FUJITSU Software
ServerView Infrastructure Manager V2.0
Operating procedures

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Revision History			
Version	Revision Date	Revision Item	Revision Contents
1.0	08/08/2016	-	New Creation

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1. **Shared Operations**

1.1. Display the Help screen

【Explanation】
A help screen has been prepared to provide detailed explanations for each screen in ISM2.0. Refer to the help screen for explanations for the content displayed.

【Procedure】
Select the [? Help] - [Help for this screen] in upper right hand side of each screen while it is displayed.

1.2. Refresh the screen

【Explanation】
Except for some screens, ISM acquires information when screens are displayed. The information in each screen will not be automatically updated while the screen is displayed. When you want to display the most recent information, execute the screen refresh procedure to refresh the screen.

【Procedure】
If you click the refresh button (⟳ , the information will be acquired again and the screen will be refreshed.

2．Pre-configurations

ISM manages 4 in layers: datacenter, floor, rack, and node. The meaning of each is as follows.

- **Datacenter**

  Datacenter corresponds to the building layer. This layer supposes a datacenter model with multiple floors.
- **Floor**

  This layer supposes a floor space where multiple racks are placed.

  The floor view can be displayed on the dashboard.

  Also, 3D view displays 3D graphics of the floor units.
- **Rack**

  This layer supposes a server rack with multiple management target devices (nodes) mounted.
- **Node**

  Management Target Devices

Registration within each layer is done using the following procedure.

① Registration of datacenters

② Floor registration (Registration of which data center that the floor is situated in)

③ Rack registration (Registration of which floor the rack is situated in)

④ Arranging the rack on the floor (Registration of the rack's installation position on the floor)

⑤ Node registration (registration of a node in a rack)

2．1．Register a datacenter

【Explanation】

Register the "Datacenter" layer showing the facility housing the datacenter.

【Procedure】

1．From the Global Navigation menu, go to [Management] - [Datacenters] to display the [Datacenter List] screen.

2．Select the button to display the [Register Datacenter/ Floor/ Rack] wizard.

3．In [Object of Registration], select [Datacenter].

４．Enter the setting items, and then click the [Register] button. See the help screens for explanations on the setting items.

Help screen：

[Management] → ["Datacenters" screen] → [Datacenter List] → [Register Datacenter/Floor/Rack]

This finishes the datacenter registration. After datacenter registration is finished, the corresponding datacenter will be displayed on the [Datacenter List] screen.

２.２．Register a floor

【Explanation】

Register the [Floor] layer that signifies the machine room in the datacenter facility.

【Procedure】

１．On the [Datacenter List] screen, click the button to display the [Register Datacenter/ Floor/ Rack] wizard.

２．In [Object of Registration], select [Floor].

３．Enter the setting items, and then click the [Register] button. For the [Datacenter] settings item, specify the datacenter registered in [1.1 Register a datacenter]. See the help screen regarding other setting items.

Help screen：

[Management] → ["Datacenters" screen] → [Datacenter List] → [Register Datacenter/Floor/Rack]

４．In Help, go to [Management] → ["Datacenter" screen] → [Datacenter List] → [Register Datacenter/Floor/Rack], then refer to [Register Datacenter/Floor/Rack].

This finishes the floor registration. After floor registration is finished, the corresponding floor will be displayed on the [Datacenter List] screen.

２.３．Register a rack

【Explanation】

Register the "Rack" layer that signifies the server racks on the floor.

【Procedure】

１．On the [Datacenter List] screen, click the button to display the [Register Datacenter/ Floor/ Rack] wizard.

２．In [Object of Registration], select [Rack].

３．Enter the setting items, and then click the [Register] button. For setting items

[Datacenter] and [Floor], select the datacenter and floor registered in [1.1 Register a datacenter] and [1.2 Register a floor] respectively. For explanations on other setting items, see the help screen.

> Help screen :
>
> > [Management] → ["Datacenters" screen] → [Datacenter List] → [Register Datacenter/Floor/Rack]

This finishes the rack registration. After rack registration is finished, the rack will be displayed on the [Datacenter List] screen.

２.４. Deploy a rack on the floor

【Explanation】
Deploying a rack on the floor.

【Procedure】
1． On the [Datacenter List] screen, select the floor where the rack should be deployed and the [Details of Floor] screen will be displayed.
2． From the [Actions] button, select [Set Rack Position] and the [Set Rack Position] wizard will be displayed.
3． Select the [Add] and the [Add Unlocated Rack] wizard will be displayed.
4． Select the rack to be added and click the [Add] button.
5． Set the position of the rack and click the [Apply] button. See the help screen for information on how to set the rack position.
   > Help Screen:
   >
   > > [Management]→["Datacenter" screen]→["Details of Floor" screen]→[Set Rack Position]

This finishes the rack deployment. After rack deployment is finished, the rack will be displayed on the [Details of Floor] screen.

２.５. Register a node

【Explanation】
Node registration can be done either by detecting and registering existing nodes in the network, or by directly entering the node information. Only the method of detecting and registering nodes in the network can be executed on a server.
If the information registered in ISM and the information registered in the node does not match, the functionality of the ISM might be limited.

【Procedure】

2.5.1. Detect nodes in the network and register nodes

1． Select the [Registration] from the Global Navigation menu and the [Node Registration] screen will be displayed.
2． From the [Actions] button, select [Manual Discovery] and the [Manual Discovery] wizard will be displayed.
3． Enter the settings item and click the [Execute] button.
- IP address detection range　　　: Set the search range by specifying the IP address range.
- Account　　　　　　　　: IPMI Fixing
- Account Name　　　　　　: iRMC Account Name
- Password　　　　　　　　: Password of iRMC account
- Port Number　　　　　　　: IPMI Port Number (Default 623)

4． When a server is detected, it will be output on the [Discovered Node List] screen. The server detection takes time, but the detection status will not be automatically updated. Click the refresh button and refresh the screen.
5． When the status is shown as [Complete], select the [Discovered Node List] tab.
6． Select the checkbox of the node to be registered.
7． Select [Registration discovered nodes] from the [Actions] button on the [Discovered Node List] screen to open the [Node Registration] wizard.
8． Follow the instructions in the [Node Registration] wizard and input the setting items. See the help screen for explanations on the setting items.

Help screen :
[Registration]→["Registration" screen](c)[Discovered Node List]→[Registration discovered nodes]

This finishes the node registration. After node registration is finished, the corresponding node will be deleted from the [Detected Node List] screen.

2.5.2. Register a node directly

1． Select [Registration] from the Global Navigation menu and the [Node Registration] screen will be displayed.
2． From the [Actions] button, select [Registration] and the [Node Manual Registration] wizard will be displayed.
3． Follow the instructions in the [Node Manual Registration] wizard and input the

setting items. See the help screen for explanations on the setting items.

 Help screen :

 [Registration] → ["Registration" screen](c)[Discovered Node List] → [Registration]

4． Below is the explanation for the [Account] setting items in [1.Node Information] in the [Node Manual Registration] wizard.

　　　＜If server was selected in [Node Type]＞
- IPMI   : When not accessing the node through IPMI,

        uncheck the checkbox (default: Checked).

- Port Number   : IPMI Port Number (Default 623)
- Account Name   : iRMC Account Name
- Password   : Password of iRMCaccount

　　　＜If "switch" or "storage" was selected in [Node Type]＞
- SSH   : When not accessing the node through SSH,

        uncheck the checkbox (default: Checked).

- Port Number   : SSH Port Number (Default: 22)
- Account Name   : Account name of the switch or storage
- Password   : Account password of the switch or storage

- SNMP   : When accessing the node through SNMP,

        uncheck the checkbox (default: Checked).

- Version   : SNMP Version
- Port Number   : SNMP Port Number (Default: 161)
- SNMP Community: SNMP community name of the switch or storage

　　　＜If "other" was selected in [Node Type]＞
- IPMI   : When accessing the node through IPMI,

        check the checkbox (default: Unchecked).

- Port Number   : IPMI Port Number (Default 623)
- Account Name   : iRMC Account Name
- Password   : Password of iRMC account

- SSH   : When accessing the node through SSH,

        uncheck the checkbox (default: Checked).

- Port Number   : SSH Port Number (Default: 22)
- Account Name   : Node account name
- Password   : Node account password

- SNMP　　　　　　 : When accessing the node through SNMP,

　　　　　　　　　　 uncheck the checkbox (default: Checked).

- Version　　　　　 : SNMPVersion

- Port Number　　 : SNMP Port Number (Default: 161)

- SNMP Community: SNMP community name of the node

From the Global Navigation menu, go to [Management] - [Nodes] to show the [Node List] screen.

Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

５．If an OS is installed on the target node, select the target node.

６．Select the [OS] tab on the node information display screen.

７．Select the lower [Actions]-[Edit OS Information].

８．The settings on the OS information display screen are as follows.

- OS Type　　　　　　　　　 : Select OS type.

- OS Version　　　　　　　　 : Select the OS version.

- OS IP Address　　　　　　 : After setting the IP version, enter the IP address of the OS management port (IPv4/IPv6 are supported).

- Domain Name　　　　　　 : Enter domain name in FQDN format.

- Account　　　　　　　　　 : Enter the administrator account.

- Password　　　　　　　　 : Enter the password of the administrator account.

- Password (for confirmation)　　　　　 : 　Enter the password of the administrator account.

- OS Connection Port Number　　 : 　Enter the port number for connecting to the OS.

　Enter the port number. If using Windows it is the port number of the WinRM service (default setting is 5986), if using Linux it is the port number of the SSH service (default setting is 22). If not entered, the default port number will be set.

９．After entering the OS account information has been finished, select apply.

This finishes the node registration. After node registration is finished, the corresponding node will be displayed on the [Node List] screen.

２.６．Set up network connection

【Explanation】

In the case of LLDP enabled, a network map automatically displays the connections between nodes. However, if LLDP is not supported or not enabled, the connections are

not displayed. You can manually set up connections between respective nodes.

【Procedure】

1．From the Global Navigation menu, go to [Management] - [Network Map] to display the [Network Map] screen.

It may take time to display the network map depending on the number of nodes registered in ISM.
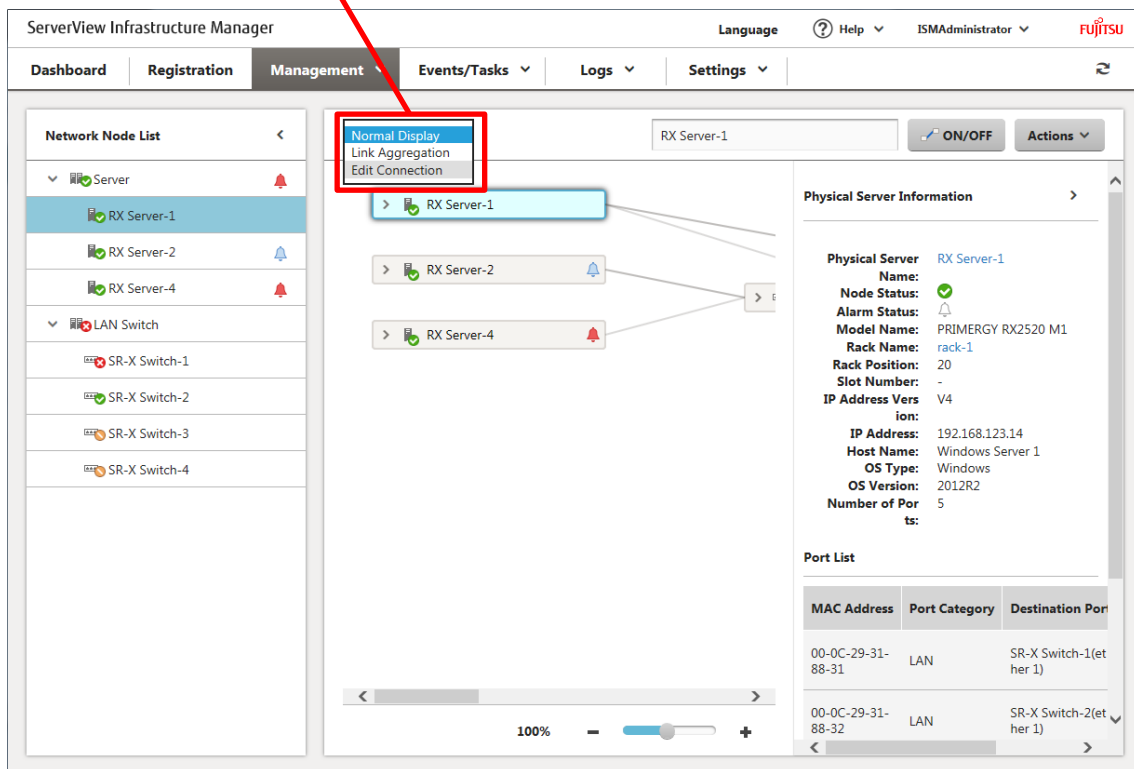
2．From the [Actions] button, select [Refresh Network Information] and select [Yes] to execute.
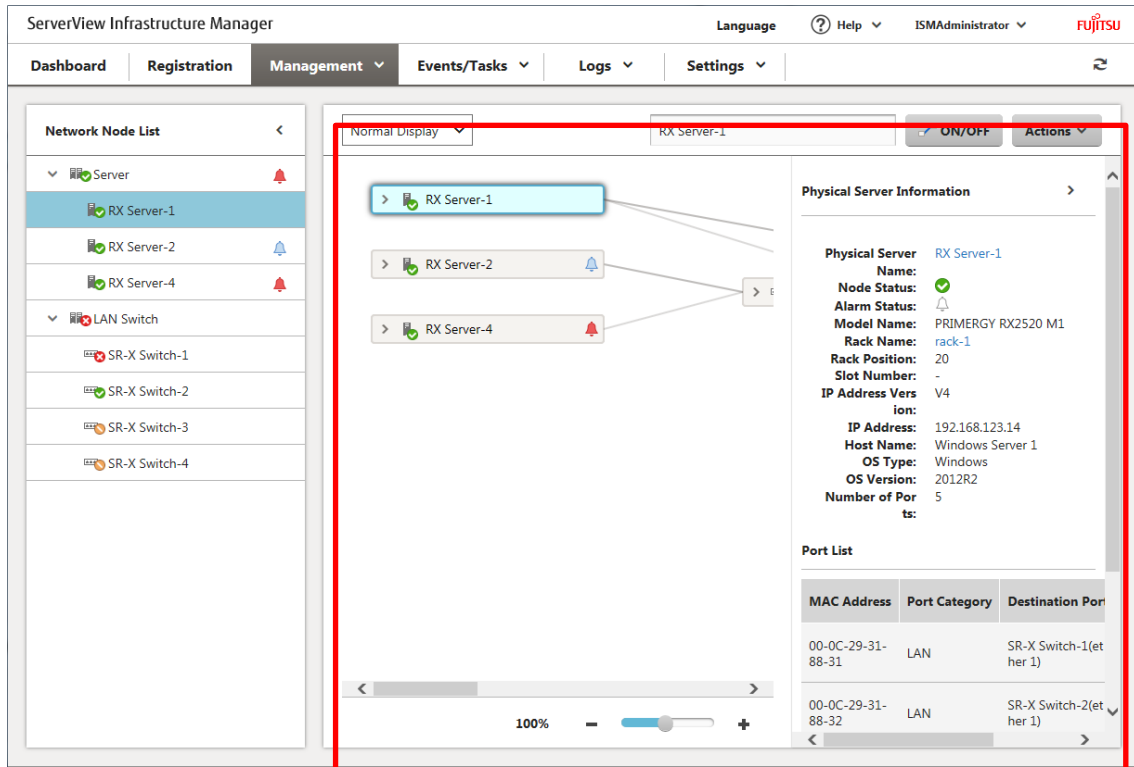
[Network Map]Screen

3．Select [Edit Connection] from the [Display Mode] pull-down menu.

[Display Mode]
Pull-down menu

4．Select the ⟩ mark within the icon of the node to be connected to and the network port (▮) will be displayed.

5．Select the 2 ports to be connected and click the [Add] button. The additional connections are displayed in gray.

6．Repeat the procedure 3 to 5 as many times as the number of the connections you wish to add.

7．On the [Network Map] screen, select [Edit Connections Saved] from the [Actions] button.

8．On the [Edit Connections Saved] screen, check the contents of the connections set up, then click the [Save] button.

9．In [Display Mode], select [Normal Display].

This finishes the procedure of network connection set up.

2.7．Set an alarm

【Explanation】

Set up of the external notifications for ISM, based on the alarm detected when a node failure occurred, (such as the various traps received from a node, or events detected by Monitoring function of ISM). It is possible to send notifications either by executing any

script or by sending an e-mail.

When sending e-mails, it is possible to encrypt the message with SMIME.

【Procedure】

When making the alarm settings, it should be done in the order of Action settings (notification method)⇒ Alarm settings.

1．If using script execution or e-mail (encryption available) as a notification method, preparations are necessary before making the action settings. When using an e-mail, if encryption is unnecessary, proceed to step 2.

<If executing a script>

① Prepare script file.

② FTP is used to send it to ISM-VA. Access the ftp://<ISM-VA IP Address>/<User Group Name>/ftp/actionscript over FTP and store script files there.

③ Log in to the ISM-VA console as the administrator user.

④ Execute the ismadm event import –type script command. When executing the command, the script files stored in the FTP by each user will be imported in a batch.

<If sending an encrypted e-mail>

① Prepare personal certificate. Check that the certificate is in PEM format and that the certification and recipient mail address is encrypted.

② FTP is used to send it to ISM-VA. Access the ftp://<ISM-VA IP Address>/<User Group Name>/ftp/cert using FTP and store certificates there.

③ Log in to the ISM-VA console as the administrator user.

④ Execute the ismadm event import –type cert command. When executing the command, the certificates stored in the FTP by each user will be imported in a batch.

2．From the Global Navigation menu, select [Settings] - [Alarms] to display the [Alarm Settings] screen.

3．Select [Actions] and the [Actions List] screen will be displayed.

4．From the [Actions] button, select [Add] and the [Add Action] wizard will be displayed.

5．Enter the setting items and select the [Apply] button. (For help on entering the setting items, move to [Settings]→["Alarms" screen]→[Add (Alarm)], and refer to Help on [Add (Alarm)].)

6．After action addition is finished, the corresponding action will be displayed on the [Actions List] screen.

7．On the [Alarms] screen, select the [SMTP Server] to display the [SMTP Serer

Settings] screen (If not sending e-mail, this step is unnecessary and you can move on to step 11).

8．From the [Actions] button, select [Edit] and the [SMTP Server Settings] wizard will be displayed.

9．Enter the setting items and select the [Apply] button. (For help on entering the setting items, move to [Settings]→["Alarms" screen]→["SMTP Server" screen], and refer to Help on [SMTP Server].)

1０．After the SMTP server settings are finished, the corresponding settings will be displayed on the [SMTP Server Settings] screen.

1１．On the [Alarms] screen, select [Common Alarm Settings] to display the [Common Alarm Settings] screen.

1２．From the [Actions] button, select [Edit] and the [Edit Common Alarm Settings] wizard will be displayed.

1３．Enter the setting items and select the [Apply] button. (Foe help on entering the setting items, move to [Settings]→["Alarms" screen]→["Common Alarm Settings" screen], and refer to Help on [Common Alarm Settings].)

1４．On the [Alarms] screen, select [Alarms] to display the [Alarm List] screen.

1５．[From the [Actions] button, select [Add] and the [Add Alarm] wizard will be displayed.

1６．Follow the [Add Alarm] wizard and enter the setting items. (For help on entering the setting items, move to [Settings]→["Alarms" screen]→[Add (Alarm)], and refer to Help on [Add (Alarm)].)

1７．After alarm addition is finished, the alarm will be displayed on the [Alarm List] screen.

This finishes the setup of node failure notifications.

２.８．Set a log collection schedule

【Explanation】

ISM follows the schedule set (example: every day at 23:00) and collects and accumulates node logs on a regular basis. It is possible to have different settings for each node. The set schedule can be executed and log collection done at any time

【Procedure】

1．From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.

Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

2．Select the node to be configured from the node list.

3．Select the [Log Settings] tab.

4．Execute [Edit Log Collection Settings] from the [Actions] button in the [Log Settings] tab.

5．Do the necessary settings on the settings screen, then click [Apply].

・After selecting the [Schedule Type], click the [Add] button and set the log collection time.

・Check the [Enable Schedule execution] box. If the check is disabled, the created schedule will not be executed.

・When the node is a server, [Operating System Log] and [ServerView Suite Log] can be selected as targets for log collection if the OS information is set correctly.

6．Using the operations above, the log of the specified node will automatically be collected at the set time and accumulated in ISM.

7．When the log collection occurs according to the arbitrary timing in the settings, clicking the [Actions] button in the [Log Settings] tab and selecting [Collect Logs] executes the log collection. The [Collect Logs] operation will be registered as an ISM task. Select [Events/Tasks]-[Tasks] from the Global Navigation Menu and check that the task has been completed.

2．8．Delete a node

【Explanation】

Deleting a registered node.

【Procedure】

1．Select [Management] from the Global Navigation menu and the [Node List] screen will be displayed.
Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

2．Select the node to be deleted.

3．From the [Actions] button, select [Delete Node].

4．Check that the node to be deleted is correct, and then click [Delete].

5．After node deletion is finished, the corresponding node will be deleted from the [Node List] screen.

This finishes node deletion.

2．9．Deleting a rack

【Explanation】

Deleting a registered rack

【Procedure】
　1．From the Global Navigation menu, select [Datacenters] to display the [Datacenter List] screen.
　2．Select the rack to be deleted.
　3．From the [Actions] button, select [Delete Rack]
　　　See the help screen regarding things to be careful about when deleting a rack.
　　　Help Screen:
　　　[Management]→["Datacenters" screen]→[『Details of Rack』 screen]→[Delete Rack]
　4．Check that the rack to be deleted is correct, and then click [Delete].

２.１０．Delete a floor

【Explanation】
Delete a registered floor.

【Procedure】
　1．On the [Datacenter List] screen, select the floor to be deleted.
　2．From the [Actions] button, select [Delete Floor]
　　　See the help screen regarding things to be careful about when deleting a floor.
　　　Help Screen:
　　　[Management]→["Datacenters" screen]→[『Details of Floor』 screen]→[Delete Floor]
　3．Check that the floor to be deleted is correct, and then click [Delete].

２.１１．Delete a datacenter

【Explanation】
Delete a registered datacenter.

【Procedure】
　1．On the [Datacenter List] screen, select the datacenter to be deleted.
　2．From the [Actions] button, select [Delete Datacenter]
　　　See the help screen regarding things to be careful about when deleting a datacenter.
　　　Help Screen:
　　　[Management]→["Datacenters" screen]→[『Details of Datacenter』 screen]→

[Delete Datacenter]

３．Check that the datacenter to be deleted is correct, and then click [Delete].

3．Node Monitoring

3.1．Operate the dashboard

The dashboard displays the widget showing various information about status, logs etc. Select the widget according to the needs of the user. The information necessary can be referenced.

See the help screen [Dashboard] - [Dashboard Customization] for help on how to select the widget to be shown on the dashboard.
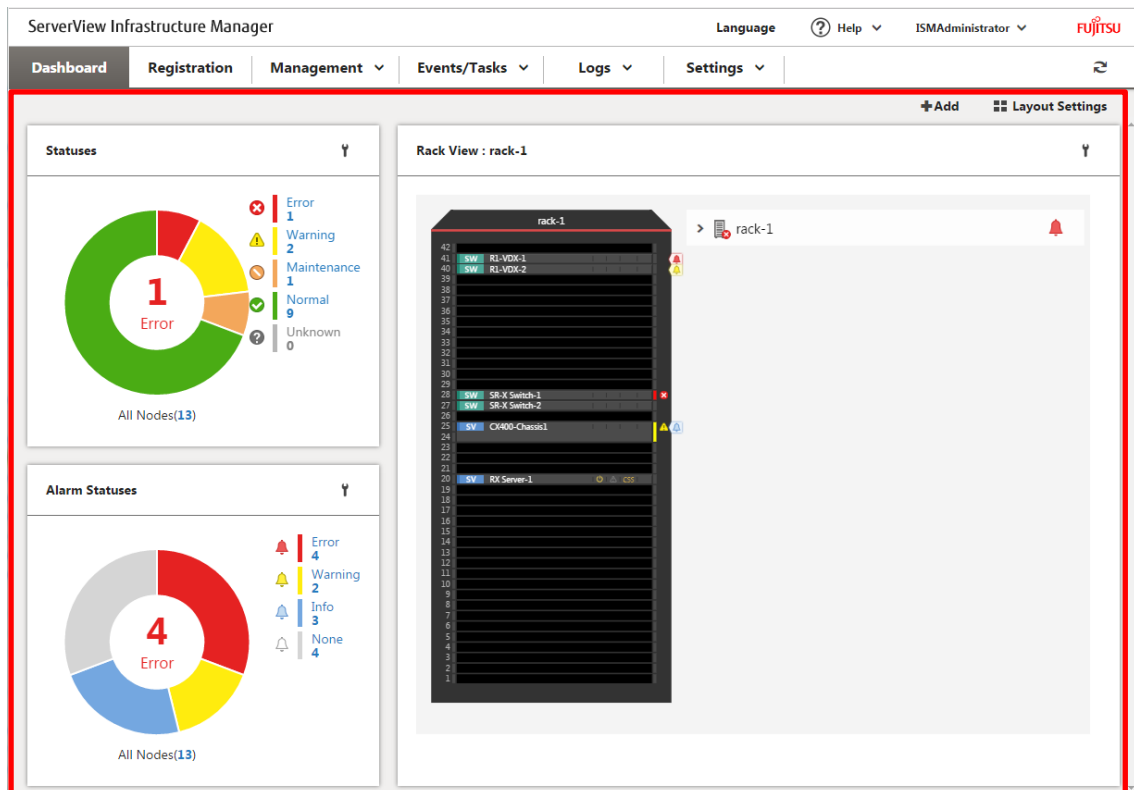
3.2．Check the status of a node

【Explanation】
  The node status can be checked in the [Statuses] widget on the dashboard or on the [Node List] screen.

【Procedure】
  1. Check the node status using the [Statuses] widget on the dashboard.

[Dashboard] screen

2. See the help screen for details regarding the [Statuses] widget.

Help screen：

　Go to [Dashboard]→[Dashboard Widget]→[Statuses], and see [Statuses] for

　help.

3. In the [Statuses] widget, select the status to check (Error, Warning, Maintenance, Normal, and Unknown) to display the [Node List] screen.

　Depending on the number of nodes registered in ISM, it may take time before the

　node list is displayed.

4. The status of the node is displayed. (For help regarding the contents displayed,

go to [Management]→["Nodes" screen], and see the ["Nodes" screen] for Help.)

5. This finishes the node status display.

３.３. Display the node notification information.

【Explanation】

The node status, as well as whether an event has occurred on the node can be checked using either the [Alarm Statuses] widget on the dashboard or by checking the [Node List] screen.

【Procedure】

1. Select [Dashboard] from the Global Navigation menu to display the [Dashboard] screen.
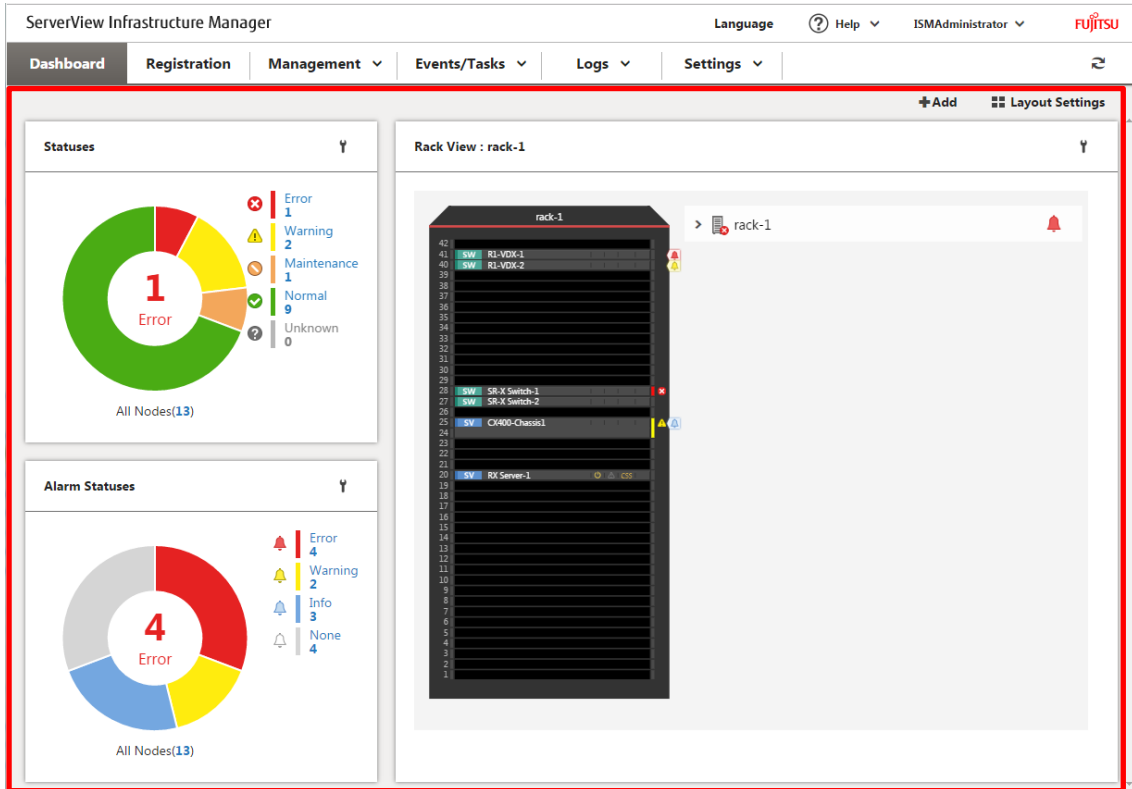
[Dashboard] screen

2. For explanations on the [Alarm Statuses] widget, go to [Dashboard] - [Dashboard] Widget] - [Alarm Statuses] and see [Alarm Statuses] for help.

3. In the [Alarm Statuses] widget, select the status to be checked (Error, Warning, Info, and None) to display the [Node List] screen.

Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

4. The nodes with the alarm status will be displayed. (For help regarding the contents displayed, go to [Management]→["Nodes" screen], and see the ["Node" screen] for Help.)

This finishes the display of the node notification information.

３.４. Display the node log

【Explanation】
Displaying the logs collected from the management node lined up in a time series.
By specifying the requirements of the management target node, Severity, Category (Hardware, operating system) etc., the logs to be displayed can be narrowed down.

【Procedure】
1. From the Global Navigation Menu, select [Logs] - [Node Logs] to display the

[Node Log Message List] screen.

2. When narrowing down the node logs displayed, select the [Filter] button to display the [Filter] wizard.
   Enter the filtering requirements into the [Filter] wizard,
   and then click the [Filter] button. (For help on filtering conditions, go to [Logs]→ ["Node Logs" screen]→[Filter (Node Logs)], and see Help on [Filter (Node Logs)]).

3. The filtered node logs will be displayed on the [Node Log Message List] screen.
   This finishes the node log display.

３.５. Download the Archived Logs

【Explanation】

Displaying the logs collected from the management node lined up in a time series.
The displayed logs can be filtered by severity, category (hardware or operating system), management target node, and so on.

【Procedure】

1. From the Global Navigation Menu, select [Logs] - [Archived Logs] to display the [List of Archived Logs] screen.
2. Select the checkbox of the node whose archived logs should be downloaded.
3. From the [Actions] button, select [Create Download Files] to open the [Create Download Files of Archived Logs] wizard.
4. Enter the setting items and click the [Run] button. (For help on setting items, go to [Logs]→["Archived Logs" screen]→[Create Download Files (Archived Logs)]→ ("Archived Logs" screen)], and refer to Help on [Create Download Files of Archived Logs ("Archived Logs" screen)].
5. The download file is created.
6. From the [Actions] button, select [Check Download Files] to show the [List of Archived Logs] wizard.
7. When clicking the [Download] button, the download file created in step 5 will be downloaded to the console.

This finishes the download of the archived logs.

4．Operations for each use scene

4.1. Check the node where a failure occurred

【Explanation】
　Since among all the nodes, only the nodes where a failure is currently occurring are displayed, it is easy to check the information of failed nodes.
　ISM does not update the status of the nodes on the screen in real time. In order to display the current status of the node, click the refresh button and refresh the screen.

【Procedure】
　1. Select [Dashboard] from the Global Navigation menu.
　2. In the [Statuses] widget, select [Error] on the right side of ⊗ .
　3. Only the nodes where an error has occurred will be displayed.
　4. Check the status for the abnormal nodes displayed.

3.2 Display the node logs of the target node
【Explanation】
　Information collection about a node error checks if there is an error in the contents of the node log that has been collected and displayed.

【Procedure】
　1. To display the log correctly, the already collected logs will be processed before collecting the most recent log.
　　From the Global Navigation Menu, select [Logs] - [Node Logs] to display the [Node Log Message List] screen. If the node logs have been shown previously, the messages will be displayed in the list. Delete logs as necessary.

　　＜Deleting Logs＞
　　　①On the [Node Log Message List] screen, select [Delete Log] from the [Actions] button to open the [Delete Logs] wizard.
　　　②Enter the setting items, then press the [Delete] button. (For help on setting items, go to [Logs]→["Node Logs" screen]→[Delete Logs], and refer to Help on [Delete Logs].)

　2. Select [Actions]-[Collect Logs] to display the [Collect Logs] wizard.
　3. Press the [Select] button, and then select nodes on the [Select applicable node(s)]

screen displayed.

4. By clicking the [Run] button on the [Collect Logs] screen, collection is executed.

5. Since collection happens in the background, the results are not reflected immediately. When the update button in clicked, depending on the collection status, any collected messages will be added.

This finishes the node logs display.

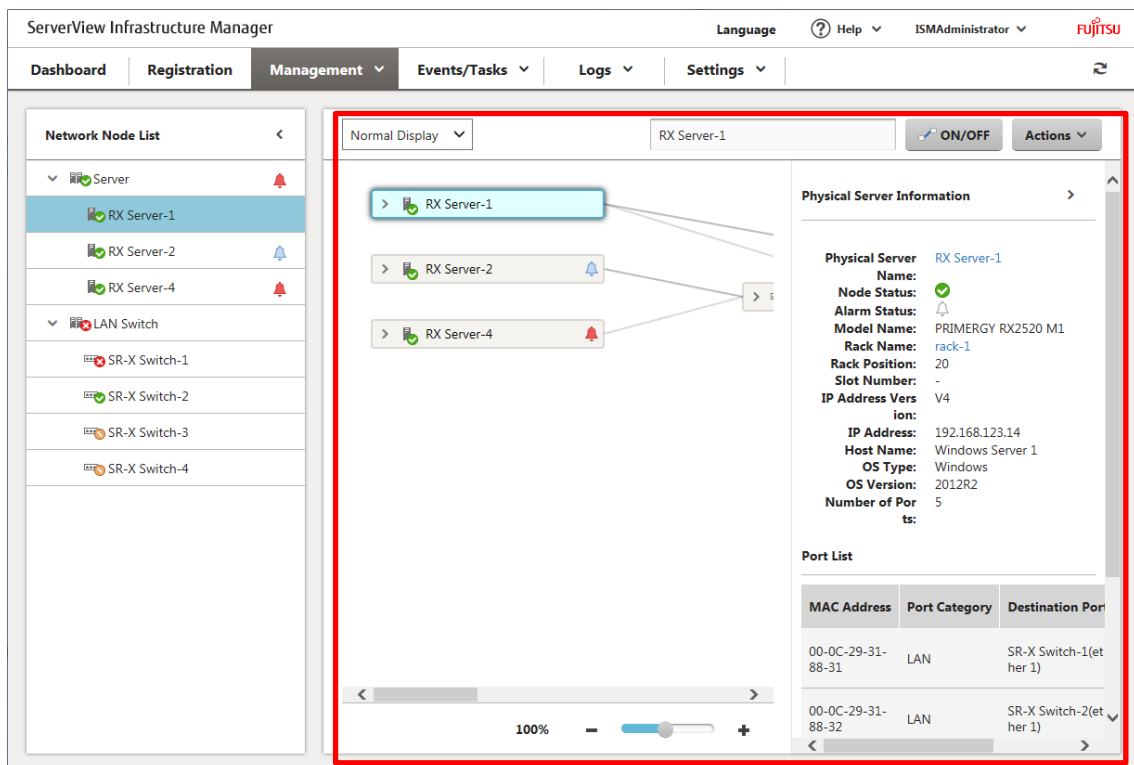## ４.２. Check the failed network point and its impact area

【Explanation】

You can graphicaly check the failed network point and its imapct area with network map.

【Procedure】

1. Select [Management]-[Network Map] from the Global Navigation menu to display the [Network Map] screen.
It may take time to display the network map depending on the number of nodes registered in ISM.

[Network Map]Screen

2. Check the node indicated in red. The node where an error occurs turns red.

3. From the [Actions] button, select [Enable displaying impacted area].

4. Check the impact area indicated in red.

This finishes the check for failed network point and its impact area.

４.３. Set up server

4.3.1. Set up server BIOS

【Explanation】

Set up BIOS for server registered in ISM.

【Procedure】

1. For the BIOS settings procedure, see "4.3.6 Assign Profile."

4.3.2. Set up server iRMC

【Explanation】

Set the iRMC of the servers registered in ISM.

【Procedure】

1. For the iRMC settings procedure, see "4.3.6 Assign Profile."

4.3.3. Install server OS

【Explanation】

Install OSes on the servers registered in ISM.

The following OSes can be installed.

    Windows Server

    Red Hat Enterprise Linux

    VMware

【Procedure】

1. Preparing environment configurations

    When installing an OS, it is necessary to create a DHCP server.

    See our products website for detailed information.

        http://software.fujitsu.com/jp/serverviewism/

2. Preparing the OS image

As a preparation setting when installing an OS, it is necessary to first import the OS image into the repository. See the chapter 2.3.4 in the user's manual regarding repository management.

3. Create a profile (or set up)

OS installation is executed by the profile assignment. To install an OS, a profile must be created or set up.

4. Assigning a profile

The OS registered in the profile, after the profile assignment, will be installed. See "4.3.6 Assign Profile" for the procedure on profile assignment.

4.3.4. Create policy

【Explanation】

The template containing information regarding node hardware settings or information on OS installation is called a policy. When a lot of nodes are managed, input into the profile is simplified by policies specified by common factors. Creating this policy. It is optional to create a policy and it is not always necessary when creating a profile.

【Procedure】

1. Select [Settings] - [Profiles] from the Global Navigation Menu to display the [Profile Settings] screen.
2. On the [Profile Settings] screen, select [All Policies] to display the [All Policies] screen.
3. From the [All Policies] screen, select [Add Policy] from the [Actions] button to display the [Add Policy] wizard.

【If setting the BIOS policy】

On the [1.General Information] screen on the [Add Policy] wizard, select [BIOS] in the field of [Policy Type].

【If setting iRMC policy】

On the [1.General Information] screen on the [Add Policy] wizard, select [iRMC] in the field of [Policy Type].

Follow the [Add Policy] wizard and enter the other setting items. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→ [Policy/Policy Group List]→[Add Policy], and refer to Help on [Add Policy].)

4. After policy addition is finished, the corresponding policy will be displayed on the [All Policies] screen.

This finishes policy creation.

4.3.5. Create profile

【Explanation】

Profiles are collections of settings for node hardware or OS installation, they need to be created individually for each node.

【Procedure】

1. Create a policy

   See "3.3.4. Create policy" for instructions on how to create a policy. A policy is not always necessary for creating a profile.

   Moreover, already created policies can be applied.

2. On the [Profile Settings] screen, select [All Profiles] to display the [All Profiles] screen.

3. From the [All Profiles] screen, select [Add Profile] from the [Actions] button to display the [Add Profile] wizard.

4. Follow the instructions on the [Add Profile] wizard and enter the setting items. The explanations below outline operations using policies.

   【If setting up BIOS】

   1) In the [Add Profile] wizard, go to [BIOS Policy] on the [1.General Information] screen and select the policy created in step 1 above (or a policy to be reused). Enter the other setting items on the [1.General Information] screen. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→[Profile/Profile Group List]→[Add Profile], and refer to Help on [Add Profile].)

   2) In [2.Details], select the [BIOS] tab and enter the setting items. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→[Profile/Profile Group List]→[Add Profile], and see Help on [Add Profile].)

   【If setting up iRMC】

   1) On the [Add Profile] wizard, go to [iRMC Policy] on the [1.General Information] screen and select the policy created in step 1 above (or a policy to be reused). Enter the other setting items on the [1.General Information] screen. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→[Profile/Profile Group List]→[Add Profile], and see Help on

[Add Profile].)

2) In [2.Details] select the [iRMC] tab and enter the setting items. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→ [Profile/Profile Group List]→[Add Profile], and see Help on [Add Profile].)

【If installing an OS】

1) On the [Add Profile] wizard, go to [OS Type] on the [1.General Information] screen and select the OS to be installed. Enter the other setting items on the [1.General Information] screen. (For help on setting items, go to [Settings] →["Profiles" screen (Settings)]→[Profile/Profile Group List]→[Add Profile], and see Help on [Add Profile].)

2) In [2.Details], select the [OS] tab and enter the setting items. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→ [Profile/Profile Group List]→[Add Profile], and see Help on [Add Profile].)

3) In [2. Details], select the [OS Information] tab and enter the setting items. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→ [Profile/Profile Group List]→[Add Profile], and see Help on [Add Profile].)

5. Hereafter, follow the instructions on the [Add Profile] wizard and enter the setting items. (For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→[Profile/Profile Group List]→[Add Profile] and see Help on [Add Profile].)

6. After profile addition is finished, the corresponding policy will be displayed on the [All Profiles] screen.

This finishes profile creation.

4.3.6. Assign profile

【Explanation】

Assign the profile to the servers registered in ISM, set up the server BIOS/iRMC and install an OS.

【Procedure】

1. Create a profile. (See "2.4.5 Create profile" for instruction on creating a profile.)

2. From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.

Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

3. In [Column Display], select [Profile].

4. From the node list, select the nodes where the profile should be assigned.

5. From the [Actions] button, select [Assign/Reassign Profile] to show the [Profile Assignment] wizard.

6. Follow the instructions on the [Profile Assignment] wizard and enter the setting items. (For help on setting items, go to [Management]→["Nodes" screen]→ [Assign/Reassign Profile], and refer to Help on [Apply/Reapply Profile].)

7. After the BIOS/iRMC settings or the OS installation is finished, the [Status] field on the [Node List] screen will display [Assigned] for the corresponding server.

This finishes the node profile application.

4.4. Check firmware version of the server

【Explanation】

Display the firmware version of the servers registered in ISM.

【Procedure】

1. From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.
   Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

2. Click the name of the target server and select [Properties].

3. From the [Actions] button, select [Get Node Information] to start collecting node information.

4. From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.
   Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

5. In [Column Display], select [Firmware].

6. On the [Node List] screen, the firmware version of the server will be displayed in the [Current Version] column.

This finishes the check of the firmware version of the server.

4.5. Update the server firmware.

【Explanation】

Updating the firmware of the servers registered in ISM.

【Procedure】

1. If the firmware to be updated is not imported yet, the firmware must first be imported. If it is already imported, proceed to step 7.

2. Download the firmware of the iRMC/BIOS from the website. Download the firmware for the target model from the website below.
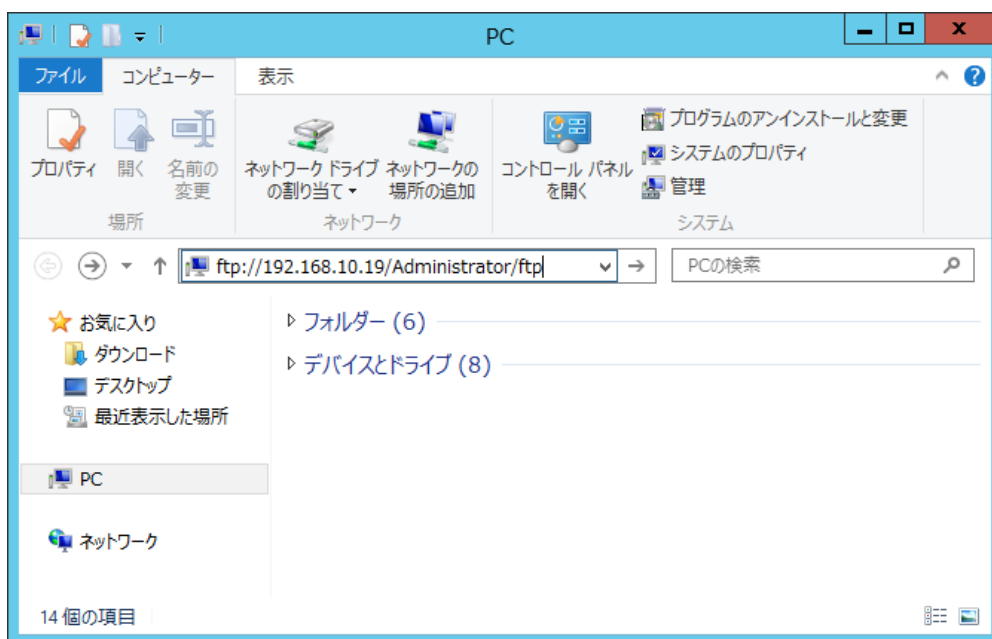
 http://support.ts.fujitsu.com/

3. Store the downloaded file in any folder. If the downloaded file is compressed, decompress the file in the folder.
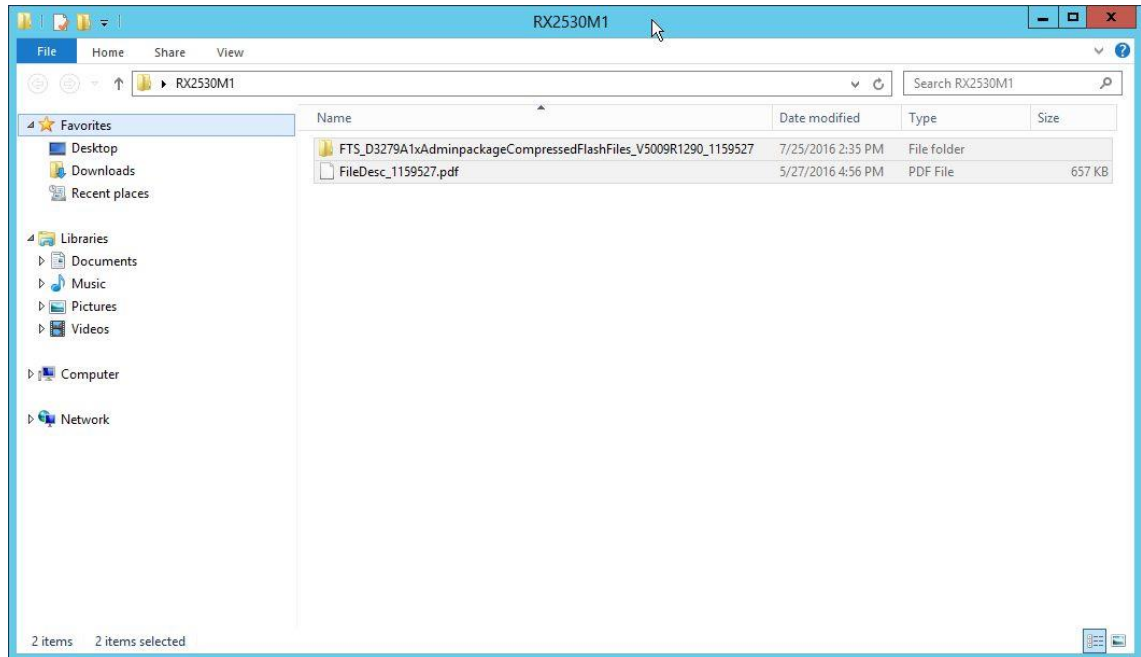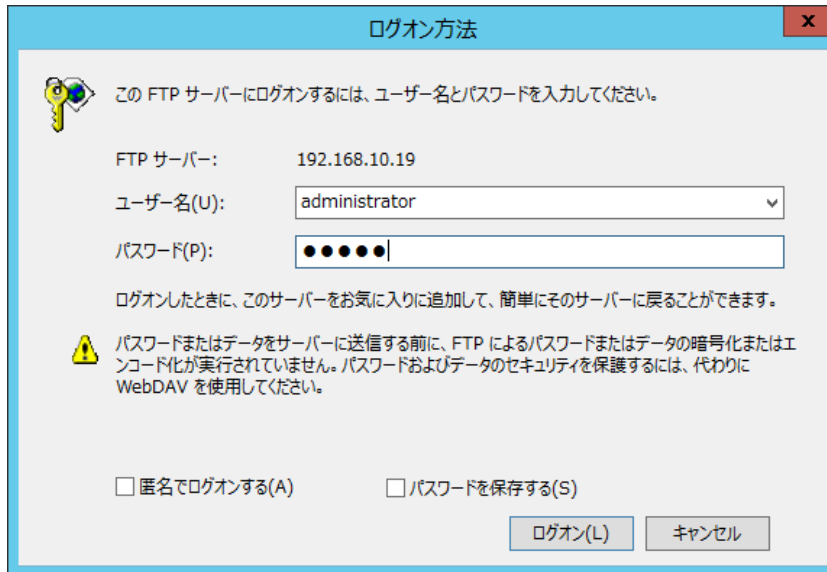

4. Use FTP and transfer the data to ISM-VA. Make sure to transfer it with the same structure as the folder.
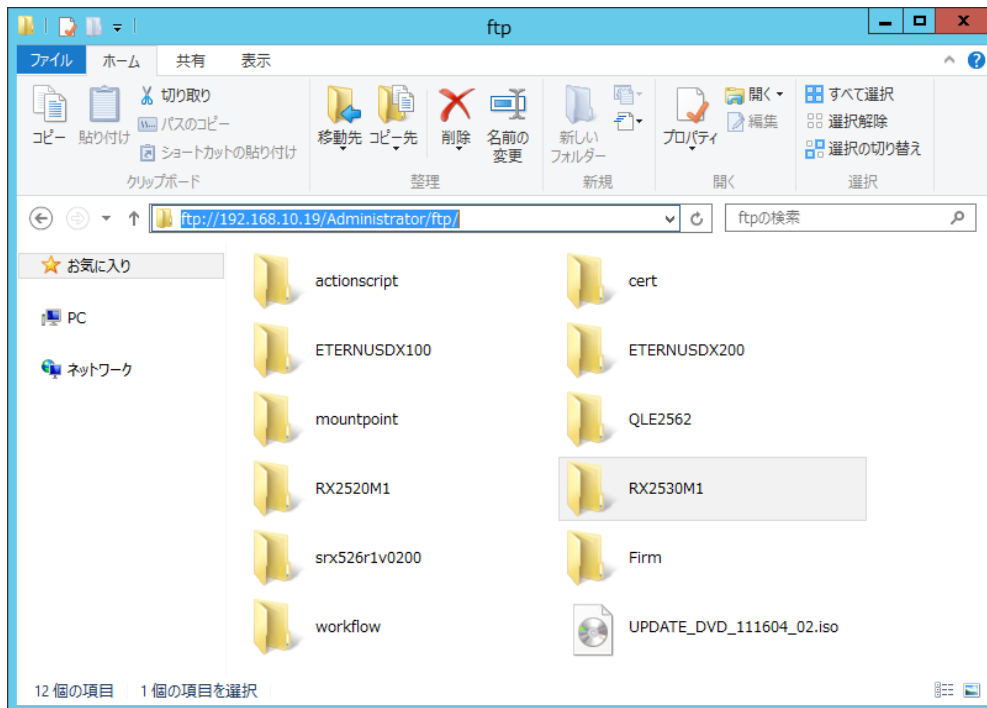
 In the file explorer, enter "ftp://<ISM-VA IP Address>/<User Group Name>/ftp".

If an FTP folder error is output, right-click inside the folder, select [Logon Method], enter the user name and password and click logon.

If you created a folder in step 2, drag and drop it into the FTP folder, while maintaining the hierarchical structure.

5. Import firmware.

From the Global Navigation Menu on the GUI screen of ISM, select [Settings] - [Repositories]. From the [Actions] button in [Firmware], select [Import Firmware].

Follow the instructions on the screen and enter the file location, type, model and version, then select [Assign].

Enter versions to be entered using the table below.

Type	Model	Version Entering Method
iRMC	RX100 S8, CX2550 M1, etc.	Refer to the release notes and specify the versions of iRMC and SDR.
BIOS	RX100 S8, CX2550 M1, etc.	Refer to the release notes and specify the BIOS version.

After starting the import, the operations will be registered as ISM tasks. Check the status of the operations on the "Task" screen.

Select [Events/Tasks]-[Tasks] from the Global Navigation Menu to display a list of the tasks in the [Tasks] screen.

6. Check that the firmware has been imported.

Select [Settings] - [Repositories] from the Global Navigation Menu to display the [Repository Settings] screen. Select [Firmware] on the left side of the screen, then select the [Firmware] tab on the right side of the screen.

Check that the imported firmware is displayed on the [Firmware List] screen.

7. Set the target server to maintenance mode.

From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.

Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.

Select the node that is target for firmware update, select [Actions] - [Maintenance Mode Settings] and put it in maintenance mode.

8. Select target server.

In [Column Display], select [Firmware].

Select the checkbox of the node where firmware update should be done.

(If a firmware with a higher version number than the current one is imported, the checkbox cannot be selected unless the version number of this firmware is displayed in the latest version column).

From the [Actions] button, select [Update Firmware] to display the [Update Firmware] wizard.

9. Starting firmware update.

Follow the instructions on the [Update Firmware] wizard and enter the setting items. (For help on setting items, go to [Management]→["Nodes" screen]→ [Update Firmware], and see Help on [Update Firmware].)

After starting the firmware update, the operations will be registered as ISM tasks.

Check the current status of the task on the "Task" screen.

Select [Events/Tasks]-[Tasks] from the Global Navigation Menu to display a list of the tasks on the [Tasks] screen.

10. If doing online firmware update for BIOS, PCI cards, the target server must be restarted.

11. Cancel maintenance mode for the target server.
From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.
Select the server target for firmware update, select [Actions] - [Maintenance Mode Settings] and cancel maintenance mode.

12. Check that the firmware version of the target server has been updated.
From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.
Click the node name of the device where firmware update was done and select [Properties].
From the [Actions] button, select [Get Node Information] to start retrieving node information.
From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.
In [Column Display] on the [Node List] screen, select [Firmware] to display the version number after updating.

This finishes the server firmware update.

4.6. Set up switch and storage

4.6.1. Create profile

【Explanation】
Create a profile (aggregate of hardware settings).

【Procedure】
1. On the [Profile Settings] screen, select [All Profiles] to display the [All Profiles] screen.
2. From the [All Profiles] screen, select [Add Profile] from the [Actions] button to display the [Add Profile] wizard.
3. Follow the instructions on the [Add Profile] wizard and enter the setting items.
Enter RAID configuration, SNMP settings, account and other settings for each device.
(For help on setting items, go to [Settings]→["Profiles" screen (Settings)]→ [Profile/Profile Group List]→[Add Profile], and see Help on [Add Profile].)

4. After profile addition is finished, the corresponding profile will be displayed on the [All Profiles] screen.

This finishes profile creation.

4.6.2. Assign profile

【Explanation】

Assign the profile to the node registered in ISM.

【Procedure】

1. Create profile. (See "2.4.5 Create profile" for instruction on creating a profile.)
2. From the Global Navigation menu, go to [Management] - [Nodes] to display the [Node List] screen.

   Depending on the number of nodes registered in ISM, it may take time before the node list is displayed.
3. In [Column Display], select [Profile].
4. From the node list, select the nodes where the policy should be applied.
5. From the [Actions] button, select [Assign/Reassign Profile] to show the [Profile Assignment] wizard.
6. Follow the instructions on the [Profile Assignment] wizard and enter the setting items. (For help on setting items, go to [Management]→["Nodes" screen]→ [Assign/Reassign Profile], and see Help on [Assign/Reassign Profile].)
7. After assignment of the profile has been finished, on the [Node List] screen the [Status] column of the node will be displayed as [Assigned].

This finishes the node profile application.

－ End －