port Group for vSAN >] - [IPv4 Address]* | - |
| | Subnet mask of vSAN network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [IPv4 Subnet Mask]* | - |
| | IP address of vMotion network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vMotion>] - [IPv4 Address]* | - |
| | Subnet mask of vMotion network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [IPv4 Subnet Mask]* | - |
| [Settings] - [System traffic] - [Management traffic] | | | |
| | Share | 30 | - |
| | Reserve | 500 | - |
| Disk | | | |
| | Hard disk Mark as local | true | - |
| | SSD Mark as SSD capacity other than for cache (When using an All Flash configuration) | True [Note 1] | - |
| Datacenter | | | |
| | Add nodes for creating a new cluster to the virtual network <Name of Virtual Distributed Switch for Workload> | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1] -[vDS Name]* | - |
| | Add nodes for creating a new cluster to the virtual network <Name of Virtual Distributed Switch for Management> | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [vDS Name]* | - |
| | Add hosts for creating a new cluster to datacenter | [Basic Information] - [Data Center Name]* | - |
| Cluster | | | |
| | Fault domain or stretch cluster | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* | - |
| | Add nodes for creating a new cluster to the cluster | [Basic Information] - [Cluster Name]* | - |

[Note 1]: Set if all is SSD. Note that it will not be set as an SSD for cache in the following case.

PRIMEFLEX for VMware vSAN V1: Among two types of SSD, the one with fewer number of units (if the number of units of SSD is the same, it is the one with less volume)

Setting for hosts for creating a new cluster vCSA in the configuration of PRIMERGY CX series

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| Virtual Standard Switch (vSS) - vSwitch0 (Built-in Virtual Switch) | | |
| vSwitch0 | Delete | - |
| All vmnic | Delete | - |
| Management Network | Delete | - |
| Virtual Distribution Switch (vDS) - Virtual switch for Workload | | |
| Management traffic | - | - |
| VLANID | - | - |
| MTU | - | - |
| Management IP address | - | - |
| subnet mask | - | - |
| Failback | - | - |
| uplink1 | - | - |
| uplink2 | - | - |
| vmk0 | - | - |
| Virtual Distribution Switch (vDS) - Virtual switch for management | | |
| uplink1 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic1>]* | - |
| uplink2 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>] - [vmnic name<vmnic3>]* | - |
| vmk0 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for Management>] - [Port Group Name]* | - |
| vmk1 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [Port Group Name]* | - |
| vmk2 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [Port Group Name]* | - |
| IP address of vSAN network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vSAN>] - [IPv4 Address]* | - |
| Subnet mask of vSAN network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [IPv4 Subnet Mask]* | - |
| IP address of vMotion network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vMotion>] - [IPv4 Address]* | - |
| Subnet mask of vMotion network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [IPv4 Subnet Mask]* | - |
| [Settings] - [System traffic] - [Management traffic] | | |
| Share | 30 | - |
| Reserve | 500 | - |
| Disk | | |

| Setting Item | | Setting Value | Modification |
|--------------|---|---|--------------|
| | Hard disk Mark as local | true | - |
| | SSD Mark as SSD capacity other than for cache (When using an All Flash configuration) | True [Note 1] | - |
| Datacenter | | | |
| | Add nodes for creating a new cluster to the virtual network <Name of Virtual Distributed Switch for Workload> | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1] - [vDS Name]* | - |
| | Add nodes for creating a new cluster to the virtual network <Name of Virtual Distributed Switch for Management> | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [vDS Name]* | - |
| | Add hosts for creating a new cluster to the cluster | [Basic Information] - [Data Center Name]* | - |
| Cluster | | | |
| | Fault domain or stretch cluster | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* | - |
| | Add nodes for creating a new cluster to the cluster | [Basic Information] - [Cluster Name]* | - |

[Note 1]: Set if all is SSD. Note that it will not be set as an SSD for cache in the following case.

PRIMEFLEX for VMware vSAN V1: Among two types of SSD, the one with fewer number of units (if the number of units of SSD is the same, it is the one with less volume)



Note

Description of "Setting Value"

- For setting values followed by *, the value is set by the value entered in the [Create Cluster] wizard.
- In some "Setting Value", not values but setting locations are described. For actual values, check the relevant setting locations.

Table 1.1 Automatic setting values of vmnic name and uplink name

| Setting Item | Setting Value | |
|--------------|--|--|
| | PRIMERGY RX M4 series | PRIMERGY CX M4 series |
| vmnic name | <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for workload) <ul style="list-style-type: none"> Workload port#1: vmnic1 Workload port#2: vmnic3 [Note 1] - vDS-2 (Virtual distributed switch for management) <ul style="list-style-type: none"> - Network Port Group for Management <ul style="list-style-type: none"> Active: vmnic2 Standby: vmnic4 [Note 1] - Network Port Group for vMotion <ul style="list-style-type: none"> Active: vmnic2 Standby: vmnic4 [Note 1] | <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for workload) <ul style="list-style-type: none"> Workload port#1: vmnic2 Workload port#2: vmnic4 [Note 1] - vDS-2 (Virtual distributed switch for management) <ul style="list-style-type: none"> - Network Port Group for Management <ul style="list-style-type: none"> Active: vmnic1 Standby: vmnic3 - Network Port Group for vMotion <ul style="list-style-type: none"> Active: vmnic1 Standby: vmnic3 |

| Setting Item | Setting Value | |
|--------------|---|---|
| | PRIMERGY RX M4 series | PRIMERGY CX M4 series |
| | - Network Port Group for vSAN Active: vmnic4 [Note 1] Standby: vmnic2 | - Network Port Group for vSAN Active: vmnic3 Standby: vmnic1 |
| Uplink name | - vDS-1 (Virtual distributed switch for workload) Workload port#1: Uplink2 Workload port#2: Uplink4 - vDS-2 (Virtual distributed switch for management) - Network Port Group for Management Active: Uplink1 Standby: Uplink3 - Network Port Group for vMotion Active: Uplink1 Standby: Uplink3 - Network Port Group for vSAN Active: Uplink3 Standby: Uplink1 | - vDS-1 (Virtual distributed switch for workload) Workload port#1: Uplink2 Workload port#2: Uplink4 - vDS-2 (Virtual distributed switch for management) - Network Port Group for Management Active: Uplink1 Standby: Uplink3 - Network Port Group for vMotion Active: Uplink1 Standby: Uplink3 - Network Port Group for vSAN Active: Uplink3 Standby: Uplink1 |

[Note 1]: If you purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the second expansion card.

1.2 PRIMEFLEX for Microsoft Storage Spaces Direct Automatic Setting Values List

This section describes the automatic setting values for PRIMEFLEX for Microsoft Storage Spaces Direct.

Cluster Creation for the PRIMEFLEX for Microsoft Storage Spaces Direct version can be used with ISM 2.3.0.b or later.

The notation in the "Modification" column of the following table shows whether Cluster Creation can be executed if the setting values of the existing cluster have been changed from the settings of the PRIMEFLEX configuration. (Y: Changeable, N: Not changeable)

ISM-[Management]-[Nodes]-[<Node name for creating a new cluster>]-[Node List]

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| [Communication methods] of [Edit] Wizard | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' User] - [New Password]* | - |
| [Properties] tab | | |
| Web i/f URL | https://<IP address of iRMC>/ | - |
| [OS] tab | | |
| Account | pflocaladmin | - |
| [Log Collection Settings] tab | | |
| Retention Period | | |
| Event Log (days) | 7 | - |
| Operation Log (days) | 7 | - |
| Security Log (days) | 7 | - |
| Archived Log (generations) | 7 | - |

| Setting Item | Setting Value | Modification |
|---------------------------|-------------------------|--------------|
| Log Collection Target | | |
| Hardware Log | Enable | - |
| Operating System Log | Enable | - |
| Schedule | | |
| Enable schedule execution | Enable | - |
| Schedule Type | Specify day of the week | - |
| Day of the week | Every week | - |
| Day of the week | Saturday | - |
| Time | 0:00 | - |

ISM-[Management]-[Cluster]

| Setting Item | Setting Value | Modification |
|----------------------------|--|--------------|
| Virtual Resource | | |
| Microsoft Failover Cluster | Add information of the created cluster | - |
| Other | | |
| Cluster Information | Add information of the created cluster | - |

ISM-[Settings]-[General]

| Setting Item | Setting Value | Modification |
|---------------------------|--|--------------|
| Cloud Management Software | | |
| Cloud Management Software | Add information of the created cluster | - |

User management for iRMC of servers for creating a new cluster

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [iRMC S4 user information]-[Create new user] | | |
| Name | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [User Name]* | - |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [Password]* | - |
| IPMI User Enabled | true | - |
| LAN Access Privilege | OEM | - |
| Serial Access Privilege | OEM | - |
| Privilege to Change User Accounts | true | - |
| Privilege to Change iRMC S4 Settings | true | - |
| AVR Use Privilege | true | - |
| Remote Storage Use Privilege | true | - |
| [iRMC S4 user information]-['admin' user] | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' User] - [New Password]* | - |

LDAP configuration for iRMC of servers for creating a new cluster

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [User management]-[LDAP configuration] | | |
| Enable LDAP | true | - |
| Enable LDAP SSL connection | false | - |
| Forbid log in for local users | [Cluster Details] - [LDAP] tab - [Local User Login]* | - |
| Always use SSL Login false | [Cluster Details] - [LDAP] tab - [Always use TLS/SSL Login]* | - |
| Directory Server Type | Active Directory [Cluster Details] - [LDAP] tab - [Directory Server Type]* | - |
| Domain name | [Cluster Details] - [LDAP] tab - [Domain Name]* | - |
| Department name | [Cluster Details] - [LDAP] tab - [Division]* | - |
| Primary | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Primary Host)]* | - |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Primary Host)]* | - |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Primary Host)]* | - |
| Backup | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Backup Host)]* | - |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Backup Host)]* | - |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Backup Host)]* | - |

Settings for Windows Server Failover Cluster

| Setting Item | Setting Value | Modification |
|--------------------------------------|--|--------------|
| Create Cluster | | |
| Cluster Name | [Basic Information] - [Cluster Name]* | - |
| Create Cluster Network | | |
| Number of cluster networks to create | Number of cluster networks specified in [Cluster Details] - [Network] tab - [Management Virtual Switch]* | - |
| Network Name | [Cluster Details] - [Network] tab - [Management Virtual Switch] - [Network Name]* | - |
| Role Settings | [Cluster Details] - [Network] tab - [Management Virtual Switch] - [Role Settings]* | - |
| IP Address | [Cluster Details] - [Network] tab - [Management Virtual Switch] - [IPv4 Network Address]* | - |
| Subnet Mask | [Cluster Details] - [Network] tab - [Management Virtual Switch] - [IPv4 Subnet Mask]* | - |
| Storage Pool | | |
| Friendly Name of Storage Pool | S2D on <Cluster Name> | - |
| Journal Settings | | |
| Media Type | [Cluster Details] - [Storage Pool] tab - [Journal Settings] - [Media Type]* | - |

| Setting Item | | Setting Value | Modification |
|-----------------------|-----------------------|---|--------------|
| | Bus Type | [Cluster Details] - [Storage Pool] tab - [Journal Settings] - [Bus Type]* | - |
| Storage Tier Settings | | | |
| | Storage Tier Name | [Cluster Details] - [Storage Pool] tab - [Storage Tier Settings] - [Storage Tier Name]* | - |
| | Media Type | [Cluster Details] - [Storage Pool] tab - [Storage Tier Settings] - [Media Type]* | - |
| | Recovery | [Cluster Details] - [Storage Pool] tab - [Storage Tier Settings] - [Recovery]* | - |
| | Redundancy | [Cluster Details] - [Storage Pool] tab - [Storage Tier Settings] - [Redundancy]* | - |
| | Number of data copies | [Cluster Details] - [Storage Pool] tab - [Storage Tier Settings] - [Number of data copies]* | - |

Settings for Windows Server of servers for a new cluster

| Setting Item | | Setting Value | Modification |
|-------------------------|--------------------------------|---|--------------|
| WinRM | | | |
| | Basic authentication | true | - |
| Enable service | | | |
| | CredSSP | Enable | - |
| CredSSP | | | |
| | Server roll | Enable | - |
| | Client roll | Enable | - |
| Certificate | | | |
| | <File in ISM>.cer | Register | - |
| | <File in ISM>.pfx | Register | - |
| Firewall | | | |
| | 5986 | Open | - |
| HTTPS | | | |
| | Listener | Create | - |
| Creation of local user | | | |
| | User Name | [Node Details] - [OS] tab - [Local User Settings] - [Administrator User ID]* | - |
| | Password | [Node Details] - [OS] tab - [Local User Settings] - [Password]* | - |
| Add functions and roles | | | |
| | Hyper-V management tool | Install | - |
| | Windows Server back up | Install | - |
| | Management of failover cluster | Install | - |
| Creating virtual switch | | | |
| | Virtual switch name | [Node Details] - [Virtual Switch] tab - [Workload Virtual Switch or Management Virtual Switch] - [Virtual Switch Settings] - [Virtual Switch Name]* | - |

| Setting Item | Setting Value | Modification |
|---|---|--------------|
| | [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | |
| Teaming | Enable [Node Details] - [Virtual Switch] tab - [Workload Virtual Switch or Management Virtual Switch] - [Virtual Switch Settings] - [Embedded Teaming]* | - |
| VM net adapter - Setting network name | | |
| Network name | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter for management or Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct or Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [Adapter Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| VM network settings - Network 1 for live migration, Microsoft Storage Spaces Direct | | |
| VLANID | [Cluster Details] - [Network] tab - [Management Virtual Switch <Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct>] - [VLAN ID]* | - |
| IP Address | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Address]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Length of subnet mask | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Subnet Mask]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Type of IP address | IPv4 | - |
| VM network settings - Network 2 for live migration, Microsoft Storage Spaces Direct | | |
| VLANID | [Cluster Details] - [Network] tab - [Management Virtual Switch <Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [VLAN ID]* | - |
| IP Address | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Address]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Length of subnet mask | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Subnet Mask]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Type of IP address | IPv4 | - |
| Network settings | | |
| IPv6 | Disable | - |
| Network settings - IPv4 | | |

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| IP Address | IPv4 IP address of [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Length of subnet mask | IPv4 Length of subnet mask of [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Type of IP address | IPv4 | - |
| Default Gateway | Default Gateway of Network at OS Individual specified in the ISM profile [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| IP Address | IPv4 IP address of [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Network settings - Prioritized DNS server | | |
| DNS name | Mgmt | - |
| IP Address | IP address of the DNS server specified in the ISM profile | - |
| Primary DNS suffix | register=primary | - |
| Authentication of DNS server settings | validate=no | - |
| Network settings - Alternative DNS server | | |
| DNS name | Mgmt | - |
| IP Address | [Cluster Details] - [DNS] tab - [IP Address (Secondary DNS Server)]* | - |
| Order | index=2 | - |
| Authentication of DNS server settings | validate=no | - |
| Network settings - VMQ for Management Port | | |
| Enable | True [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| MaxProcessors | $(X - 1) / M$ [Note 1] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| BaseProcessorNumber | $(1 + ((X - 1) / M) * (N - 1)) * Y$ [Note 1] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| MaxProcessorNumber | $((X - 1) / M) * N * Y$ [Note 1] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Network settings - VMQ for Workload Port | | |
| Enable | True [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| MaxProcessors | $(X - 1) / M$ [Note 1] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| BaseProcessorNumber | $(1 + ((X - 1) / M) * (N - 1)) * Y$ [Note 1] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| MaxProcessorNumber | $((X - 1) / M) * N * Y$ [Note 1] | - |

| Setting Item | Setting Value | Modification |
|-------------------------------|--|--------------|
| | [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | |
| Network settings - LAN driver | | |
| VMQ | Enable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| SR-IOV | Disable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| QoS(Workload port) | Disable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| QoS(Management port) | Disable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |

[Note 1]: Each symbol represents the following value.

X : Number of processor cores

Y : Number of logical processors per core

M : Number of physical network ports for setting VMQ

N : Sequence number (1 to M) of physical network ports for setting VMQ



Note

Description of "Setting Value"

- For setting values followed by *, the value is set by the value entered in the [Create Cluster] wizard.
- In some "Setting Value", not values but setting locations are described. For actual values, check the relevant setting locations.

Chapter 2 Automatic Setting Values Lists for Cluster Expansion

This section describes the setting values automatically set by executing the Cluster Expansion.

2.1 PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1 Automatic Setting Values List

This section describes the automatic setting values for PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1.

The notation in the "Modification" column of the following table shows whether Cluster Expansion can be executed if the setting values of the existing cluster have been changed from the settings of PRIMEFLEX configuration. (Y: Changeable, N: Not changeable)

ISM - [Management] - [Nodes] - [<Node name for expanding a cluster>] - [Node List]

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| [Communication methods] of [Edit] Wizard | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' user] - [New Password]* | N |
| [Properties] tab | | |
| Web i/f URL | https://<IP address of iRMC>/ | N |
| [Log Collection Settings] tab | | |
| Retention Period | | |
| Event Log (days) | 7 | Y |
| Operation Log (days) | 7 | Y |
| Security Log (days) | 7 | Y |
| Archived Log (generations) | 7 | Y |
| Log Collection Target | | |
| Hardware Log | Enable | Y |
| Operating System Log | Enable | Y |
| Schedule | | |
| Enable schedule execution | Enable | N |
| Schedule Type | Specify day of the week | Y |
| Day of the week | Every week | Y |
| Day of the week | Saturday | Y |
| Time | 0:00 | Y |

ADVM of PRIMEFLEX HS/PRIMEFLEX for VMware vSAN configuration

| Setting Item | Setting Value | Modification |
|---|---|--------------|
| [DNS Manager]-[<Domain name>] | | |
| Host record for forward lookup zones [Note 1] | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* | N |
| Host code for reverse lookup zones [Note 1] | ESXi IP address of servers for expanding a cluster [Note 2] | N |

[Note 1]: It is not registered if not using an ADVN configured for PRIMEFLEX (can be selected for PRIMEFLEX V2.2.0.c.1 or later). If not using an ADVN configured for PRIMEFLEX, register it in "6.7.1.2 Register host records in DNS" in "Operating Procedures."

[Note 2] For ESXi IP address of servers for expanding a cluster, the value corresponding to [Cluster Nodes Selection] - [Target nodes selection] - [Node Name] in the node information registered in ISM is searched and set.

User management for iRMC of servers for expanding a cluster

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [iRMC S4 user information]-[Create new user] | | |
| Name | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [User Name]* | Y |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [Password]* | Y |
| IPMI User Enabled | true | N |
| LAN Access Privilege | OEM | N |
| Serial Access Privilege | OEM | N |
| Privilege to Change User Accounts | true | N |
| Privilege to Change iRMC S4 Settings | true | N |
| AVR Use Privilege | true | N |
| Remote Storage Use Privilege | true | N |
| [iRMC S4 user information]-['admin' user] | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' user] - [New Password] | N |

LDAP configuration for iRMC of servers for expanding a cluster

| Setting Item | Setting Value | Modification |
|---|---|--------------|
| [User management]-[LDAP configuration] [Note 1] | | |
| Enable LDAP | true | N |
| Enable LDAP SSL connection | false | N |
| Forbid log in for local users | false [Note 2] [Cluster Details] - [LDAP] tab - [Local User Login]* [Note 3] | N |
| Always use SSL Login false | false [Note 2] [Cluster Details] - [LDAP] tab - [Always use TLS/SSL Login]* [Note 3] | N |
| Directory Server Type | Active Directory | N |
| Domain name | [Cluster Details] - [LDAP] tab - [Domain Name]* | N |
| Department name | [Cluster Details] - [LDAP] tab - [Division]* | N |
| Primary | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Primary Host)]* | Y |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Primary Host)]* | Y |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Primary Host)]* | Y |
| Backup | | |

| Setting Item | Setting Value | Modification |
|---------------|---|--------------|
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Backup Host)]* | Y |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Backup Host)]* | Y |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Backup Host)]* | Y |

[Note 1]: Not set if the check was removed for [Cluster Details] - [LDAP] tab - [Activate LDAP Settings] of Cluster Definition Parameters.

[Note 2]: Setting value set if you are using ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

[Note 3]: Setting value set if you are using ISM for PRIMEFLEX V2.2.0.c.1 or later.

Setting for ESXi of servers for expanding a cluster

| Setting Item | Setting Value | Modification |
|---|---|--------------|
| OS | | |
| VMware ESXi | Install | - |
| ESXi Patch | Apply if a file is uploaded to ISM | - |
| SMI-S Provider | | |
| VMware SMIS Provider | Apply if a file is uploaded to ISM [Note 1] [Note 2] - [Note 1] [Note 3] | - |
| Driver | | |
| ixgben driver | Enable [Note 1] | - |
| [Host Client]-[Management]-[System]-[Date and Time] | | |
| Current date and time | UTC (Coordinated Universal Time) | - |
| IP address of NTP server 1 | [Cluster Details] - [NTP] tab - [NTP Server1 (Host Name or Host IP Address)]* | - |
| IP address of NTP server 2 | [Cluster Details] - [NTP] tab - [NTP Server2 (Host Name or Host IP Address)]* | - |
| NTP decentralization | [Cluster Details] - [NTP] tab - [Max Interval between NTP Peer]* | - |
| Settings for NTP client firewall | Enable | - |
| Enabling of NTP client services | Enable | - |
| [Host Client]-[Management]-[Service] | | |
| Enable ESXi shell | Enable | - |
| Start ESXi shell | Start | - |
| Enable SSH service | Enable | - |
| Start SSH service | Start | - |
| Enable ESXi shell | Enable | - |
| TSM | Stop | - |
| TSM-SSH | Stop | - |
| Start Likewise service | Start [Note 4] | - |
| [Host Client]-[Management]-[Security and user] | | |
| User Name | [Node Details] - [OS] tab - [Local User Settings] - [Administrator User ID]* | - |
| Password | [Node Details] - [OS] tab - [Local User Settings] - [Password]* | - |
| Authentication | Enable | - |

| Setting Item | Setting Value | Modification |
|---|--|--------------|
| Join domain [Note 5] | | |
| [Host Client]-[Storage]-[Datastore] | | |
| Renaming the local datastore | LocalDatastore_<Host name> [Note 6] | - |
| [Host Client]-[Network]-[TCP/IP stack]-[Default TCP/IP stack] | | |
| IP address of secondary DNS server | [Cluster Details] - [DNS] tab - [IP Address (Secondary DNS server)]* | - |
| DNS suffix | [Cluster Details] - [DNS] tab - [Domain Name]* | - |
| [Host Client]-[Host]-[Action]-[Privilege]-[Addition of user] | | |
| Role settings | Adding Admin privilege for Host/virtual machine | - |
| Other | | |
| FQDN settings | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]. [Cluster Details] - [DNS] tab - [Domain Name]* | - |
| IPv6 | Disable | - |
| Existing VM Network port group | Delete | - |
| SSL v3 | Enable | - |

[Note 1]: Setting value set if you are using PRIMEFLEX for VMware vSAN V1.

[Note 2]: Setting value set if you are using VMware ESXi 6.5.0.5310538.

[Note 3]: Setting value set if you are using VMware ESXi 6.5 Update 1.

[Note 4]: Not started if the check was removed for [Cluster Details] - [LDAP] tab - [Activate LDAP Settings] of Cluster Definition Parameters.

[Note 5]: Not set if the check was removed for [Cluster Details] - [LDAP] tab - [Activate LDAP Settings] of Cluster Definition Parameters.

[Note 6]: Rename from datastore1.

Setting for hosts for expanding a cluster vCSA in the configuration of PRIMERGY RX series

| Setting Item | Setting Value | Modification |
|--|---------------|--------------|
| Virtual Standard Switch (vSS) - vSwitch0 (Built-in Virtual Switch) | | |
| vSwitch0 | Delete | N |
| All vmnic | Delete | N |
| Management Network | Delete | N |
| Virtual Distribution Switch (vDS) - Virtual switch for workload | | |
| Management traffic | - | - |
| VLANID | - | - |
| MTU | - | - |
| Management IP address | - | - |
| subnet mask | - | - |
| Failback | - | - |
| uplink1 | - | - |
| uplink2 | - | - |
| vmk0 | - | - |
| Virtual Distribution Switch (vDS) - Virtual switch for management | | |

| Setting Item | | Setting Value | Modification |
|--|---|--|--------------|
| | uplink1 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic0>]* [Note 1] [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic2>]* [Note 2] | N |
| | uplink2 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>] - [vmnic name<vmnic2>]* [Note 1] [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>] - [vmnic name<vmnic4>]* [Note 2] | N |
| | vmk0 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings]-[vDS-2] - [Port Group<Network Port Group for Management>] - [Port Group Name]* | N |
| | vmk1 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [Port Group Name]* | N |
| | vmk2 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [Port Group Name]* | N |
| | IP address of vSAN network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vSAN>] - [IPv4 Address]* | Y |
| | Subnet mask of vSAN network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [IPv4 Subnet Mask]* | Y |
| | IP address of vMotion network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vMotion>] - [IPv4 Address]* | Y |
| | Subnet mask of vMotion network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [IPv4 Subnet Mask]* | Y |
| [Settings] - [System traffic] - [Management traffic] | | | |
| | Share | 30 | Y |
| | Reserve | 500 | Y |
| Disk | | | |
| | Hard disk Mark as local | true | - |
| | SSD Mark as SSD capacity other than for cache (When using an All Flash configuration) | True [Note 3] | - |
| Datacenter | | | |
| | Add hosts for expanding a cluster to the virtual network | - | - |
| | Add hosts for expanding a cluster to datacenter | [Basic Information]- [Data Center Name]* | Y |
| Cluster | | | |
| | Fault domain or stretch cluster | [Cluster Nodes Selection]-[Target nodes selection]-[Node Name]* | - |

| Setting Item | Setting Value | Modification |
|--|-----------------------|--------------|
| Add nodes for expanding a cluster to the cluster | Selected cluster name | Y |

[Note 1]: Setting value set if you are using PRIMEFLEX HS V1.0/V1.1.

[Note 2]: Setting value set if you are using PRIMEFLEX for VMware vSAN V1.

[Note 3]: Set if all is SSD. Note that it will not be set as an SSD for cache in the following case.

PRIMEFLEX HS V1.0/V1.1: If the size is 160 - 210 GB, 320 - 420 GB

PRIMEFLEX for VMware vSAN V1: Among two types of SSD, the one with fewer number of units (if the number of units of SSD is the same, it is the one with less volume)

Setting for hosts for expanding a cluster vCSA in the configuration of PRIMERGY CX series

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| Virtual Standard Switch (vSS) - vSwitch0 (Built-in Virtual Switch) | | |
| vSwitch0 | - [Note 1] Delete [Note 2] | N |
| All vmnic | - [Note 1] Delete [Note 2] | N |
| Management Network | - [Note 1] Delete [Note 2] | N |
| Virtual Distribution Switch (vDS) - Virtual switch for workload | | |
| Management traffic | Check [Note 1] - [Note 2] | N |
| VLANID | 0 [Note 1] - [Note 2] | N |
| MTU | 1500 [Note 1] - [Note 2] | N |
| Management IP address | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for Management>] - [IPv4 Address]* [Note 1] - [Note 2] | N |
| subnet mask | [Node Details] - [vDS] tab - [vDS] - [Port Group <Network Port Group for Management>] - [IPv4 Subnet mask]* [Note 1] - [Note 2] | N |
| Failback | True [Note 1] - [Note 2] | N |
| uplink1 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic0>]* [Note 1] - [Note 2] | N |
| uplink2 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>] - [vmnic name<vmnic1>]* [Note 1] - [Note 2] | N |

| Setting Item | | Setting Value | Modification |
|---|---|--|--------------|
| | vmk0 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings]- [vDS-2] - [Port Group<Network Port Group for Management>] - [Port Group Name]* [Note 1] [Note 3] - [Note 2] | N |
| Virtual Distribution Switch (vDS) - Virtual switch for management | | | |
| | uplink1 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic2>]* [Note 1] [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink1>] - [vmnic name<vmnic1>]* [Note 2] | N |
| | uplink2 | [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>] - [vmnic name<vmnic3>]* [Note 1] [Node Details] - [vDS] tab - [vDS] - [Physical NIC<uplink2>] - [vmnic name<vmnic3>]* [Note 2] | N |
| | vmk0 | - [Note 1] [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for Management>] - [Port Group Name]* [Note 2] | N |
| | vmk1 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [Port Group Name]* | N |
| | vmk2 | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [Port Group Name]* | N |
| | IP address of vSAN network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vSAN>] - [IPv4 Address]* | Y |
| | Subnet mask of vSAN network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vSAN>] - [IPv4 Subnet Mask]* | Y |
| | IP address of vMotion network | [Node Details] - [vDS] tab - [vDS] - [Port Group<Network Port Group for vMotion>] - [IPv4 Address]* | Y |
| | Subnet mask of vMotion network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-2] - [Port Group<Network Port Group for vMotion>] - [IPv4 Subnet Mask]* | Y |
| [Settings] - [System traffic] - [Management traffic] | | | |
| | Share | - [Note 1] 30 [Note 2] | Y |
| | Reserve | - [Note 1] 500 [Note 2] | Y |
| Disk | | | |
| | Hard disk Mark as local | true | - |
| | SSD Mark as SSD capacity other than for cache (When using an All Flash configuration) | True [Note 4] | - |

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| Datacenter | | |
| Add hosts for expanding a cluster to the virtual network | [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1] - [vDS Name]* [Note 1] - [Note 2] | N |
| Add hosts for expanding a cluster to datacenter | [Basic Information] - [Data Center Name]* | Y |
| Cluster | | |
| Fault domain or stretch cluster | [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* | - |
| Add nodes for expanding a cluster to the cluster | Selected cluster name | Y |

[Note 1]: Setting value set if you are using PRIMEFLEX HS V1.0/V1.1.

[Note 2]: Setting value set if you are using PRIMEFLEX for VMware vSAN V1.

[Note 3]: Transfer from vSS to vDS.

[Note 4]: Set if all is SSD. Note that it will not be set as an SSD for cache in the following case.

PRIMEFLEX HS V1.0/V1.1: If the size is 160 - 210 GB, 320 - 420 GB

PRIMEFLEX for VMware vSAN V1: Among two types of SSD, the one with fewer number of units (if the number of units of SSD is the same, it is the one with less volume)

Note

Description of "Setting Value"

- For setting values followed by *, the value is set by the value entered in the [Expand Cluster] wizard.
- In some "Setting Value", not values but setting locations are described. For actual values, check the relevant setting locations.

Table 2.1 Automatic setting values of vmnic name and uplink name

| Setting Item | Setting Value | |
|--------------|---|--|
| | If PRIMERGY CX M2 series are not included in the current cluster | If PRIMERGY CX M2 series are included in the current cluster |
| vmnic name | If the case is PRIMEFLEX HS V1.0/V1.1 <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for workload) Workload port#1: vmnic1 Workload port#2: vmnic3 [Note 1] - vDS-2 (Virtual distributed switch for management) <ul style="list-style-type: none"> - Network Port Group for Management Active: vmnic0 Standby: vmnic2 [Note 1] - Network Port Group for vMotion Active: vmnic0 Standby: vmnic2 [Note 1] - Network Port Group for vSAN Active: vmnic2 [Note 1] Standby: vmnic0 | If the case is PRIMEFLEX HS V1.0/V1.1 [PRIMERGY CX M2 series] <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for management) <ul style="list-style-type: none"> - Network Port Group for Management Active: vmnic0 Active: vmnic1 - vDS-2 (Virtual distributed switch for management and workload) <ul style="list-style-type: none"> - Network Port Group for vMotion Active: vmnic2 Standby: vmnic3 - Network Port Group for vSAN Active: vmnic3 Standby: vmnic2 |

| Setting Item | Setting Value | |
|--------------|--|--|
| | If PRIMERGY CX M2 series are not included in the current cluster | If PRIMERGY CX M2 series are included in the current cluster |
| | <p>If the case is PRIMEFLEX for VMware vSAN V1 [Note 2]</p> <p>[PRIMERGY RX M4 series]</p> <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for workload) Workload port#1: vmnic1 Workload port#2: vmnic3 [Note 1] - vDS-2 (Virtual distributed switch for management) - Network Port Group for Management Active: vmnic2 Standby: vmnic4 [Note 1] - Network Port Group for vMotion Active: vmnic2 Standby: vmnic4 [Note 1] - Network Port Group for vSAN Active: vmnic4 [Note 1] Standby: vmnic2 <p>[PRIMERGY CX M4 series]</p> <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for workload) Workload port#1: vmnic2 Workload port#2: vmnic4 [Note 1] - vDS-2 (Virtual distributed switch for management) - Network Port Group for Management Active: vmnic1 Standby: vmnic3 - Network Port Group for vMotion Active: vmnic1 Standby: vmnic3 - Network Port Group for vSAN Active: vmnic3 Standby: vmnic1 | <p>[PRIMERGY CX M4 series]</p> <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for management) - Network Port Group for Management Active: vmnic1 Active: vmnic2 - vDS-2 (Virtual distributed switch for management and workload) - Network Port Group for vMotion Active: vmnic3 Standby: vmnic4 - Network Port Group for vSAN Active: vmnic4 Standby: vmnic3 |
| Uplink name | <p>If the case is PRIMEFLEX HS V1.0/V1.1/ PRIMEFLEX for VMware vSAN V1</p> <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for workload) Workload port#1: Uplink2 Workload port#2: Uplink4 - vDS-2 (Virtual distributed switch for management) - Network Port Group for Management Active: Uplink1 Standby: Uplink3 | <p>If the case is PRIMEFLEX HS V1.0/V1.1</p> <ul style="list-style-type: none"> - vDS-1 (Virtual distributed switch for management) - Network Port Group for Management Active: Uplink1 Active: Uplink2 - vDS-2 (Virtual distributed switch for management/ workload) - Network Port Group for vMotion Active: Uplink3 Standby: Uplink4 |

| Setting Item | Setting Value | |
|--------------|---|--|
| | If PRIMERGY CX M2 series are not included in the current cluster | If PRIMERGY CX M2 series are included in the current cluster |
| | <ul style="list-style-type: none"> - Network Port Group for vMotion Active: Uplink1 Standby: Uplink3 - Network Port Group for vSAN Active: Uplink3 Standby: Uplink1 | <ul style="list-style-type: none"> - Network Port Group for vSAN Active: Uplink4 Standby: Uplink3 |

[Note 1]: If you purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the second expansion card.

[Note 2]: The same as if expanding PRIMERGY M4 series in PRIMEFLEX HS V1.0/1.1.

2.2 PRIMEFLEX for Microsoft Storage Spaces Direct version Automatic Setting Values List

This section describes the automatic setting values for PRIMEFLEX for Microsoft Storage Spaces Direct.

The notation in the "Modification" column of the following table shows whether Cluster Expansion can be executed if the setting values of the existing cluster have been changed from the settings of the PRIMEFLEX configuration. (Y: Changeable, N: Not changeable)

ISM - [Management] - [Nodes] - [<Node name for expanding a cluster>] - [Node List]

| Setting Item | Setting Value | Modification |
|--|--|--------------|
| [Communication methods] of [Edit] Wizard | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' user] - [New Password]* | N |
| [Properties] tab | | |
| Web i/f URL | https://<IP address of iRMC>/ | N |
| [OS] tab | | |
| Account | pflocaladmin | N |
| [Log Collection Settings] tab | | |
| Retention Period | | |
| Event Log (days) | 7 | Y |
| Operation Log (days) | 7 | Y |
| Security Log (days) | 7 | Y |
| Archived Log (generations) | 7 | Y |
| Log Collection Target | | |
| Hardware Log | Enable | Y |
| Operating System Log | Enable | Y |
| Schedule | | |
| Enable schedule execution | Enable | N |
| Schedule Type | Specify day of the week | Y |
| Day of the week | Every week | Y |
| Day of the week | Saturday | Y |

| Setting Item | Setting Value | Modification |
|--------------|---------------|--------------|
| Time | 0:00 | Y |

User management for iRMC of servers for expanding a cluster

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [iRMC S4 user information] - [Create new user] | | |
| Name | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [User Name]* | Y |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - [Administrator User] - [Password]* | Y |
| IPMI User Enabled | true | N |
| LAN Access Privilege | OEM | N |
| Serial Access Privilege | OEM | N |
| Privilege to Change User Accounts | true | N |
| Privilege to Change iRMC S4 Settings | true | N |
| AVR Use Privilege | true | N |
| Remote Storage Use Privilege | true | N |
| [iRMC S4 user information] - ['admin' user] | | |
| Password | [Node Details] - [iRMC] tab - [Local User Settings] - ['admin' user] - [New Password]* | N |

LDAP configuration for iRMC of servers for expanding a cluster

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| [User management]-[LDAP configuration] | | |
| Enable LDAP | true | N |
| Enable LDAP SSL connection | false | N |
| Forbid log in for local users | false [Note 1] [Cluster Details] - [LDAP] tab - [Local user login]* [Note 2] | N |
| Always use SSL Login | false [Note 1] [Cluster Details] - [LDAP] tab - [Always use TLS/SSL Login]* [Note 2] | N |
| Directory Server Type | Active Directory | N |
| Domain name | [Cluster Details] - [LDAP] tab - [Domain Name]* | N |
| Department name | [Cluster Details] - [LDAP] tab - [Division]* | N |
| Primary | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Primary Host)]* | Y |
| LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Primary Host)]* | Y |
| LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Primary Host)]* | Y |
| Backup | | |
| LDAP Server | [Cluster Details] - [LDAP] tab - [Host Name or IP Address (Backup Host)]* | Y |

| Setting Item | | Setting Value | Modification |
|--------------|---------------|--|--------------|
| | LDAP Port | [Cluster Details] - [LDAP] tab - [Port (Backup Host)]* | Y |
| | LDAP SSL Port | [Cluster Details] - [LDAP] tab - [TLS/SSL Port (Backup Host)]* | Y |

[Note 1] Setting value set if you are using ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

[Note 2] Setting value set if you are using ISM for PRIMEFLEX V2.2.0.c.1 or later.

Settings for Windows Server of servers for expanding a cluster

| Setting Item | | Setting Value | Modification |
|---------------------------------------|--------------------------------|---|--------------|
| WinRM | | | |
| | Basic authentication | true | - |
| Enable service | | | |
| | CredSSP | Enable | - |
| CredSSP | | | |
| | Server roll | Enable | - |
| | Client roll | Enable | - |
| Certificate | | | |
| | <File in ISM>.cer | Register | - |
| | <File in ISM>.pfx | Register | - |
| Firewall | | | |
| | 5986 | Open | - |
| HTTPS | | | |
| | Listener | Create | - |
| Creation of local user | | | |
| | User Name | [Node Details] - [OS] tab - [Local User Settings] - [Administrator User ID]* | - |
| | Password | [Node Details] - [OS] tab - [Local User Settings] - [Password]* | - |
| Add functions and roles | | | |
| | Hyper-V management tool | Install | - |
| | Windows Server back up | Install | - |
| | Management of failover cluster | Install | - |
| Creating virtual switch | | | |
| | Virtual switch name | [Node Details] - [Virtual Switch] tab - [Workload Virtual Switch or Management Virtual Switch] - [Virtual Switch Settings] - [Virtual Switch Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* [Note 1] | N |
| | Teaming | Enable [Note 2] [Node Details] - [Virtual Switch] tab - [Workload Virtual Switch or Management Virtual Switch] - [Virtual Switch Settings] - [Embedded Teaming]* [Note 3] | - |
| VM net adapter - Setting network name | | | |
| | Network name | [Node Details] - [Virtual Switch] tab - [Workload Virtual Switch or Management Virtual Switch] - [Virtual Network Adapter | N |

| Setting Item | Setting Value | Modification |
|---|--|--------------|
| | <Name of network adapter for management or Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct or Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [Adapter Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | |
| VM network settings - Network 1 for live migration, Microsoft Storage Spaces Direct | | |
| VLANID | The VLAN ID set for live migration, Microsoft Storage Spaces Direct network 1 for the current servers configured in the cluster | Y |
| IP Address | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Address]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Length of subnet mask | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Subnet Mask]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Type of IP address | IPv4 | N |
| VM network settings - Network 2 for live migration, Microsoft Storage Spaces Direct | | |
| VLANID | The VLAN ID set for live migration, Microsoft Storage Spaces Direct network 2 for the current servers configured in the cluster | Y |
| IP Address | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Address]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Length of subnet mask | [Node Details] - [Virtual Switch] tab - [Management Virtual Switch] - [Virtual Network Adapter <Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct>] - [IPv4 Subnet Mask]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Type of IP address | IPv4 | N |
| Network settings | | |
| IPv6 | Disable | - |
| Network settings - IPv4 | | |
| IP Address | IPv4 IP address of [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Length of subnet mask | IPv4 Length of subnet mask of [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Type of IP address | IPv4 | N |
| Default Gateway | Default Gateway of Network at OS Individual specified in the ISM profile | Y |

| Setting Item | Setting Value | Modification |
|--|---|--------------|
| | [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | |
| IP Address | IPv4 IP address of [Cluster Nodes Selection] - [Target nodes selection] - [Node Name]* [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | Y |
| Network settings - Prioritized DNS server | | |
| DNS name | Mgmt | N |
| IP Address | IP address of the DNS server specified in the ISM profile | Y |
| Primary DNS suffix | register=primary | - |
| Authentication of DNS server settings | validate=no | - |
| Network settings - Alternative DNS server | | |
| DNS name | Mgmt | N |
| IP Address | [Cluster Details] - [DNS] tab - [IP Address (Secondary DNS server)]* | Y |
| Order | index=2 | - |
| Authentication of DNS server settings | validate=no | - |
| Network settings - VMQ for Management Port | | |
| Enable | True [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| MaxProcessors | $(X - 1) / M$ [Note 3] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| BaseProcessorNumber | $(1 + ((X - 1) / M) * (N - 1)) * Y$ [Note 3] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| MaxProcessorNumber | $((X - 1) / M) * N * Y$ [Note 3] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| Network settings - VMQ for Workload Port | | |
| Enable | True [Node Details] - [Virtual Switch] tab - [Slot Numbers]* [Note7] | - |
| MaxProcessors | $(X - 1) / M$ [Note 3] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* [Note7] | - |
| BaseProcessorNumber | $(1 + ((X - 1) / M) * (N - 1)) * Y$ [Note 3] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* [Note7] | - |
| MaxProcessorNumber | $((X - 1) / M) * N * Y$ [Note 3] [Node Details] - [Virtual Switch] tab - [Slot Numbers]* [Note7] | - |
| Network settings - LAN driver | | |
| VMQ | Enable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| SR-IOV | Disable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |
| QoS(Workload port) | Disable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* [Note7] | - |

| Setting Item | Setting Value | Modification |
|----------------------|--|--------------|
| QoS(Management port) | Disable [Node Details] - [Virtual Switch] tab - [Slot Numbers]* | - |

[Note 1]: Setting value set if you are using ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

[Note 2]: Setting value set if you are using ISM for PRIMEFLEX V2.2.0.c.1 or later.

[Note 3]: Each symbol represents the following value.

X : Number of processor cores

Y : Number of logical processors per core

M : Number of physical network ports for setting VMQ

N : Sequence number (1 to M) of physical network ports for setting VMQ

[Note 7]: Set onboard if you are using PRIMERGY M2 series.



Note

Description of "Setting Value"

- For setting values followed by *, the value is set by the value entered in the [Expand Cluster] wizard.
- In some "Setting Value", not values but setting locations are described. For actual values, check the relevant setting locations.

Chapter 3 Setting Items Lists for Cluster Definition Parameters

This chapter describes the setting items for Cluster Definition Parameters when executing Cluster Creation and Cluster Expansion.

3.1 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX for VMware vSAN V1 (Cluster Creation)

This section describes the cluster definition parameter setting values of the Cluster Creation of PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1.



- If you are using the Cluster Creation of PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1, set the following cluster definition parameter setting values.
- When using Export/Import of Cluster Definition Parameters, edit Cluster Definition Parameters to set them appropriately according to your environment. Export/Import of Cluster Definition Parameters can be used with ISM 2.3.0.b or later.

CMS Information [Note 1]

| Setting Item | Description | Setting Value |
|--------------------------------|---|---------------------|
| Cluster Type | Cluster Type - VMware vSAN Cluster - Microsoft Failover Cluster | VMware vSAN Cluster |
| Cloud Management Software Name | Cloud Management Software Name | Arbitrary value |

[Note 1]: This item is required to be specified when you create Cluster Definition Parameters. This parameter is not displayed when editing Cluster Definition Parameters.

Basic Information

| Setting Item | Description | Setting Value |
|---|---|---|
| Cloud Management Software Name [Note 1] | Cloud Management Software Name | Setting value specified in [CMS Information] - [Cloud Management Software Name] |
| Type [Note 1] | Cluster Type | VMware vSAN Cluster |
| Data Center Name | Name of the datacenter that the cluster belongs to | Name of the datacenter that the cluster belongs to |
| Cluster Name [Note 1] | Cluster Name | Name of the cluster that the cluster creates |
| Storage Configuration | Storage Configuration - Hybrid - All Flash Default: Hybrid | Hybrid or All Flash |
| Network Configuration | Type of network configuration - Type I | Type I |

[Note 1]: This parameter can not be set.

Cluster Details - DNS tab

| Setting Item | Description | Setting Value |
|-----------------------------------|---|--|
| Domain Name | DNS domain name | DNS domain name |
| IP Address (Secondary DNS Server) | IP address of secondary DNS server [Note 1] | <ul style="list-style-type: none"> - If you are using the Active Directory currently configured in your environment: IP address of the customers' AD2 - If you are using the ADVN configured as dedicated to PRIMEFLEX HS V1.0/V1.1/ PRIMEFLEX for VMware vSAN V1: IP address of ADVN2 |
| DNS Record Registration [Note 2] | <p>Specify whether to automatically register the host (A/PTR) records of servers for creating a new cluster.</p> <p>If you set it to "Enable" it will be registered automatically.</p> <ul style="list-style-type: none"> - Enable - Disable <p>Default: Disable</p> | <ul style="list-style-type: none"> - If you are using the Active Directory currently configured in your environment or using the configuration without AD links: Disable - If you are using the ADVN configured as dedicated to PRIMEFLEX HS V1.0/V1.1/ PRIMEFLEX for VMware vSAN V1: Enable |
| WinRM Service Port [Note 2] | <p>Specify the communication system and the port number of the WinRM service of the DNS server.</p> <ul style="list-style-type: none"> - Communication system <ul style="list-style-type: none"> - HTTPS - HTTP <p>Default: HTTPS</p> <ul style="list-style-type: none"> - Port Number <ul style="list-style-type: none"> - For HTTPS Port number of the WinRM service (SSL) of the DNS server If you specified this item, communication with the DNS server will be encrypted (SSL). It is required to register a TLS/SSL communication authentication certificate in the DNS server in advance. Default: 5986 - For HTTP Port number of the WinRM service (non SSL) of the DNS server Specify if communicating with the DNS server in plain text. Default: 5985 | <ul style="list-style-type: none"> - Communication system HTTPS or HTTP - Port Number <ul style="list-style-type: none"> - For HTTPS: 5986 - For HTTP: 5985 |
| User Name [Note 2] | User name used when connecting to the DNS server | pfadmin |

| Setting Item | Description | Setting Value |
|---|--|---------------------|
| Password [Note 2] [Note 3] | Password used when connecting to the DNS server | Password of pfadmin |
| Password (Confirmation) [Note 2] [Note 3] | Password used when connecting to the DNS server (Confirmation) | Password of pfadmin |

[Note 1]: The IP address of the primary DNS server is specified in the ISM profile.

[Note 2]: DNS server is only enabled when using Windows Server. If you are not using the PRIMEFLEX configuration ADVN or the AD link using AD servers in your environment, set [DNS Record Registration] to "Disable." In addition, [WinRM Service Port], [WinRM Service (SSL) Port], [User Name] and [Password] are not required to be specified.

[Note 3]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Cluster Details - NTP tab

| Setting Item | Description | Setting Value |
|---------------------------------------|---|--|
| NTP Server1 (Host Name or IP Address) | Host name or IP address of NTP server1 | Host name or IP address of NTP server1 |
| NTP Server2 (Host Name or IP Address) | Host name or IP address of NTP server2 | Host name or IP address of NTP server2 |
| Max Interval between NTP Peer | Maximum interval to peer for NTP time source setting (Seconds) Default: 30 (Seconds) | 30 |

Cluster Details - LDAP tab [Note 1]

| Setting Item | Description | Setting Value |
|--|--|--|
| Activate LDAP Settings | Specify whether to enable LDAP settings. - Enable - Disable Default: Disable | Arbitrary value |
| Domain Name | Domain name of LDAP server | Domain name of LDAP server |
| User Name | User name used when connecting to the LDAP server | pfadmin |
| Password [Note 2] | Password used when connecting to the LDAP server | Password of pfadmin |
| Password (Confirmation) [Note 2] | Password used when connecting to the LDAP server (Confirmation) | Password of pfadmin |
| Directory Server Type | The type of the directory server - Active Directory | Active Directory |
| Host Name or IP Address (Primary Host) | Host name or IP address of the primary LDAP server | Host name or IP address of the primary LDAP server |
| Port (Primary Host) | Port number of the LDAP service (non TLS/SSL) of the primary LDAP server Default: 389 | 389 |
| TLS/SSL Port (Primary Host) | Port number of the LDAP service (TLS/SSL) of the primary LDAP server Default: 636 | 636 |

| Setting Item | Description | Setting Value |
|---------------------------------------|--|---|
| Host Name or IP Address (Backup Host) | Host name or IP address of the backup LDAP server | Host name or IP address of the backup LDAP server |
| Port (Backup Host) | Port number of the LDAP service (non TLS/SSL) of the backup LDAP server Default: 389 | 389 |
| TLS/SSL Port (Backup Host) | Port number of the LDAP service (TLS/SSL) of the backup LDAP server Default: 636 | 636 |
| Division | LDAP division name | PF_Dept_1 |
| Local User Login | Specify whether to enable log in for local users. - Enable - Disable Default: Disable | Enable |
| Always use TLS/SSL Login | Specify whether to always use TLS/SSL for login. - Yes - No Default: No | No |

[Note 1]: This setting is not required if you are not using the PRIMEFLEX configuration ADVm or the AD link using AD servers in your environment (Remove the check for [LDAP] tab - [Activate LDAP Settings]).

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Cluster Details - Function tab

| Setting Item | Description | Setting Value |
|-------------------------------|--|------------------------------|
| vSphere HA Settings | | |
| Isolation Response Address 1 | Isolation Response Address (IP Address) 1 Note) Normally the IP address of the Virtual SAN Network of the first node configuring the cluster is set. | Isolation Response Address 1 |
| Isolation Response Address 2 | Isolation Response Address (IP Address) 2 Note) Normally the IP address of the Virtual SAN Network of the second node configuring the cluster is set. | Isolation Response Address 2 |
| vSAN Settings | | |
| Add Disks to Storage | Specify whether to add disks to the storage automatically. - Automatic - Manual Default: Automatic | Arbitrary value |
| Deduplication and Compression | Specify whether to enable deduplication and compression. | Arbitrary value |

| Setting Item | Description | Setting Value |
|--------------|--|---------------|
| | <ul style="list-style-type: none"> - Enable - Disable Default: Disable | |

Cluster Details - Network tab

| Setting Item | Description | Setting Value |
|--|--|---|
| Default Gateway | IPv4 address of the default gateway | Arbitrary value |
| vSAN Distributed Switch Settings | | |
| vDS-1 or vDS-2 | | |
| vDS Name [Note 1] | Name of the vDS (vSphere Distributed Switch) | Arbitrary value <ul style="list-style-type: none"> - Name of the workload virtual distributed switch - Name of the management virtual distributed switch * vDS setting information lists are two |
| NIOC | Specify whether to enable NIOC. <ul style="list-style-type: none"> - Enable - Disable Default: Enable | vDS-1: Disable (can not be set) vDS-2: Enable or Disable |
| NIOC Settings (multiple can be set) [Note 2] | | |
| Traffic [Note 3] | System Traffic Type <ul style="list-style-type: none"> - Management - vMotion - vSAN | Management, vMotion, vSAN |
| Shares | Relative priority of System Traffic Types 1-100 Default: 50(Management), 70(vMotion), 100(vSAN) | Arbitrary value |
| Reservation (Mbps) [Note 4] | Minimum band width required to be maintained on a single physical adapter (Mbps) Default: 500(Management), 500(vMotion), 1000(vSAN) | Arbitrary value |
| Limit (Mbps) [Note 4] | Maximum bandwidth that can be used by system traffic on a single physical adapter (Mbps) Default: 0 | Arbitrary value |
| MTU | Size of the Maximum Transfer Unit (MTU) (Number of bytes) Default: 1500 Maximum: 9000 | Arbitrary value |

| Setting Item | Description | Setting Value |
|---|--|---|
| Port Group (multiple can be set) [Note 5] | | |
| Port Group Name [Note 6] | Name of the vDS port group (network label) | Arbitrary value |
| Type | Type of the vDS port group <ul style="list-style-type: none"> - VMkernel - Virtual Machine | vDS-1 <ul style="list-style-type: none"> - Virtual Machine port group for workload: Virtual Machine vDS-2 <ul style="list-style-type: none"> - Network port group for management: VMkernel - Network port group for vSAN: VMkernel - Network port group for vMotion: VMkernel - Virtual Machine port group for management: Virtual Machine |
| Number of Ports | Port number of the distributed port group Default: 8 Maximum: 8192 | Arbitrary value |
| VLAN Type | The type of the VLAN <ul style="list-style-type: none"> - None (Do not use VLAN) - VLAN Default: VLAN | Arbitrary value |
| VLAN ID | VLAN ID to use for vDS port group Default: No setting | Arbitrary value |
| IPv4 Network Address | IPv4 Network address of the VMkernel adapter | Arbitrary value |
| IPv4 Subnet Mask | IPv4 subnet mask of the VMkernel adapter | Arbitrary value |
| Traffic | Traffic <ul style="list-style-type: none"> - Management traffic - vMotion traffic - vSAN traffic | vMotion traffic <ul style="list-style-type: none"> - Network port group for management: Disable - Network port group for vSAN: Disable - Network port group for vMotion: Enable Management traffic <ul style="list-style-type: none"> - Network port group for management: Enable - Network port group for vSAN: Disable - Network port group for vMotion: Disable vSAN traffic |

| Setting Item | Description | Setting Value |
|---------------------------------------|---|--|
| | | <ul style="list-style-type: none"> - Network port group for management: Disable - Network port group for vSAN: Enable - Network port group for vMotion: Disable |
| Uplink Settings (multiple can be set) | | |
| Uplink Name | Distinguished name of uplink <ul style="list-style-type: none"> - Uplink 1 - Uplink 2 - Uplink 3 - Uplink 4 | Refer to " Setting values for vmnic name and uplink name when creating a cluster " |
| Failover Priority Settings [Note 7] | | |
| How to Distribute | Distribution method for uplink workload <ul style="list-style-type: none"> - Active - Stand-by | Arbitrary value |
| Priority Order | Specify the uplink priority with a decimal number starting with 0. | Arbitrary value |

[Note 1]: If you specify the same [vDS Name] as that of the existing cluster, it will be set to the existing cluster. The same [vDS Name] as that of the existing cluster specify the vDS name created for PRIMEFLEX for VMware vSAN V1. If you specify a [vDS Name] different from the existing cluster, a new vDS will be created.

[Note 2]: If you specify "Enabled" in [NIOC], you can specify [Traffic], [Shares], [Reservation] and [Limit] by selecting the [Set] button.

[Note 3]: This parameter can not be set.

[Note 4]: For the value to be specified in [Limit], specify the value as same as or larger than the value specified in [Reservation].

[Note 5]: In the type of network configuration, it is possible to set the number of and type of port group, as well as the system traffic.

| Type of network configuration | Port Group number | Classify according to type | |
|-------------------------------|-------------------|----------------------------|-------------------------------|
| | | VMkernel (System traffic) | Virtual Machine |
| Type I | vDS-1 | 1 | 0 |
| | vDS-2 | 4 | 3 (Management, vMotion, vSAN) |

[Note 6]: If you specify the [Port Group Name] of the same [vDS Name] as of the existing cluster, it will be set to the [Port Group Name] of the existing cluster.

- When using the existing vDS

If you specify the same [Port Group Name] as that of the existing cluster, the Port Group of the existing vDS will be used.

If you specify the different [Port Group Name] as that of the existing cluster, a new Port Group will be created.

- When creating a new vDS

A new Port Group will be created. Specify a name different from the [Port Group Name] of the existing cluster.

[Note 7]: If you specify [Port Group Name], you can specify [How to Distribute] and [Priority Order] by selecting the [Set] button.

Cluster Details - Storage Pool tab

| Setting Item | Description | Setting Value |
|-------------------|----------------------|--------------------------|
| Storage Pool Name | vSAN data store name | Arbitrary value [Note 1] |

[Note 1]: Specify a storage pool name different from that of the existing cluster.

Cluster Nodes Selection

| Setting Item | Description | Setting Value |
|--|---|-----------------------------------|
| Target nodes selection (multiple can be set) | | |
| Node Name | Select the node name managed by ISM. | Node name managed by ISM [Note 1] |
| Profile | Select the profile name managed by ISM. | Arbitrary value |

[Note 1]: Specify the node name that is the server for creating a new cluster.

Node Details - iRMC tab [Note 1]

| Setting Item | Description | Setting Value |
|--------------------------------------|--|-----------------|
| Local User Settings | | |
| 'admin' User | | |
| New Password [Note 2] | New password to be set for the iRMC admin user When doing cluster creation, update it along with the password set for the admin user registered in ISM. | Arbitrary value |
| New Password (Confirmation) [Note 2] | New password to be set for the iRMC admin user (Confirmation) | Arbitrary value |
| Administrator User | | |
| User Name | Administrator user name created in iRMC | pflocaladmin |
| Password [Note 2] | Password set for the iRMC administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the iRMC administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Node Details - OS tab [Note 1]

| Setting Item | Description | Setting Value |
|----------------------------------|---|--|
| Local User Settings | | |
| Administrator User ID | Administrator user name created in the OS | Arbitrary value Example: pflocaladmin |
| Password [Note 2] | Password set for the OS administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the OS administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Node Details - vDS tab [Note 1]

| Setting Item | Description | Setting Value |
|---|--|--|
| vDS (multiple can be set) | | |
| Physical NIC (multiple can be set) | | |
| vmnic Name [Note 2] | Name of the physical network adapter Example: vmnic2 * Only specify numbers that start with "vmnic." | Refer to " Setting values for vmnic name and uplink name when creating a cluster " |
| Uplink Name [Note 3] | Distinguished name of uplink - Uplink 1 - Uplink 2 - Uplink 3 - Uplink 4 | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Uplink Name] |
| Port Group (multiple can be set) [Note 4] | | |
| Port Group Name [Note 3] | Name of the vDS port group (network label) | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Port Group Name] |
| Type [Note 3] | Type of the vDS port group - VMkernel - Virtual Machine | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Type] |
| Traffic [Note 3] | Traffic - Management traffic - vMotion traffic - vSAN traffic | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Traffic] |
| IPv4 Address | IPv4 address of the VMkernel adapter | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: Specify the physical NIC set in the profile settings ([Details] - [OS] tab - [Management network port settings] - [Network port specification]) first.

[Note 3]: This parameter can not be set.

[Note 4]: In the type of network configuration, it is possible to set the number of and type of port group, as well as the system traffic. Refer to the table of [Note 5] in "Cluster Details - Network tab."

Setting values for vmnic name and uplink name when creating a cluster

Table 3.1 When creating clusters for PRIMEFLEX for VMware vSAN V1 PRIMERGY CX M4 series

| Setting Item | Setting Value | | |
|--|---------------------|------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management port switch (vSwitch1 [Note 1]) | Expansion option #0 | vmnic1 | Uplink1 |
| | PCI card #0 | vmnic3 | Uplink3 |
| Workload port switch (vSwitch0 [Note 1]) | Expansion option #1 | vmnic2 | Uplink2 |

| Setting Item | Setting Value | | |
|--------------|---------------|------------|-------------|
| | Physical port | vmnic name | uplink name |
| | PCI card #1 | vmnic4 | Uplink4 |

[Note 1]: This is the default setting value.

Table 3.2 When creating clusters for PRIMEFLEX for VMware vSAN V1 PRIMERGY RX M4 series

| Setting Item | Setting Value | | |
|---|---------------------|-----------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management port switch (vSwitch1 [Note 1]) | Expansion option #0 | vmnic2 | Uplink1 |
| | PCI card #0 | vmnic4 [Note 2] | Uplink3 |
| Workload port switch (vSwitch0 [Note 1]) | Expansion option #1 | vmnic3 | Uplink2 |
| | PCI card #1 | vmnic5 [Note 2] | Uplink4 |

[Note 1]: This is the default setting value.

[Note 2]: If you purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the second expansion card.

 Note

"Setting values for vmnic name and uplink name when creating a cluster" is only set if expansion cards are used for this product. If you are using the PRIMERGY RX series servers, and purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the part in [Note 2]. The vmnic number is allocated from onboard to the PCI slots in ascending order.

If you purchased two expansion cards and installed them in PCI slots 2 and 3 (PCI slot 1 is the SAS array controller card), the vmnic number is allocated as follows.

Table 3.3 Example of vmnic numbers if expansion cards were installed

| Target server | Port location | vmnic number |
|-----------------------|-------------------------|--------------|
| PRIMERGY RX M2 series | Expansion option port 0 | vmnic0 |
| | Expansion option port 1 | vmnic1 |
| | Port 0 on PCI slot 2 | vmnic2 |
| | Port 1 on PCI slot 2 | vmnic3 |
| | Port 0 on PCI slot 3 | vmnic4 |
| | Port 1 on PCI slot 3 | vmnic5 |
| PRIMERGY RX M4 series | Onboard port 0 | vmnic0 |
| | Onboard port 1 | vmnic1 |
| | Expansion option port 0 | vmnic2 |
| | Expansion option port 1 | vmnic3 |
| | Port 0 on PCI slot 2 | vmnic4 |
| | Port 1 on PCI slot 2 | vmnic5 |
| | Port 0 on PCI slot 3 | vmnic6 |
| | Port 1 on PCI slot 3 | vmnic7 |

3.2 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX for Microsoft Storage Spaces Direct (Cluster Creation) (ISM 2.3.0.b or later)

This section describes the cluster definition parameter setting values of the Cluster Creation of PRIMEFLEX for Microsoft Storage Spaces Direct.

Cluster Creation for the PRIMEFLEX for Microsoft Storage Spaces Direct version can be used with ISM 2.3.0.b or later.



Note

- If you are using the Cluster Creation of PRIMEFLEX for Microsoft Storage Spaces Direct, set the following cluster definition parameter setting values.
- When using Export/Import of Cluster Definition Parameters, edit Cluster Definition Parameters to set them appropriately according to your environment. Export/Import of Cluster Definition Parameters can be used with ISM 2.3.0.b or later.

CMS Information

| Setting Item | Description | Setting Value |
|---|---|----------------------------|
| Cluster Type | Cluster Type - VMware vSAN Cluster - Microsoft Failover Cluster | Microsoft Failover Cluster |
| Cloud Management Software Name [Note 1] | Cloud Management Software Name | Arbitrary value |
| IPv4 IP Address [Note 1] | IPv4 IP address of the CMS | IPv4 IP address of the CMS |
| Domain Name | Domain name of the CMS | Domain name of the CMS |
| User Name | User name used when connecting to the CMS | pfadmin |
| Password [Note 2] | Password used when connecting to the CMS | Password of pfadmin |
| Password (Confirmation) [Note 2] | Password used when connecting to the CMS (Confirmation) | Password of pfadmin |
| WinRM Service (SSL) Port [Note 3] | WinRM service port number of the CMS | 5986 |

[Note 1]: Specify a setting value different from the value of the existing cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters.

[Note 3]: This parameter can not be set.

Basic Information

| Setting Item | Description | Setting Value |
|---|---|-----------------------------------|
| Cloud Management Software Name [Note 1] | Name of the cloud management software | Arbitrary value |
| Type [Note 1] | Cluster Type - VMware vSAN Cluster - Microsoft Failover Cluster | Microsoft Failover Cluster |
| Cluster Name [Note 1] | Cluster Name | Name of the cluster to be created |
| Number of Composing Nodes | The number of nodes configuring the cluster - 2 | Arbitrary value |

| Setting Item | Description | Setting Value |
|--------------|-----------------------------------|---------------|
| | - 3 or more Default: 3 or more | |

[Note 1]: This parameter can not be set.

Cluster Details - DNS tab

| Setting Item | Description | Setting Value |
|-----------------------------------|---|--|
| IP Address (Secondary DNS Server) | IP address of secondary DNS server [Note 1] | <ul style="list-style-type: none"> - If you are using the Active Directory currently configured in your environment: IP address of the customers' AD2 - If you are using an ADVN configured as dedicated to PRIMEFLEX for Microsoft Storage Spaces Direct: IP address of ADVN2 |

[Note 1]: The IP address of the primary DNS server is specified in the ISM profile.

Cluster Details - LDAP tab

| Setting Item | Description | Setting Value |
|--|--|--|
| Domain Name | Domain name of LDAP server | Domain name of LDAP server |
| User Name | User name used when connecting to the LDAP server | pfadmin |
| Password [Note 1] | Password used when connecting to the LDAP server | Password used when connecting to the LDAP server (Password of pfadmin) |
| Password (Confirmation) [Note 1] | Password used when connecting to the LDAP server (Confirmation) | Password used when connecting to the LDAP server (Password of pfadmin) |
| Directory Server Type | The type of the directory server - Active Directory | Active Directory |
| Host Name or IP Address (Primary Host) | Host name or IP address of the primary LDAP server | Host name or IP address of the primary LDAP server |
| Port (Primary Host) | Port number of the LDAP service (non TLS/SSL) of the primary LDAP server Default: 389 | 389 |
| TLS/SSL Port (Primary Host) | Port number of the LDAP service (TLS/SSL) of the primary LDAP server Default: 636 | 636 |
| Host Name or IP Address (Backup Host) | Host name or IP address of the backup LDAP server | Host name or IP address of the backup LDAP server |
| Port (Backup Host) | Port number of the LDAP service (non TLS/SSL) of the backup LDAP server Default: 389 | 389 |
| TLS/SSL Port (Backup Host) | Port number of the LDAP service (TLS/SSL) of the backup LDAP server Default: 636 | 636 |
| Division | LDAP division name | PF_Dept_1 |

| Setting Item | Description | Setting Value |
|--------------------------|--|---------------|
| Local User Login | Specify whether to enable log in for local users. - Enable - Disable Default: Disable | Enable |
| Always use TLS/SSL Login | Specify whether to always use TLS/SSL for login. - Yes - No Default: No | No |

[Note 1]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters.

Cluster Details - Network tab

| Setting Item | Description | Setting Value |
|---|--|--|
| Default Gateway | IPv4 address of the default gateway | Arbitrary value |
| Workload Virtual Switch | | |
| Virtual Switch Name | Name of the virtual switch | Name of Workload Virtual Switch |
| Embedded Teaming | Specify whether to enable embedded teaming. - Enable - Disable Default: Disable | Enable |
| Management Virtual Switch (multiple can be set) | | |
| Virtual Switch Name | Name of the virtual switch | Name of Management Virtual Switch |
| Embedded Teaming | Specify whether to enable embedded teaming. - Enable - Disable Default: Disable | Enable |
| Network Name | Name of the virtual network | The three of the following - Name of network adapter for management - Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct - Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct |
| Role Settings | Values to be set to Role - Do not allow cluster network communication | Arbitrary value |

| Setting Item | Description | Setting Value |
|----------------------|--|-----------------|
| | <ul style="list-style-type: none"> - Allow only cluster network communication - Allow both cluster network communication and connections between the clients <p>Default:</p> <ul style="list-style-type: none"> - For network adapter for management: Allow both cluster network communication and connections between the clients - For network adapter 1 for live migration, Microsoft Storage Spaces Direct or network adapter 2 for live migration, Microsoft Storage Spaces Direct : Allow only cluster network communication | |
| VLAN Type | <p>The type of the VLAN</p> <ul style="list-style-type: none"> - None (Do not use VLAN) - VLAN <p>Default: VLAN</p> | Arbitrary value |
| VLAN ID | <p>VLAN ID to use for vDS port group</p> <p>Default: No setting</p> | Arbitrary value |
| IPv4 Network Address | IPv4 Network address of the cluster network | Arbitrary value |
| IPv4 Subnet Mask | IPv4 subnet mask of the cluster network | Arbitrary value |

Cluster Details - Storage Pool tab

| Setting Item | Description | Setting Value |
|-----------------------|--|-------------------------------|
| Journal Settings | | |
| Media Type | <p>Media Type of disks used for Journal</p> <p>Default: SSD</p> | SSD |
| Bus Type | <p>Bus Type of disks used for Journal</p> <p>Default: SAS</p> | SAS |
| Storage Tier Settings | | |
| Storage Tier Name | Friendly Name of Storage Tier | Arbitrary value |
| Media Type | <p>Media Type of Storage Tier</p> <p>Default: HDD</p> | HDD |
| Recovery | <p>Type of Recovery method (allocation method)</p> <ul style="list-style-type: none"> - 2-Way or 3-Way Mirror Storage | 2-Way or 3-Way Mirror Storage |
| Redundancy | <p>Redundancy of disks</p> <ul style="list-style-type: none"> - 2 | "2" or "3 or more" |

| Setting Item | Description | Setting Value |
|-----------------------|--|----------------------------------|
| | <ul style="list-style-type: none"> - 3 or more Default: The number of nodes specified in [Basic Information]-[Number of Composing Nodes] | |
| Number of data copies | Number of data copies <ul style="list-style-type: none"> - 2-way Mirror - 3-way Mirror Default: <ul style="list-style-type: none"> - When Redundancy is 2 nodes: 2-way Mirror - When Redundancy is 3 or more: 3-way Mirror | "2-way Mirror" or "3-way Mirror" |

Cluster Nodes Selection

| Setting Item | Description | Setting Value |
|---|---|-----------------------------------|
| Target nodes selection (multiple can be set) [Note 1] | | |
| Node Name | Select the node name managed by ISM. | Node name managed by ISM [Note 2] |
| Profile | Select the profile name managed by ISM. | Arbitrary value |

[Note 1]: Specify the number of nodes set in [Basic Information]-[Number of Composing Nodes]

[Note 2]: Specify the Node Name of the server configuring the new cluster.

Node Details - iRMC tab [Note 1]

| Setting Item | Description | Setting Value |
|--------------------------------------|--|-----------------|
| Local User Settings | | |
| 'admin' User | | |
| New Password [Note 2] | New password to be set for the iRMC admin user When doing cluster creation, update it along with the password set for the admin user registered in ISM. | Arbitrary value |
| New Password (Confirmation) [Note 2] | New password to be set for the iRMC admin user (Confirmation) | Arbitrary value |
| Administrator User | | |
| User Name | Administrator user name created in iRMC | pflocaladmin |
| Password [Note 2] | Password set for the iRMC administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the iRMC administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters.

Node Details - OS tab [Note 1]

| Setting Item | Description | Setting Value |
|----------------------------------|--|--|
| Local User Settings | | |
| Administrator User ID | Administrator user name created in the OS | Arbitrary value Example: pflocaladmin |
| Password [Note 2] | Password set for the OS administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the OS administrator user | Arbitrary value (Confirmation) |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters.

Node Details - Virtual Switch tab [Note 1]

| Setting Item | Description | Setting Value |
|---|--|--|
| Slot Number Settings | | |
| Slot Numbers (multiple can be set) | Number of the PCI slot where the physical network adapter binding the virtual switch is installed. Example: 2 | Number of the PCI slot where the physical network adapter binding the virtual switch is installed. |
| Workload Virtual Switch | | |
| Virtual Switch Settings | | |
| Virtual Switch Name | Name of the virtual switch | Name of Workload Virtual Switch |
| Slot Number - Port Number (multiple can be set) | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed Example: 2-0 | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed |
| Embedded Teaming | Specify whether to enable embedded teaming. - Enable - Disable Default: Disable | Enable |
| Management Virtual Switch | | |
| Virtual Switch Settings | | |
| Virtual Switch Name | Name of the virtual switch | Name of Management Virtual Switch |
| Slot Number - Port Number (multiple can be set) | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed Example: 2-0 | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed |
| Embedded Teaming | Specify whether to enable embedded teaming. - Enable - Disable Default: Disable | Enable |

| Setting Item | Description | Setting Value |
|---|---|---|
| Virtual Network Adapter (multiple can be set) | | |
| Adapter Name | Name of the virtual network adapter | The three of the following <ul style="list-style-type: none"> - Name of network adapter for management - Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct - Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct |
| Management OS | Specify whether it is the virtual network adapter for the management OS. <ul style="list-style-type: none"> - Yes - No Default: Yes | Specify the following <ul style="list-style-type: none"> - Name of network adapter for management: Yes - Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct: Yes - Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct: Yes |
| IPv4 Address | IPv4 Address | Arbitrary value |
| Network Adapter (multiple can be set) | | |
| Slot Number | Number of the PCI slot where the physical network adapter binding the virtual switch is installed <p>Example: 2</p> | Number of the PCI slot where the physical network adapter binding the virtual switch is installed |
| Virtual Machine Queue [Note 3] | Specify whether to enable virtual machine queue. <ul style="list-style-type: none"> - Enable - Disable Default: Enable | PCI adapter: Enable |
| SR/IOV [Note 3] | Specify whether to enable SR/IOV. <ul style="list-style-type: none"> - Enable - Disable Default: Enable | PCI adapter: Disable |
| vRSS [Note 3] | Specify whether to enable vRSS. <ul style="list-style-type: none"> - Enable - Disable Default: Enable | PCI adapter: Enable |

[Note 1]: Specify it for each node configured in the selected cluster.

3.3 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1 (Cluster Expansion)

This section describes the cluster definition parameter setting values of the Cluster Expansion of PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1.

Note

- If you are using the Cluster Expansion of PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1, set the following cluster definition parameter setting values.
- When using Export/Import of Cluster Definition Parameters, edit Cluster Definition Parameters to set them appropriately according to your environment. Export/Import of Cluster Definition Parameters can be used with ISM 2.3.0.b or later.

Basic Information for PRIMERGY RX Series Configuration [Note 1]

| Setting Item | Description | Setting Value |
|---|---|--|
| Cloud Management Software Name [Note 2] | Name of the cloud management software | Arbitrary value |
| Type [Note 2] | Cluster Type | VMware vSAN Cluster |
| Data Center Name | Name of the datacenter that the cluster belongs to | Name of the datacenter that the cluster belongs to |
| Cluster Name [Note 2] | Cluster Name | Name of the cluster that the cluster expands |
| Storage Configuration | Storage Configuration - Hybrid - All-Flash Default : Hybrid | Hybrid or All-Flash |
| Network Configuration [Note 3] | Type of network configuration - Type I - Type II Default: Type I | Type I |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: This parameter can not be set.

[Note 3]: This item is required to be specified when you create Cluster Definition Parameters. This parameter is not displayed when editing Cluster Definition Parameters.

Basic Information for PRIMERGY CX Series Configuration [Note 1]

| Setting Item | Description | Setting Value |
|---|--|--|
| Cloud Management Software Name [Note 2] | Name of the cloud management software | Arbitrary value |
| Type [Note 2] | Cluster Type | VMware vSAN Cluster |
| Data Center Name | Name of the datacenter that the cluster belongs to | Name of the datacenter that the cluster belongs to |
| Cluster Name [Note 2] | Cluster Name | Name of the cluster that the cluster expands |

| Setting Item | Description | Setting Value |
|--------------------------------|--|---|
| Storage Configuration | Storage Configuration <ul style="list-style-type: none"> - Hybrid - All Flash Default: Hybrid | Hybrid or All Flash [Note 4] Hybrid [Note 5] |
| Network Configuration [Note 3] | Type of network configuration <ul style="list-style-type: none"> - Type I - Type II Default: Type I | Type I [Note 4] Type II [Note 5] |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters. This parameter can not be set.

[Note 2]: This parameter can not be set.

[Note 3]: This item is required to be specified when you create Cluster Definition Parameters. This parameter is not displayed when editing Cluster Definition Parameters.

[Note 4]: Specify the type for PRIMERGY CX M4 series.

[Note 5]: Specify the type for PRIMERGY CX M2 series.

Cluster Details - DNS tab [Note 1]

| Setting Item | Description | Setting Value |
|-----------------------------------|---|--|
| Domain Name | DNS domain name | DNS domain name |
| IP Address (Secondary DNS server) | IP address of secondary DNS server [Note 2] | <ul style="list-style-type: none"> - If you are using the Active Directory currently configured in your environment: IP address of the customers' AD2 - If you are using the ADVM configured as dedicated to PRIMEFLEX HS V1.0/V1.1/ PRIMEFLEX for VMware vSAN V1: IP address of ADVM2 |
| DNS Record Registration [Note 3] | Specify whether to automatically register the host (A/PTR) records of servers for creating a new cluster. If you set it to "Enable" it will be registered automatically. <ul style="list-style-type: none"> - Enable - Disable Default: Disable | <ul style="list-style-type: none"> - If you are using the Active Directory currently configured in your environment or using the configuration without AD links: Disable - If you are using the ADVM configured as dedicated to PRIMEFLEX HS V1.0/V1.1/ PRIMEFLEX for VMware vSAN V1: Enable |
| WinRM Service Port [Note 3] | Specify the communication system and the port number of the WinRM service of the DNS server. <ul style="list-style-type: none"> - Communication system <ul style="list-style-type: none"> - HTTPS - HTTP Default: HTTPS | <ul style="list-style-type: none"> - Communication system HTTPS or HTTP - Port Number <ul style="list-style-type: none"> - For HTTPS: 5986 - For HTTP: 5985 |

| Setting Item | Description | Setting Value |
|---|---|---------------------|
| | <ul style="list-style-type: none"> - Port Number - For HTTPS Port number of the WinRM service (SSL) of the DNS server If you specified this item, communication with the DNS server will be encrypted (SSL). It is required to register a TLS/SSL communication authentication certificate in the DNS server in advance. Default: 5986 - For HTTP Port number of the WinRM service (non SSL) of the DNS server Specify if communicating with the DNS server in plain text. Default: 5985 | |
| User Name [Note 3] | User name used when connecting to the DNS server | pfadmin |
| Password [Note 3] [Note 4] | Password used when connecting to the DNS server | Password of pfadmin |
| Password (Confirmation) [Note 3] [Note 4] | Password used when connecting to the DNS server (Confirmation) | Password of pfadmin |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: The IP address of the primary DNS server is specified in the ISM profile.

[Note 3]: DNS server is only enabled when using Windows Server. If you are not using the PRIMEFLEX configuration ADVN or the AD link using AD servers in your environment, set [DNS Record Registration] to "Disable." In addition, [WinRM Service Port], [WinRM Service (SSL) Port], [User Name] and [Password] are not required to be specified.

[Note 4]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Cluster Details - NTP tab [Note 1]

| Setting Item | Description | Setting Value |
|---------------------------------------|---|--|
| NTP Server1 (Host Name or IP Address) | Host name or IP address of NTP server1 | Host name or IP address of NTP server1 |
| NTP Server2 (Host Name or IP Address) | Host name or IP address of NTP server2 | Host name or IP address of NTP server2 |
| Max Interval between NTP Peer | Maximum interval to peer for NTP time source setting (Seconds) Default: 30 (Seconds) | 30 |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

Cluster Details - LDAP tab [Note 1] [Note 2]

| Setting Item | Description | Setting Value |
|------------------------|---|-----------------|
| Activate LDAP Settings | Specify whether to enable LDAP settings. <ul style="list-style-type: none"> - Enable - Disable | Arbitrary value |

| Setting Item | Description | Setting Value |
|--|--|--|
| | Default: Disable | |
| Domain Name | Domain name of LDAP server | Domain name of LDAP server |
| User Name | User name used when connecting to the LDAP server | pfadmin |
| Password [Note 3] | Password used when connecting to the LDAP server | Password of pfadmin |
| Password (Confirmation) [Note 3] | Password used when connecting to the LDAP server (Confirmation) | Password of pfadmin |
| Directory Server Type | The type of the directory server - Active Directory | Active Directory |
| Host Name or IP Address (Primary Host) | Host name or IP address of the primary LDAP server | Host name or IP address of the primary LDAP server |
| Port (Primary Host) | Port number of the LDAP service (non TLS/SSL) of the primary LDAP server Default: 389 | 389 |
| TLS/SSL Port (Primary Host) | Port number of the LDAP service (TLS/SSL) of the primary LDAP server Default: 636 | 636 |
| Host Name or IP Address (Backup Host) | Host name or IP address of the backup LDAP server | Host name or IP address of the backup LDAP server |
| Port (Backup Host) | Port number of the LDAP service (non TLS/SSL) of the backup LDAP server Default: 389 | 389 |
| TLS/SSL Port (Backup Host) | Port number of the LDAP service (TLS/SSL) of the backup LDAP server Default: 636 | 636 |
| Division | LDAP division name | PF_Dept_1 |
| Local User Login | Specify whether to enable log in for local users. - Enable - Disable Default: Disable | Enable [Note 4] |
| Always use TLS/SSL Login | Specify whether to always use TLS/SSL for login. - Yes - No Default: No | No [Note 4] |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: This setting is not required if you are not using the PRIMEFLEX configuration ADVN or the AD link using AD servers in your environment (Remove the check for [LDAP] tab - [Activate LDAP Settings]).

[Note 3]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

[Note 4]: This parameter is ignored for ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

Cluster Details - Function tab [Note 1]

| Setting Item | Description | Setting Value |
|-------------------------------|--|------------------------------|
| vSphere HA Settings | | |
| Isolation Response Address 1 | Isolation Response Address (IP Address) 1 Note) Normally the IP address of the Virtual SAN Network of the first node configuring the cluster is set. | Isolation Response Address 1 |
| Isolation Response Address 2 | Isolation Response Address (IP Address) 2 Note) Normally the IP address of the Virtual SAN Network of the second node configuring the cluster is set. | Isolation Response Address 2 |
| vSAN Settings | | |
| Add Disks to Storage | Specify whether to add disks to the storage automatically. - Automatic - Manual Default: Automatic | Arbitrary value |
| Deduplication and Compression | Specify whether to enable deduplication and compression. - Enable - Disable Default: Disable | Arbitrary value |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

Cluster Details - Network tab [Note 1]

| Setting Item | Description | Setting Value |
|--|---|--|
| Default Gateway | IPv4 address of the default gateway | Arbitrary value |
| vSAN Distributed Switch Settings | | |
| vDS-1 or vDS-2 | | |
| vDS Name [Note 2] | Name of the vDS (vSphere Distributed Switch) | Arbitrary value - Name of the workload virtual distributed switch - Name of the management virtual distributed switch * vDS setting information lists are two |
| NIOC | Specify whether to enable NIOC. - Enable - Disable Default: Enable | vDS-1: Disable (can not be set) vDS-2: Enable or Disable |
| NIOC Settings (multiple can be set) [Note 3] | | |

| Setting Item | Description | Setting Value |
|---|--|--|
| Traffic [Note 4] | System Traffic Type - Management - vMotion - vSAN | Management, vMotion, vSAN |
| Shares | Relative priority of System Traffic Types 1-100 Default: 50(Management), 70(vMotion), 100(vSAN) | Arbitrary value |
| Reservation (Mbps) [Note 5] | Minimum band width required to be maintained on a single physical adapter (Mbps) Default: 500(Management), 500(vMotion), 1000(vSAN) | Arbitrary value |
| Limit (Mbps) [Note 5] | Maximum bandwidth that can be used by system traffic on a single physical adapter (Mbps) Default: 0 | Arbitrary value |
| MTU | Size of the Maximum Transfer Unit (MTU) (Number of bytes) Default: 1500 Maximum: 9000 | Arbitrary value |
| Port Group (multiple can be set) [Note 6] | | |
| Port Group Name [Note 7] | Name of the vDS port group (network label) | Arbitrary value |
| Type [Note 8] | Type of the vDS port group - VMkernel - Virtual Machine | vDS-1 - Virtual machine port group for workload: Virtual Machine vDS-2 - Network port group for management: VMkernel - Network port group for vSAN : VMkernel - Network port group for vMotion : VMkernel Network port group for management: Virtual Machine |
| Number of Ports | Port number of the distributed port group Default: 8 Maximum: 8192 | Arbitrary value |
| VLAN Type | The type of the VLAN - None (Do not use VLAN) - VLAN Default: VLAN | Arbitrary value |

| Setting Item | Description | Setting Value |
|---------------------------------------|---|--|
| VLAN ID | VLAN ID to use for vDS port group Default: No setting | Arbitrary value |
| IPv4 Network Address | IPv4 Network address of the VMkernel adapter | Arbitrary value |
| IPv4 Subnet Mask | IPv4 subnet mask of the VMkernel adapter | Arbitrary value |
| Traffic [Note 9] | Traffic <ul style="list-style-type: none"> - Management traffic - vMotion traffic - vSAN traffic | vMotion traffic <ul style="list-style-type: none"> - Network port group for Management: Disable - Network port group for vSAN: Disable - Network port group for vMotion: Enable Management traffic <ul style="list-style-type: none"> - Network port group for Management: Enable - Network port group for vSAN: Disable - Network port group for vMotion: Disable vSAN traffic <ul style="list-style-type: none"> - Network port group for Management: Disable - Network port group for vSAN: Enable - Network port group for vMotion: Disable |
| Uplink Settings (multiple can be set) | | |
| Uplink Name | Distinguished name of uplink <ul style="list-style-type: none"> - Uplink 1 - Uplink 2 - Uplink 3 - Uplink 4 | Refer to " Setting values for vmnic name and uplink name when expanding a cluster " |
| Failover Priority Settings [Note 10] | | |
| How to Distribute | Distribution method for uplink workload <ul style="list-style-type: none"> - Active - Stand-by | Arbitrary value |
| Priority Order | Specify the uplink priority with a decimal number starting with 0. | Arbitrary value |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: For vDS names, specify the adequate vDS name according to your environment.

[Note 3]: If you select the [Set] button, you can specify [Traffic], [Shares], [Reservation] and [Limit].

[Note 4]: This parameter can not be set.

[Note 5]: For the value to be specified in [Limit], specify the value as same as or larger than the value specified in [Reservation].

[Note 6]: In the type of network configuration it is possible to set the number of and type of port group, as well as the system traffic.

| Type of network configuration | | Port Group number | Classify according to type | |
|-------------------------------|-------|-------------------|-------------------------------|-----------------|
| | | | VMkernel (System traffic) | Virtual Machine |
| Type I | vDS-1 | 1 | 0 | 1 |
| | vDS-2 | 4 | 3 (Management, vMotion, vSAN) | 1 |
| Type II | vDS-1 | 2 | 1 (Management) | 1 |
| | vDS-2 | 3 | 2 (vMotion, vSAN) | 1 |

[Note 7]: For vDS port group names, specify the adequate port group name according to your environment.

[Note 8]: This parameter is ignored for ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

[Note 9]: This is only enabled when the vDS port group is a "VMkernel" type.

[Note 10]: If you specify [Port Group Name], you can specify [How to Distribute] and [Priority Order] by selecting the [Set] button.

Cluster Details - Storage Pool tab [Note 1]

| Setting Item | Description | Setting Value |
|-------------------|----------------------|-----------------|
| Storage Pool Name | vSAN data store name | Arbitrary value |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

Cluster Nodes Selection

| Setting Item | Description | Setting Value |
|--|---|-----------------------------------|
| Target nodes selection (multiple can be set) | | |
| Node Name | Select the node name managed by ISM. | Node name managed by ISM [Note 1] |
| Profile | Select the profile name managed by ISM. | Arbitrary value |

[Note 1]: Specify the node name that is the server for expanding a cluster when doing cluster expansion.

Node Details - iRMC tab [Note 1]

| Setting Item | Description | Setting Value |
|--------------------------------------|---|-----------------|
| Local User Settings | | |
| 'admin' user | | |
| New Password [Note 2] | New password to be set for the iRMC admin user When doing cluster expansion, update it along with the password set for the admin user registered in ISM. | Arbitrary value |
| New Password (Confirmation) [Note 2] | New password to be set for the iRMC admin user (Confirmation) | Arbitrary value |
| Administrator user | | |
| User Name | Administrator user name created in iRMC | pflocaladmin |
| Password [Note 2] | Password set for the iRMC administrator user | Arbitrary value |

| Setting Item | Description | Setting Value |
|----------------------------------|---|-----------------|
| Password (Confirmation) [Note 2] | Password set for the iRMC administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Node Details - OS tab [Note 1]

| Setting Item | Description | Setting Value |
|----------------------------------|---|--|
| Local User Settings | | |
| Administrator User ID | Administrator user name created in the OS | Arbitrary value Example: pflocaladmin |
| Password [Note 2] | Password set for the OS administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the OS administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Node Details - vDS tab [Note 1]

| Setting Item | Description | Setting Value |
|---|--|--|
| vDS (multiple can be set) | | |
| Physical NIC (multiple can be set) | | |
| vmnic Name | Name of the physical network adapter Example: vmnic2 * Only specify numbers that start with "vmnic." | Refer to " Setting values for vmnic name and uplink name when expanding a cluster " |
| Uplink Name [Note 2] | Distinguished name of uplink - Uplink 1 - Uplink 2 - Uplink 3 - Uplink 4 | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Uplink Settings] - [Uplink Name] |
| Port Group (multiple can be set) [Note 3] | | |
| Port Group Name [Note 2] | Name of the vDS port group (network label) | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Port Group Name] |
| Type [Note 2] | Type of the vDS port group - VMkernel - Virtual Machine | Setting value specified in [Cluster Details] - [Network] tab - [vSAN Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Type] |
| Traffic [Note 2] | Traffic | Setting value specified in [Cluster Details] - [Network] tab - [vSAN |

| Setting Item | Description | Setting Value |
|--------------|---|--|
| | <ul style="list-style-type: none"> - Management traffic - vMotion traffic - vSAN traffic | Distributed Switch Settings] - [vDS-1 or vDS-2] - [Port Group] - [Traffic] |
| IPv4 Address | IPv4 address of the VMkernel adapter | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter can not be set.

[Note 3]: In the type of network configuration it is possible to set the number of and type of port group, as well as the system traffic. Refer to the table of [Note 6] in "Cluster Details - Network tab."

Setting values for vmnic name and uplink name when expanding a cluster

Table 3.4 When adding PRIMERGY CX M2 series to PRIMEFLEX HS V1.0/V1.1 PRIMERGY CX M2 series

| Setting Item | Setting Value | | |
|---|---------------------|------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management switch (vSwitch0 [Note 1]) | Expansion option #0 | vmnic0 | Uplink1 |
| | Expansion option #1 | vmnic1 | Uplink2 |
| Management/Workload switch (vSwitch1 [Note 1]) | PCI card #0 | vmnic2 | Uplink3 |
| | PCI card #1 | vmnic3 | Uplink4 |

[Note 1]: This is the default setting value.

Table 3.5 When adding PRIMERGY RX M2 series to PRIMEFLEX HS V1.0/V1.1 PRIMERGY RX M2 series

| Setting Item | Setting Value | | |
|--|---------------------|----------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management switch (vSwitch1 [Note 1]) | Expansion option #0 | vmnic0 | Uplink1 |
| | PCI card #0 | vmnic2[Note 2] | Uplink3 |
| Workload switch (vSwitch0 [Note 1]) | Expansion option #1 | vmnic1 | Uplink2 |
| | PCI card #0 | vmnic3[Note 2] | Uplink4 |

[Note 1]: This is the default setting value.

[Note 2]: If you purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the second expansion card.

Table 3.6 When adding PRIMERGY RX M4 series to PRIMEFLEX HS V1.0/V1.1 PRIMERGY RX M2 series

| Setting Item | Setting Value | | |
|---|---------------------|-----------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management port switch (vSwitch1 [Note 1]) | Expansion option #0 | vmnic2 | Uplink1 |
| | PCI card #0 | vmnic4 [Note 2] | Uplink3 |
| Workload port switch (vSwitch0 [Note 1]) | Expansion option #1 | vmnic3 | Uplink2 |
| | PCI card #1 | vmnic5 [Note 2] | Uplink4 |

[Note 1]: This is the default setting value.

[Note 2]: If you purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the second expansion card.

Table 3.7 When adding PRIMERGY CX M4 series to PRIMEFLEX for VMware vSAN V1 PRIMERGY CX M4 series

| Setting Item | Setting Value | | |
|---|---------------------|------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management port switch (vSwitch1 [Note 1]) | Expansion option #0 | vmnic1 | Uplink1 |
| | PCI card #0 | vmnic3 | Uplink3 |
| Workload port switch (vSwitch0 [Note 1]) | Expansion option #1 | vmnic2 | Uplink2 |
| | PCI card #1 | vmnic4 | Uplink4 |

[Note 1]: This is the default setting value.

Table 3.8 When adding PRIMERGY RX M4 series to PRIMEFLEX for VMware vSAN V1 PRIMERGY RX M4 series

| Setting Item | Setting Value | | |
|---|---------------------|-----------------|-------------|
| | Physical port | vmnic name | uplink name |
| Management port switch (vSwitch1 [Note 1]) | Expansion option #0 | vmnic2 | Uplink1 |
| | PCI card #0 | vmnic4 [Note 2] | Uplink3 |
| Workload port switch (vSwitch0 [Note 1]) | Expansion option #1 | vmnic3 | Uplink2 |
| | PCI card #1 | vmnic5 [Note 2] | Uplink4 |

[Note 1]: This is the default setting value.

[Note 2]: If you purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the second expansion card.

 **Note**

"Setting values for vmnic name and uplink name when expanding a cluster" is only set if expansion cards are used for this product. If you are using the PRIMERGY RX series servers, and purchased multiple expansion cards, enter a vmnic name that is appropriate for your environment for the part in [Note 2]. The vmnic number is allocated from onboard to the PCI slots in ascending order.

If you purchased two expansion cards and installed them in PCI slots 2 and 3 (PCI slot 1 is the SAS array controller card), the vmnic number is allocated as follows.

Table 3.9 Example of vmnic numbers if expansion cards were installed

| Target server | Port location | vmnic number |
|-----------------------|-------------------------|--------------|
| PRIMERGY RX M2 series | Expansion option port 0 | vmnic0 |
| | Expansion option port 1 | vmnic1 |
| | Port 0 on PCI slot 2 | vmnic2 |
| | Port 1 on PCI slot 2 | vmnic3 |
| | Port 0 on PCI slot 3 | vmnic4 |
| | Port 1 on PCI slot 3 | vmnic5 |
| PRIMERGY RX M4 series | Onboard port 0 | vmnic0 |
| | Onboard port 1 | vmnic1 |
| | Expansion option port 0 | vmnic2 |
| | Expansion option port 1 | vmnic3 |
| | Port 0 on PCI slot 2 | vmnic4 |
| | Port 1 on PCI slot 2 | vmnic5 |

| Target server | Port location | vmnic number |
|---------------|----------------------|--------------|
| | Port 0 on PCI slot 3 | vmnic6 |
| | Port 1 on PCI slot 3 | vmnic7 |

3.4 Setting Items Lists for Cluster Definition Parameters for PRIMEFLEX for Microsoft Storage Spaces Direct version (Cluster Expansion)

This section describes the cluster definition parameter setting values of the Cluster Expansion of PRIMEFLEX for Microsoft Storage Spaces Direct.

Note

- If you are using the Cluster Expansion of PRIMEFLEX for Microsoft Storage Spaces Direct, set the following cluster definition parameter setting values.
- When using Export/Import of Cluster Definition Parameters, edit Cluster Definition Parameters to set them appropriately according to your environment. Export/Import of Cluster Definition Parameters can be used with ISM 2.3.0.b or later.

Cluster Details - DNS tab [Note 1]

| Setting Item | Description | Setting Value |
|-----------------------------------|---|--|
| IP Address (Secondary DNS server) | IP address of secondary DNS server [Note 2] | <ul style="list-style-type: none"> - If you are using the Active Directory currently configured in your environment: IP address of the customers' AD2 - If you are using an ADVN configured as dedicated to PRIMEFLEX for Microsoft Storage Spaces Direct: IP address of ADVN2 |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: The IP address of the primary DNS server is specified in the ISM profile.

Cluster Details - LDAP tab [Note 1]

| Setting Item | Description | Setting Value |
|--|---|--|
| Domain Name | Domain name of LDAP server | Domain name of LDAP server |
| User Name | User name used when connecting to the LDAP server | pfadmin |
| Password [Note 2] | Password used when connecting to the LDAP server | Password of pfadmin |
| Password (Confirmation) [Note 2] | Password used when connecting to the LDAP server (Confirmation) | Password of pfadmin |
| Directory Server Type | The type of the directory server - Active Directory | Active Directory |
| Host Name or IP Address (Primary Host) | Host name or IP address of the primary LDAP server | Host name or IP address of the primary LDAP server |

| Setting Item | Description | Setting Value |
|---------------------------------------|--|---|
| Port (Primary Host) | Port number of the LDAP service (non TLS/SSL) of the primary LDAP server Default: 389 | 389 |
| TLS/SSL Port (Primary Host) | Port number of the LDAP service (TLS/SSL) of the primary LDAP server Default: 636 | 636 |
| Host Name or IP Address (Backup Host) | Host name or IP address of the backup LDAP server | Host name or IP address of the backup LDAP server |
| Port (Backup Host) | Port number of the LDAP service (non TLS/SSL) of the backup LDAP server Default: 389 | 389 |
| TLS/SSL Port (Backup Host) | Port number of the LDAP service (TLS/SSL) of the backup LDAP server Default: 636 | 636 |
| Division | LDAP division name | PF_Dept_1 |
| Local User Login [Note 3] | Specify whether to enable log in for local users. - Enable - Disable Default: Disable | Enable |
| Always use TLS/SSL Login [Note 3] | Specify whether to always use TLS/SSL for login. - Yes - No Default: No | No |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

[Note 3]: This parameter is ignored for ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

Cluster Details - Network tab [Note 1]

| Setting Item | Description | Setting Value |
|---|---|---------------------------------|
| Default Gateway [Note 2] | IPv4 address of the default gateway | Arbitrary value |
| Workload Virtual Switch (multiple can be set) | | |
| Virtual Switch Name | Name of the virtual switch | Name of Workload Virtual Switch |
| Embedded Teaming [Note 3] | Specify whether to enable embedded teaming. - Enable - Disable Default: Enable | Enable |
| Management Virtual Switch | | |

| Setting Item | Description | Setting Value |
|-------------------------------|---|--|
| Virtual Switch Name | Name of the virtual switch | Name of Management Virtual Switch |
| Embedded Teaming [Note 3] | Specify whether to enable embedded teaming. - Enable - Disable Default: Enable | Enable |
| Network Name | Name of the virtual network | - The three of the followingName of network adapter for management - Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct - Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct |
| Role Settings [Note 2] | The value to be set to Role - Do not allow cluster network communication - Allow only cluster network communication - Allow both cluster network communication and connections between the clients Default: - For network adapter for Management: Allow both cluster network communication and connections between the clients - For network adapter 1 for live migration, Microsoft Storage Spaces Direct or network adapter 2 for live migration, Microsoft Storage Spaces Direct: Allow only cluster network communication | Arbitrary value |
| VLAN Type [Note 2] | The type of the VLAN - None (Do not use VLAN) - VLAN Default: VLAN | Arbitrary value |
| VLAN ID [Note 2] | VLAN ID to use for vDS port group Default: No setting | Arbitrary value |
| IPv4 Network Address [Note 2] | IPv4 Network address of the cluster network | Arbitrary value |
| IPv4 Subnet Mask [Note 2] | IPv4 subnet mask of the cluster network | Arbitrary value |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

[Note 2]: Set this parameter for ISM 2.3.0.b or later.

[Note 3]: This parameter is ignored for ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

[Note 4]: Setting value set if PRIMERGY M2 series are included in the current cluster.

[Note 5]: Setting value set if PRIMERGY M2 series are not included in the current cluster.

Cluster Details - Storage Pool tab (ISM 2.3.0.b or later) [Note 1]

| Setting Item | Description | Setting Value |
|-----------------------|---|----------------------------------|
| Journal Settings | | |
| Media Type | Media Type of disks used for Journal Default: SSD | SSD |
| Bus Type | Bus Type of disks used for Journal Default: SAS | SAS |
| Storage Tier Settings | | |
| Storage Tier Name | Friendly Name of Storage Tier | Arbitrary value |
| Media Type | Media Type of Storage Tie Default: HDD | HDD |
| Recovery | Type of Recovery method (allocation method) Default: 2-Way or 3-Way Mirror Storage | 2-Way or 3-Way Mirror Storage |
| Redundancy | Redundancy of disks - 2 - 3 or more Default: The number of nodes specified in [Basic Information]-[Number of Composing Nodes] | "2" or "3 or more" |
| Number of data copies | Number of data copies - 2-way Mirror - 3-way Mirror Default: - When Redundancy is 2 nodes: 2-way Mirror - When Redundancy is 3 or more: 3-way Mirror | "2-way Mirror" or "3-way Mirror" |

[Note 1]: This item is required to be specified when you create and edit Cluster Definition Parameters.

Cluster Nodes Selection

| Setting Item | Description | Setting Value |
|--|---|-----------------------------------|
| Target nodes selection (multiple can be set) | | |
| Node Name | Select the node name managed by ISM. | Node name managed by ISM [Note 1] |
| Profile | Select the profile name managed by ISM. | Arbitrary value |

[Note 1]: Specify the node name that is the server for expanding a cluster when doing cluster expansion.

Node Details - iRMC tab [Note 1]

| Setting Item | Description | Setting Value |
|--------------------------------------|---|-----------------|
| Local User Settings | | |
| 'admin' User | | |
| New Password [Note 2] | New password to be set for the iRMC admin user When doing cluster expansion, update it along with the password set for the admin user registered in ISM. | Arbitrary value |
| New Password (Confirmation) [Note 2] | New password to be set for the iRMC admin user (Confirmation) | Arbitrary value |
| Administrator User | | |
| User Name | Administrator user name created in iRMC | pflocaladmin |
| Password [Note 2] | Password set for the iRMC administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the iRMC administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Node Details - OS tab [Note 1]

| Setting Item | Description | Setting Value |
|----------------------------------|---|--|
| Local User Settings | | |
| Administrator User ID | Administrator user name created in the OS | Arbitrary value Example: pflocaladmin |
| Password [Note 2] | Password set for the OS administrator user | Arbitrary value |
| Password (Confirmation) [Note 2] | Password set for the OS administrator user (Confirmation) | Arbitrary value |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: This parameter is not included in Export/Import of Cluster Definition Parameters. You must set the item by editing Cluster Definition Parameters. (ISM 2.3.0.b or later)

Node Details - Virtual Switch tab [Note 1] [Note 2]

| Setting Item | Description | Setting Value |
|------------------------------------|--|--|
| Slot Number Settings [Note 3] | | |
| Slot Numbers (multiple can be set) | Number of the PCI slot where the physical network adapter binding the virtual switch is installed. Example: 2 | Number of the PCI slot where the physical network adapter binding the virtual switch is installed. |
| Workload Virtual Switch | | |
| Virtual Switch Settings | | |
| Virtual Switch Name [Note 4] | Name of the virtual switch | Name of Workload Virtual Switch |

| Setting Item | | Description | Setting Value |
|--|---|--|--|
| | Slot Number - Port Number (multiple can be set) | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed Example: 2-1 | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed Slot Number is the value set in [Slot Number Settings] - [Slot Number] and Port Number is "1." |
| | Embedded Teaming [Note 4] | Specify whether to enable embedded teaming. - Enable - Disable Default: Enable | Enable |
| Management Virtual Switch | | | |
| Virtual Switch Settings | | | |
| | Virtual Switch Name [Note 4] | Name of the virtual switch | Name of Management Virtual Switch |
| | Slot Number - Port Number (multiple can be set) | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed Example: 2-0 | Number of the PCI slot and port where the physical network adapter binding the virtual switch is installed Slot Number is the value set in [Slot Number Settings] - [Slot Number] and Port Number is "0." |
| | Embedded Teaming [Note 4] | Specify whether to enable embedded teaming. - Enable - Disable Default: Enable | Enable |
| Virtual Network Adapter (multiple can be set) | | | |
| | Adapter Name [Note 5] | Name of the virtual network adapter | The three of the following - Name of network adapter for management - Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct - Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct |
| | Management OS [Note 4] | Specify whether it is the virtual network adapter for the management OS. - Yes - No Default: Yes | Specify the following - Name of network adapter for management: Yes - Name of network adapter 1 for live migration, Microsoft Storage Spaces Direct: Yes - Name of network adapter 2 for live migration, Microsoft Storage Spaces Direct: Yes |

| Setting Item | | Description | Setting Value |
|---------------------------------------|--------------------------------|---|---|
| | IPv4 Address [Note 8] | IPv4 Address | Arbitrary value |
| Network Adapter (multiple can be set) | | | |
| | Slot Number | Number of the PCI slot where the physical network adapter binding the virtual switch is installed Example: 2 | Number of the PCI slot where the physical network adapter binding the virtual switch is installed |
| | Virtual Machine Queue [Note 4] | Specify whether to enable virtual machine queue. - Enable - Disable Default: Enable | Onboard: Enable [Note 6] PCI adapter: Enable [Note 6][Note 7] |
| | SR/IOV [Note 4] | Specify whether to enable SR/IOV. - Enable - Disable Default: Disable | Onboard: Disable [Note 5] PCI adapter: Disable [Note 5][Note 6] |
| | vRSS [Note 4] | Specify whether to enable vRSS. - Enable - Disable Default: Enable | Onboard: Enable [Note 6] PCI adapter: Enable [Note 6][Note 7] |

[Note 1]: Specify it for each node configured in the selected cluster.

[Note 2]: It is not required to set vSwitch0 of the virtual switch name for ISM for PRIMEFLEX V2.2.0.a.1 or earlier. Only specify the settings for vSwitch1.

[Note 3]: Specify this parameter for ISM 2.3.0.b or later.

[Note 4]: This parameter is ignored for ISM for PRIMEFLEX V2.2.0.a.1 or earlier.

[Note 5]: If a virtual network adapter with the name specified for the servers currently configured in the cluster does not exist, Cluster Expansion ends with an error.

[Note 6]: Setting value set if PRIMERGY M2 series are included in the current cluster.

[Note 7]: Setting value set if PRIMERGY M2 series are not included in the current cluster.

[Note 8]: Specify the same IP address as of the virtual network adapter with the same name on the server currently configured in the cluster.

Chapter 4 Profile Setting List

This chapter describes the profile setting values.

4.1 PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1 Profile Setting Items List

This section describes the profile setting values for PRIMEFLEX HS V1.0/V1.1/PRIMEFLEX for VMware vSAN V1.

General Information

| Setting Item | Setting Value |
|------------------------|--|
| Affiliation Group Path | /ProfileGroup/Administrator Forward Match |
| Profile Name | <Any profile name> |
| Category | <Select the model of the expansion target server> |
| BIOS Policy | <BIOS policy referred to> |
| iRMC Policy | <iRMC policy referred to> |
| OS Type | <Select the type of the OS to install from the list> |
| Description | <Optional description> |

Details - BIOS tab for PRIMEFLEX HS V1.0/V1.1

| Setting Item | Setting Value |
|---|---|
| CPU Configuration | |
| Execute Disable Bit | <input checked="" type="checkbox"/> : Enabled |
| Hyper-Threading | <input checked="" type="checkbox"/> : Enabled |
| Intel Virtualization Technology | <input checked="" type="checkbox"/> : Enabled |
| Intel(R) Vt-d | <input checked="" type="checkbox"/> : Enabled |
| Power Technology | <input checked="" type="checkbox"/> : Customize |
| Enhanced Speed Step | <input checked="" type="checkbox"/> : Enabled |
| Turbo Mode | <input checked="" type="checkbox"/> : Enabled |
| Memory Configuration | |
| DDR Performance | <input checked="" type="checkbox"/> : Performance optimized |
| Numa | <input checked="" type="checkbox"/> : Enabled |
| Onboard Device Configuration | |
| Onboard SAS/SATA (SCU) | <input checked="" type="checkbox"/> : Enabled |
| SAS/SATA OpROM | <input checked="" type="checkbox"/> : Enabled |
| SAS/SATA Driver | <input checked="" type="checkbox"/> : LSI MegaRAID |
| Option ROM Configuration (Exclude slot numbers that do not exist on the servers.) | |

| Setting Item | | Setting Value |
|-------------------|-------------------------------|---|
| | Launch Slot 1 OpROM | [Note 1] |
| | Launch Slot 2 OpROM | [Note 1] |
| | Launch Slot 3 OpROM | [Note 1] |
| | Launch Slot 4 OpROM | [Note 1] |
| | Launch Slot 5 OpROM | [Note 1] |
| | Launch Slot 6 OpROM | [Note 1] |
| | Launch Slot 7 OpROM | [Note 1] |
| | Launch Slot 8 OpROM | [Note 1] |
| | Launch Slot 9 OpROM | [Note 1] |
| | Launch Slot 10 OpROM | [Note 1] |
| | Launch Slot 11 OpROM | [Note 1] |
| | Launch Slot 12 OpROM | [Note 1] |
| CSM Configuration | | |
| | Launch CSM | <input checked="" type="checkbox"/> : Enabled |
| | Boot Option Filter | <input checked="" type="checkbox"/> : Legacy only |
| | Launch Pxe OpRomPolicy | <input checked="" type="checkbox"/> : Legacy only |
| | Launch Storage OpRomPolicy | <input checked="" type="checkbox"/> : Legacy only |
| | Other PCI Device Rom Priority | <input checked="" type="checkbox"/> : Legacy only |
| Network Stack | | |
| | Network Stack | <input checked="" type="checkbox"/> : Enabled |
| | IPv4PXE Support | <input checked="" type="checkbox"/> : Enabled |
| | IPv6PXE Support | <input checked="" type="checkbox"/> : Disabled |

[Note 1] For the Slot where the Ethernet adapter is installed, specify " : Enabled." For other Slots, specify " : -."

Details - BIOS tab for PRIMEFLEX for VMware vSAN V1

| Setting Item | | Setting Value |
|------------------------|------------------------|---|
| PCI Subsystem Settings | | |
| | ASPM Support | <input type="checkbox"/> : - |
| | DMI Control | <input type="checkbox"/> : - |
| CPU Configuration | | |
| | Execute Disable Bit | <input type="checkbox"/> : - |
| | Hyper-Threading | <input checked="" type="checkbox"/> : Enabled |
| | Active Processor Cores | <input type="checkbox"/> : - |
| | Hardware Prefetcher | <input type="checkbox"/> : - |

| Setting Item | | Setting Value |
|----------------------|---------------------------------|---|
| | Adjacent Cache Line Prefetch | <input type="checkbox"/> :- |
| | DCU Streamer Prefetcher | <input type="checkbox"/> :- |
| | DCU IP Prefetcher | <input type="checkbox"/> :- |
| | Intel Virtualization Technology | <input checked="" type="checkbox"/> : Enabled |
| | Intel(R) Vt-d | <input checked="" type="checkbox"/> : Enabled |
| | Power Technology | <input checked="" type="checkbox"/> : Custom [Note 1] |
| | HWPM Support | <input type="checkbox"/> :- |
| | Enhanced Speed Step | <input checked="" type="checkbox"/> : Disabled [Note 1] |
| | Turbo Mode | <input checked="" type="checkbox"/> : Disabled [Note 1] |
| | Override OS Energy Performance | <input checked="" type="checkbox"/> : Enabled |
| | Energy Performance | <input checked="" type="checkbox"/> : Performance |
| | Utilization Profile | <input type="checkbox"/> :- |
| | CPU C1E Support | <input checked="" type="checkbox"/> : Disabled [Note 1] |
| | Autonomous C-state Support | <input type="checkbox"/> :- |
| | CPU C3 Report | <input type="checkbox"/> :- |
| | CPU C6 Report | <input checked="" type="checkbox"/> : Disabled [Note 1] |
| | Package C State limit | <input checked="" type="checkbox"/> : C0 |
| | QPI Link Frequency Select | <input type="checkbox"/> :- |
| | Uncore Frequency Override | <input type="checkbox"/> :- |
| | LLC Dead Line Alloc | <input type="checkbox"/> :- |
| | Stale AtoS | <input type="checkbox"/> :- |
| | COD Enable | <input type="checkbox"/> :- |
| | Early Snoop | <input type="checkbox"/> :- |
| | Home Snoop Dir OSB | <input type="checkbox"/> :- |
| Memory Configuration | | |
| | NUMA | <input checked="" type="checkbox"/> : Enabled |
| | DDR Performance | <input checked="" type="checkbox"/> : Performance optimized |
| | Patrol Scrub | <input type="checkbox"/> :- |
| | IMC Interleaving | <input type="checkbox"/> :- |
| | Sub NUMA Clustering | <input type="checkbox"/> :- |

| Setting Item | | Setting Value |
|---|-------------------------------|--|
| Onboard Device Configuration | | |
| Onboard SAS/SATA (SCU) | | <input checked="" type="checkbox"/> : Enabled |
| | SAS/SATA OpROM | <input checked="" type="checkbox"/> : Enabled |
| | SAS/SATA Driver | <input checked="" type="checkbox"/> : LSI MegaRAID |
| Option ROM Configuration (Exclude slot numbers that do not exist on the servers.) | | |
| | Launch Slot 1 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 2 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 3 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 4 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 5 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 6 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 7 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 8 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 9 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 10 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 11 OpROM | <input type="checkbox"/> : - |
| | Launch Slot 12 OpROM | <input type="checkbox"/> : - |
| CSM Configuration | | |
| Launch CSM | | <input checked="" type="checkbox"/> : Disabled |
| | Boot Option Filter | <input type="checkbox"/> : - |
| | Launch Pxe OpRomPolicy | <input type="checkbox"/> : - |
| | Launch Storage OpRomPolicy | <input type="checkbox"/> : - |
| | Other PCI Device Rom Priority | <input type="checkbox"/> : - |
| USB Configuration | | <input type="checkbox"/> : - |
| | Onboard USB Controllers | <input type="checkbox"/> : - |
| Network Stack | | |
| Network Stack | | <input checked="" type="checkbox"/> : Enabled |
| | IPv4 PXE Support | <input checked="" type="checkbox"/> : Enabled |
| | IPv6 PXE Support | <input checked="" type="checkbox"/> : Disabled |

[Note 1]: This is a setting value required to be set for PRIMERGY CX series configuration.

Details - iRMC tab

| Setting Item | | Setting Value |
|-------------------------------------|-----------------------------|--|
| iRMC GUI | | |
| | Default Language | <input checked="" type="checkbox"/> : <Any default language> |
| Power Management | | |
| | POST Error Halt | <input checked="" type="checkbox"/> : Continue |
| | Power Restore Policy | <input checked="" type="checkbox"/> : Restore to powered state prior to power loss |
| | Power Control Mode | <input checked="" type="checkbox"/> : OS Controlled |
| Fan Test | | |
| | Fan Check Time | <input checked="" type="checkbox"/> : 23:00 |
| | Disable Fan Test | <input checked="" type="checkbox"/> : <input type="checkbox"/> |
| Software Watchdog | | |
| | Software Watchdog | <input checked="" type="checkbox"/> : <input type="checkbox"/> |
| | Behavior | <input checked="" type="checkbox"/> : Continue |
| | After Timeout Delay | <input checked="" type="checkbox"/> : 5 Minutes |
| Boot Watchdog | | |
| | Boot Watchdog | <input checked="" type="checkbox"/> : - |
| | Behavior | <input checked="" type="checkbox"/> : - |
| | After Timeout Delay | <input checked="" type="checkbox"/> : - |
| Time | | |
| | Time Mode | <input checked="" type="checkbox"/> : System RTC |
| | RTC Time Mode | <input checked="" type="checkbox"/> : UTC |
| | NTP Server 0 | <input type="checkbox"/> : - |
| | NTP Server 1 | <input type="checkbox"/> : - |
| | Time Zone | <input checked="" type="checkbox"/> : <Any time zone> |
| Ports and Network Services Settings | | |
| | Telnet Enabled | <input checked="" type="checkbox"/> : <input checked="" type="checkbox"/> Enabled |
| | Telnet Port (Default: 3173) | <input checked="" type="checkbox"/> : 3172 |
| | SSH Enabled | <input checked="" type="checkbox"/> : <input checked="" type="checkbox"/> Enabled |
| | SSH Port (Default: 22) | <input checked="" type="checkbox"/> : 22 |
| SNMP Generic Configuration | | |
| | SNMP Enabled | <input checked="" type="checkbox"/> : Enabled |
| | SNMP Port (Default: 161) | <input checked="" type="checkbox"/> : 161 |

| Setting Item | | Setting Value |
|---------------------------|---------------------------|--|
| | SNMP Service Protocol | <input checked="" type="checkbox"/> : All(SNMPv1/v2c/v3) |
| | SNMPv1/v2c Community Name | <input checked="" type="checkbox"/> : <Any community name> |
| SNMPv3 User Configuration | | |
| | SNMPv3 Enabled | <input type="checkbox"/> : - |
| | SNMPv3 Access Privacy | <input type="checkbox"/> : - |
| | Authentication | <input type="checkbox"/> : - |
| | Privacy | <input type="checkbox"/> : - |
| SNMP Trap Destination | | |
| | SNMP Trap Community Name | <input checked="" type="checkbox"/> : <Any community name> |
| | SNMP Selected User | <input type="checkbox"/> : - |
| | Destination SNMP Server 1 | <input checked="" type="checkbox"/> : <IP address of destination SNMP server1> |
| | Protocol | <input checked="" type="checkbox"/> : <Select the protocol from the list> |
| | Destination SNMP Server 2 | <input type="checkbox"/> : - |
| | Protocol | <input type="checkbox"/> : - |
| | Destination SNMP Server 3 | <input type="checkbox"/> : - |
| | Protocol | <input type="checkbox"/> : - |
| | Destination SNMP Server 4 | <input type="checkbox"/> : - |
| | Protocol | <input type="checkbox"/> : - |
| | Destination SNMP Server 5 | <input type="checkbox"/> : - |
| | Protocol | <input type="checkbox"/> : - |
| | Destination SNMP Server 6 | <input type="checkbox"/> : - |
| | Protocol | <input type="checkbox"/> : - |
| | Destination SNMP Server 7 | <input type="checkbox"/> : - |
| | Protocol | <input type="checkbox"/> : - |

Details - OS tab

| Setting Item | | Setting Value |
|----------------------------------|----------------------------|--|
| Installation Image | | |
| | Type of Installation Media | <Select the type of the OS installation media from the list> |
| | ServerViewSuiteDVD | <Optional selection> |
| Management network port settings | | |
| | Network port specification | <input type="checkbox"/> [Note 1] |

| Setting Item | | Setting Value |
|---------------------------------------|--|--|
| | | <input checked="" type="checkbox"/> [Note 2] |
| | Method to specify | MAC address [Note 2] |
| | MAC address | Any MAC address [Note 2] |
| | Boot mode specification | <input type="checkbox"/> |
| | Boot type | - |
| RAID & Disk Configuration | | |
| | Use Array Controller | <input type="checkbox"/> :- |
| | Do not use Array Controller | <input checked="" type="checkbox"/> : <Optional selection> |
| Basic Settings | | |
| | Keyboard | <Any keyboard> |
| Network | | |
| | Setup | <input type="checkbox"/> |
| | VLAN ID to Use | 0 |
| Register to Cloud Management Software | | |
| | Register to Cloud Management Software | <input type="checkbox"/> |
| | Cloud Management Software Name to register host with | - |
| | Folder Name or Cluster Name to register host with | - |
| Executing Script after Installation | | |
| | Execute Script after Installation | <input type="checkbox"/> |
| | The directory of Script | - |
| | Script to Execute | - |

[Note 1] Setting value set for PRIMEFLEX HS V1.0/V1.1.

[Note 2] Setting value set for PRIMEFLEX for VMware vSAN V1.

Details - OS (for each node) tab

| Setting Item | | Setting Value |
|--------------|----------------------------------|-------------------------------------|
| | License Agreement | <input checked="" type="checkbox"/> |
| | Type of Installation Media | Do not enter |
| | Root Password | <Any root password> |
| | Root Password (for confirmation) | <Any root password> |
| Network | | |
| | DHCP | |
| | Enable | <input type="checkbox"/> |
| | IP Address | <Any IP address> |
| | Subnet mask | <Any subnet mask> |
| | Default Gateway | <Any default gateway> |

| Setting Item | | Setting Value |
|--------------|----------------------------------|--|
| | DNS Server | <input checked="" type="checkbox"/> : <IP address of any DNS server> |
| | Get Computer Name via DNS Server | <input type="checkbox"/> |
| | Computer Name | <Any computer name> |

4.2 PRIMEFLEX for Microsoft Storage Spaces Direct version Profile Setting Items List

This section describes the profile setting values for PRIMEFLEX for Microsoft Storage Spaces Direct.

General Information

| Setting Item | Setting Value |
|------------------------|--|
| Affiliation Group Path | /ProfileGroup/Administrator Forward Match |
| Profile Name | <Any profile name> |
| Category | <Select the model of the expansion target server> |
| BIOS Policy | <BIOS policy referred to> |
| iRMC Policy | <iRMC policy referred to> |
| OS Type | <Select the type of the OS to install from the list> |
| Description | <Optional description> |

Details - BIOS tab

| Setting Item | | Setting Value |
|------------------------|---------------------------------|---|
| PCI Subsystem Settings | | |
| | ASPM Support | <input type="checkbox"/> :- |
| | DMI Control | <input type="checkbox"/> :- |
| CPU Configuration | | |
| | Execute Disable Bit | <input type="checkbox"/> :- |
| | Hyper-Threading | <input checked="" type="checkbox"/> : Enabled |
| | Active Processor Cores | <input type="checkbox"/> :- |
| | Hardware Prefetcher | <input type="checkbox"/> :- |
| | Adjacent Cache Line Prefetch | <input type="checkbox"/> :- |
| | DCU Streamer Prefetcher | <input type="checkbox"/> :- |
| | DCU IP Prefetcher | <input type="checkbox"/> :- |
| | Intel Virtualization Technology | <input checked="" type="checkbox"/> : Enabled |
| | Intel(R) Vt-d | <input checked="" type="checkbox"/> : Enabled |
| | Power Technology | <input checked="" type="checkbox"/> : Custom |

| Setting Item | | Setting Value |
|---|--------------------------------|---|
| | HWPM Support | <input type="checkbox"/> :- |
| | Enhanced Speed Step | <input type="checkbox"/> :- |
| | Turbo Mode | <input type="checkbox"/> :- |
| | Override OS Energy Performance | <input checked="" type="checkbox"/> : Enabled |
| | Energy Performance | <input checked="" type="checkbox"/> : Performance |
| | Utilization Profile | <input type="checkbox"/> :- |
| | CPU C1E Support | <input type="checkbox"/> :- |
| | Autonomous C-state Support | <input type="checkbox"/> :- |
| | CPU C3 Report | <input type="checkbox"/> :- |
| | CPU C6 Report | <input type="checkbox"/> :- |
| | Package C State limit | <input type="checkbox"/> :- |
| | QPI Link Frequency Select | <input type="checkbox"/> :- |
| | Uncore Frequency Override | <input type="checkbox"/> :- |
| | LLC Dead Line Alloc | <input type="checkbox"/> :- |
| | Stale AtoS | <input type="checkbox"/> :- |
| | COD Enable | <input type="checkbox"/> :- |
| | Early Snoop | <input type="checkbox"/> :- |
| | Home Snoop Dir OSB | <input type="checkbox"/> :- |
| Memory Configuration | | |
| | NUMA | <input checked="" type="checkbox"/> : Enabled |
| | DDR Performance | <input checked="" type="checkbox"/> : Performance optimized |
| | Patrol Scrub | <input type="checkbox"/> :- |
| | IMC Interleaving | <input type="checkbox"/> :- |
| | Sub NUMA Clustering | <input type="checkbox"/> :- |
| Onboard Device Configuration | | |
| | Onboard SAS/SATA (SCU) | <input checked="" type="checkbox"/> : Enabled |
| | SAS/SATA OpROM | <input checked="" type="checkbox"/> : Enabled |
| | SAS/SATA Driver | <input checked="" type="checkbox"/> : LSI MegaRAID |
| Option ROM Configuration (Exclude slot numbers that do not exist on the servers.) | | |
| | Launch Slot 1 OpROM | <input type="checkbox"/> :- |

| Setting Item | | Setting Value |
|---------------------------|-------------------------------|--|
| | Launch Slot 2 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 3 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 4 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 5 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 6 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 7 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 8 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 9 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 10 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 11 OpROM | <input type="checkbox"/> :- |
| | Launch Slot 12 OpROM | <input type="checkbox"/> :- |
| CSM Configuration | | |
| | Launch CSM | <input checked="" type="checkbox"/> : Disabled |
| | Boot Option Filter | <input type="checkbox"/> :- |
| | Launch Pxe OpRomPolicy | <input type="checkbox"/> :- |
| | Launch Storage OpRomPolicy | <input type="checkbox"/> :- |
| | Other PCI Device Rom Priority | <input type="checkbox"/> :- |
| USB Configuration | | |
| | Onboard USB Controllers | <input type="checkbox"/> :- |
| Network Stack | | |
| | Network Stack | <input checked="" type="checkbox"/> : Enabled |
| | IPv4 PXE Support | <input checked="" type="checkbox"/> : Enabled |
| | IPv6 PXE Support | <input checked="" type="checkbox"/> : Disabled |
| Secure Boot Configuration | | |
| | Secure Boot Control | <input type="checkbox"/> :- |

Details - iRMC tab

| Setting Item | | Setting Value |
|------------------|------------------|--|
| iRMC GUI | | |
| | Default Language | <input checked="" type="checkbox"/> : <Any default language> |
| Power Management | | |
| | POST Error Halt | <input checked="" type="checkbox"/> : Continue |

| Setting Item | | Setting Value |
|-------------------------------------|-----------------------------|--|
| | Power Restore Policy | <input checked="" type="checkbox"/> : Restore to powered state prior to power loss |
| | Power Control Mode | <input checked="" type="checkbox"/> : OS Controlled |
| Fan Test | | |
| | Fan Check Time | <input checked="" type="checkbox"/> : 23:00 |
| | Disable Fan Test | <input checked="" type="checkbox"/> : <input type="checkbox"/> |
| Software Watchdog | | |
| | Software Watchdog | <input checked="" type="checkbox"/> : <input type="checkbox"/> |
| | Behavior | <input checked="" type="checkbox"/> : Continue |
| | After Timeout Delay | <input checked="" type="checkbox"/> : 5 Minutes |
| Boot Watchdog | | |
| | Boot Watchdog | <input type="checkbox"/> : - |
| | Behavior | <input type="checkbox"/> : - |
| | After Timeout Delay | <input type="checkbox"/> : - |
| Time | | |
| | Time Mode | <input checked="" type="checkbox"/> : System RTC |
| | RTC Time Mode | <input checked="" type="checkbox"/> : Local Time |
| | NTP Server 0 | <input type="checkbox"/> : - |
| | NTP Server 1 | <input type="checkbox"/> : - |
| | Time Zone | <input checked="" type="checkbox"/> : <Any time zone> |
| Ports and Network Services Settings | | |
| | Telnet Enabled | <input checked="" type="checkbox"/> : <input checked="" type="checkbox"/> Enabled |
| | Telnet Port (Default: 3173) | <input checked="" type="checkbox"/> : 3172 |
| | SSH Enabled | <input checked="" type="checkbox"/> : <input checked="" type="checkbox"/> Enabled |
| | SSH Port (Default: 22) | <input checked="" type="checkbox"/> : 22 |
| SNMP Generic Configuration | | |
| | SNMP Enabled | <input checked="" type="checkbox"/> : Enabled |
| | SNMP Port (Default: 161) | <input checked="" type="checkbox"/> : 161 |
| | SNMP Service Protocol | <input checked="" type="checkbox"/> : All(SNMPv1/v2c/v3) |
| | SNMPv1/v2c Community Name | <input checked="" type="checkbox"/> : <Any community name> |
| SNMPv3 User Configuration | | |
| | SNMPv3 Enabled | <input type="checkbox"/> : - |

| Setting Item | | Setting Value |
|-----------------------|---------------------------|--|
| | SNMP v3 Access Privacy | <input type="checkbox"/> :- |
| | Authentication | <input type="checkbox"/> :- |
| | Privacy | <input type="checkbox"/> :- |
| SNMP Trap Destination | | |
| | SNMP Trap Community Name | <input checked="" type="checkbox"/> : <Any community name> |
| | SNMP Selected User | <input type="checkbox"/> :- |
| | Destination SNMP Server 1 | <input checked="" type="checkbox"/> : <IP address of ISM-VA> |
| | Protocol | <input checked="" type="checkbox"/> : SNMPv1 |
| | Destination SNMP Server 2 | <input type="checkbox"/> :- |
| | Protocol | <input type="checkbox"/> :- |
| | Destination SNMP Server 3 | <input type="checkbox"/> :- |
| | Protocol | <input type="checkbox"/> :- |
| | Destination SNMP Server 4 | <input type="checkbox"/> :- |
| | Protocol | <input type="checkbox"/> :- |
| | Destination SNMP Server 5 | <input type="checkbox"/> :- |
| | Protocol | <input type="checkbox"/> :- |
| | Destination SNMP Server 6 | <input type="checkbox"/> :- |
| | Protocol | <input type="checkbox"/> :- |
| | Destination SNMP Server 7 | <input type="checkbox"/> :- |
| | Protocol | <input type="checkbox"/> :- |

Details - OS tab

| Setting Item | | Setting Value |
|----------------------------------|----------------------------|-------------------------------------|
| Installation Image | | |
| | Type of Installation | Full |
| | Type of Installation Media | <Select OS to install> |
| | ServerViewSuiteDVD | Install Latest Version |
| Management network port settings | | |
| | Network port specification | <input checked="" type="checkbox"/> |
| | Method to specify | Port Number |
| | Network Card | PCI card: <Any slot number> |
| | Port Number | 0 |

| Setting Item | | Setting Value |
|-----------------------------------|--|---|
| Boot mode specification | | <input type="checkbox"/> |
| Boot Type | | - |
| RAID & Disk Configuration | | |
| Use Array Controller | | <input checked="" type="checkbox"/> : Use existing RAID Volume |
| Do not use Array Controller | | <input type="checkbox"/> : - |
| Volume1 | | |
| Volume Label | | system |
| File System | | NTFS |
| Partition Size (Automatic/Manual) | | Automatic |
| Quick Format | | Yes |
| Usage | | Boot,OS |
| Basic Settings | | |
| Time Zone | | <Any time zone> |
| Region and Language | | <Any region and language> |
| Keyboard | | <Any keyboard> |
| System Settings | | |
| Display Resolution [px] | | 1024x768 |
| Refresh Rate [Hz] | | 75 |
| # of Colors [bit] | | 24 |
| Adding Role and Features | | |
| Install SNMP Service | | Install |
| SNMP Trap Setting | | |
| Community Name | | fis |
| Trap Destination | | <Any IP address> |
| SNMP Security Service | | - |
| Send Authentication Trap | | Send |
| Acceptation of SNMP Packets | | Accept SNMP Packets from Default Host (LocalHost) |
| SNMP Setting Agent | | -: - |
| Service | | <input checked="" type="checkbox"/> : Application <input checked="" type="checkbox"/> : End-To-End <input checked="" type="checkbox"/> : Ethernet |
| Remote Desktop | | <input checked="" type="checkbox"/> : Enable |
| Remote Assistance | | - |
| Firewall Settings | | - |
| Additional Application | | <input checked="" type="checkbox"/> : Java Runtime Environment <input checked="" type="checkbox"/> : Software Support Guide <input checked="" type="checkbox"/> : ServerViewRAIDManager |

| Setting Item | | Setting Value |
|-------------------------------------|-----------------------------------|---------------|
| Executing Script after Installation | | |
| <input type="checkbox"/> | Execute Script after Installation | |
| | Directory Forwarded to the OS | - |
| | Script to Execute | - |

Details - OS (for each node) tab

| Setting Item | | Setting Value |
|---|------------------------------------|--|
| Type of Installation Media | | * The same items as [OS] - [Installation specifications] - [Installation media] displays automatically |
| User Name | | PRIMEFLEX |
| Organization | | FUJITSU |
| Computer Name | | <Any computer name> |
| Administrator Password | | <Any password> |
| Administrator Password (for confirmation) | | <Any password> |
| Work Group / Domain | | |
| <input type="checkbox"/> | Work Group / Domain Name | <Domain that it currently belongs to> |
| | Domain User | <User of the domain it currently belongs to> |
| | Domain Password | <Password of the user of the domain it currently belongs to> |
| | Domain Password (for confirmation) | <Password of the user of the domain it currently belongs to> |
| Network - DHCP | | |
| <input type="checkbox"/> | Enable | |
| | IP Address | <Any IP address> |
| | Subnet mask | <Any subnet mask> |
| | Default Gateway | <Any default gateway> |
| | DNS Server1 | <input checked="" type="checkbox"/> : <Any DNS server IP address> |
| | DNS Server2 | <input type="checkbox"/> |
| | DNS Domain Name | <input checked="" type="checkbox"/> : <Domain name of DNS> |