

# **Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0**

## **Plug-in and Management Pack Setup Guide**

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# Preface

## Purpose

This Setup Guide describes the installation procedure, precautions on usage and information for Infrastructure Manager Plug-in (hereinafter referred to as "ISM Plug-in") and Infrastructure Manager Management Pack (hereinafter referred to as "ISM Management Pack").

Infrastructure Manager (hereinafter referred to as "ISM") is operation and management software that manages and operates ICT devices, such as servers, storages and facility devices, such as PDUS, in an integrated way. ISM Plug-in and ISM Management Pack are Plug-in software that extends the user interface and enables you to use functions of ISM. ISM can be used directly from the cloud management software with this product.

ISM Plug-ins and cloud management software described in this guide are displayed below.

ISM Plug-in	Cloud management software
Infrastructure Manager Plug-in for Microsoft System Center Operations Manager (ISM Plug-in for SCOM)	Microsoft System Center Operations Manager (SCOM)
Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager (ISM Plug-in for SCVMM)	Microsoft System Center Virtual Machine Manager (SCVMM)
Infrastructure Manager Plug-in for VMware vCenter Server Appliance (ISM Plug-in for vCSA)	VMware vCenter Server Appliance (vCSA)
Infrastructure Manager Plug-in for Microsoft Windows Admin Center (ISM Plug-in for WAC)	Microsoft Windows Admin Center (WAC)

## Product Manuals

Manual Name	Description
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 First Step Guide	This manual is for those using this product for the first time. This manual summarizes the procedures for the use of this product, the product system, and licensing.  In this manual, it is referred to as "First Step Guide."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 User's Guide	This manual describes the functions of this product, the installation procedure, and procedures for operation. It allows you to quickly grasp all functions and all operations of this product.  In this manual, it is referred to as "User's Guide."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 Operating Procedures	This manual describes the installation procedure and usages for the operations of this product.  In this manual, it is referred to as "Operating Procedures."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 REST API Reference Manual	This manual describes how to use the required APIs and provides samples and parameter information for using user-created applications that integrate with this product.  In this manual, it is referred to as "REST API Reference Manual."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 Messages	This manual describes the messages that are output when using ISM and ISM for PRIMEFLEX, and the actions to take for these messages.  In this manual, it is referred to as "ISM Messages."
Infrastructure Manager for PRIMEFLEX V2.9.0 Messages	This manual describes the messages that are output when using ISM for PRIMEFLEX and the actions to take for these messages.  In this manual, it is referred to as "ISM for PRIMEFLEX Messages."

Manual Name	Description
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 Items for Profile Settings (for Profile Management)	This manual describes detailed information for the items set when creating profiles for managed devices.  In this manual, it is referred to as "Items for Profile Settings (for Profile Management)."
Infrastructure Manager for PRIMEFLEX V2.9.0 Cluster Creation and Cluster Expansion Parameter List	This manual describes Cluster Definition Parameters that are used for the automatic settings in Cluster Creation and Cluster Expansion when using ISM for PRIMEFLEX.  In this manual, it is referred to as "ISM for PRIMEFLEX Parameter List."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 Glossary	This document defines the terms that you need to understand in order to use this product.  In this manual, it is referred to as "Glossary."
Infrastructure Manager / Infrastructure Manager for PRIMEFLEX V2.9.0 Plug-in and Management Pack Setup Guide	This manual describes the procedures, from installation to operation as well as precautions and reference information, for the following features of Infrastructure Manager Plug-in.  <ul style="list-style-type: none"> <li>- Infrastructure Manager Plug-in for Microsoft System Center Operations Manager</li> <li>- Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager</li> <li>- Infrastructure Manager Plug-in for VMware vCenter Server Appliance</li> <li>- Infrastructure Manager Plug-in for Microsoft Windows Admin Center</li> </ul> In this manual, it is referred to as "ISM Plug-in/MP Setup Guide."

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

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

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

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

## Intended Readers

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

## Notation in this guide

### 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

Describes important information for each subject.



**Point**

Describes important information for each subject.



## Note

Describes subjects where attention is necessary.

### Variables: <xxx>

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

Example: <IP address>

### Abbreviation

This document may use the following abbreviations.

Official name	Abbreviation
Infrastructure Manager	ISM
Infrastructure Manager Plug-in	ISM Plug-in
Microsoft® System Center Operations Manager	SCOM
Microsoft® System Center Virtual Machine Manager	SCVMM
Microsoft® Windows Admin Center	WAC
Microsoft® Windows Server®	Windows Server
VMware vCenter Server® Appliance™	vCSA

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

### Terms

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

### Using PDF applications (Adobe Reader, etc.)

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- Saving to a text file
- Copying and pasting text

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## Modification History

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Edition	Issue Date	Modification Overview	Section	
01	September 2023	First edition	-	-
02	June 2024	Deleted unsupported chapter	Chapter 3 Chapter 5 Chapter 6 Chapter 7	Deleted chapters
		Added ISM Plug-in for vCSA 2.1 for vCSA 8	Chapter 3	Added new chapter
		Changed chapter number	Chapter 8 Chapter 9	Changed only chapter number
		Modified description due to the name change to Fsas Technologies	-	-
		Modified version from ISM 2.9.0.020 to ISM 2.9.0.021	-	-

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# Chapter 1 ISM Plug-in for SCOM 1.2

## 1.1 Product Summary

Infrastructure Manager Plug-in for Microsoft System Center Operations Manager (ISM Plug-in for SCOM) is designed to extend the user interface of SCOM to enable the use of the functions of ISM from the SCOM console to enhance the efficiency of the infrastructure management.

This plug-in software enables you to operate ISM directly from the SCOM console.

## 1.2 Contents

This product is composed of the following three (3) files:

- ISMSCOM\_INSTALL.exe
- Readme.txt
- Readme\_en.txt

## 1.3 System Requirements

For information on the SCOM system requirements to operate ISM Plug-in for SCOM, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

For ISM 2.8.0.010 or later, disable Multi-Factor Authentication when using this plug-in.

## 1.4 Installation Procedures

This section explains installation procedures of ISM Plug-in into SCOM.

### 1.4.1 Installation Preparation

This section explains installation procedures of ISM Plug-in into SCOM.



#### Point

- Install OpenSSL into a Windows Server that ISM Plug-in for SCOM will be installed to before execution of the following procedures. The version of OpenSSL you install must match the OpenSSL version of ISM.
- For new installations of ISM 2.3.0 or later, TLS v1.2 must be available to the Windows Server and System Center where ISM Plug-in for SCOM is to be installed.
- If the version of ISM Plug-in for SCOM is older than the version you want to apply is already installed, uninstall the older version of ISM Plug-in for SCOM.

### 1.4.2 Store the Install File

Use Remote Desktop to connect to the Windows Server on which you are installing ISM Plug-in for SCOM.

Transfer the install file to an arbitrary directory on the Windows Server of the connection destination by copying and pasting the file.

### 1.4.3 Execute the Install File

---

1. On the installation destination Windows Server, double-click the install file (ISMSCOM\_INSTALL.exe) that has been transferred in "[1.4.2 Store the Install File](#)."
2. Select language for the installation procedures.  
When the preparations are completed, the installation wizard with the message "To continue, select Next" is displayed.
3. Select [Next].  
The EULA is displayed.
4. Read the contents and select [I accept the terms]. Select [Next].  
The "Destination Folder" window is displayed.
5. Select [Next] if you do not change the destination.  
Otherwise, select [Change].  
When [Change] is selected, "Change Current Destination Folder" is displayed. Select [OK] after change.  
The path to the designated folder is displayed on "Destination Folder."
6. Select [Next] after confirmation of the path correct.  
The "Ready to Install the Program" window is displayed.
7. Select [Install].  
The "InstallShield Wizard Completed" dialog box is displayed.
8. Select [Finish] to end.

### 1.4.4 Import Management Pack

---

1. Launch the SCOM console.
2. On the left pane, click [Administration], right click [Installed Management Packs] and select [Import Management Packs].
3. Select [Add from disk] under [Add].



.....  
If the online catalog message appears after Step 3, select [No].  
.....

4. In the install destination folder, select "Fujitsu.InfrastructureManager.mp" from [Management Packs] and click [Open].
5. Select [Install].
6. After installation is completed, click [Close] to close the window.

### 1.4.5 Register the Information in ISM Plug-in for SCOM

---

Register the information of ISM and SCOM into ISM Plug-in for SCOM with the command prompt.

1. Start [Command Prompt (Admin)] on the Windows Server where ISM Plug-in for SCOM is installed.
2. Execute the command below on Command Prompt.  
`<Install destination folder name>\IsmServerConfig.exe`
3. Follow the directions and enter the information below.

```
Please enter the IP address or FQDN of ISM Server : <IP address or FQDN of ISM Server>
Please enter the port number of ISM Server : <port number of ISM Server>
Please enter the user name of ISM Server : <user name of ISM Server>
Please enter the password for the user name : <password of ISM Server>
Please enter the user name of SCOM : <user name of SCOM>
```

```
Please enter the Alert collection interval(3-525600 or 00:00-23:59): <Alert collection interval>
Please enter the Alert deletion interval(3-525600 or 00:00-23:59): <Alert deletion interval>
[INFO] Configuration file was updated successfully.
Do you want to continue? [y/n] : n (end with n)
```

Set <Alert collection interval> and <Alert deletion interval> for 3 to 525600 minutes or 0:00 to 23:59.

4. Enter the "exit" command to close the window.

## Point

To replace the server information, just execute Steps 1 - 4 again.

## 1.4.6 How to use the ISM Plug-in for SCOM

### Note

When Multiple-Factor Authentication is enabled, alert information detected from ISM is not displayed. Also, if trying to display the ISM login screen, the following error screen is displayed:

```
AcISM [ERROR] ISM Alert Task is failed.
{"MessageInfo": [{"TimeStamp": "2022-08-11T05:26:51.470Z", "MessageId": "50060008", "API": "POST
https://xx.xx.xxx.xxx:25566/ism/api/v1/session/login", "Message": "Failed to log in. The
authentication code has not been entered."}], "IsmBody": {}, "SchemaType": "https://xx.xx.xxx.xxx:
25566/ism/schema/v1/MessageInfo-Out.0.0.1.json"}
```

1. Launch the SCOM console.
2. Select [Active Alert] in the left pane and select the designated host in the middle pane.

[Alert task] is displayed in the right pane.

## Point

In the [active alerts] window, alerts detected via ISM has [InfrastructureManager] as a source.

Only the activated monitored items and specified thresholds are going to be detected. The time stamp shown in the Name column is using UTC time, which differs from the time shown in the Created column.

For setting up the monitoring items and each threshold value, refer to "2.3.1 Setting of Monitoring Items and Threshold Values" in "User's Guide."

3. Select [Fujitsu ISM (node)] under [Alert Task].

The ISM Login console is displayed.

## Point

If the selected alert is not registered in ISM as a node, an error message is displayed.

4. The designated node information appears after the login.

## 1.5 Uninstallation Procedure

Uninstallation procedures of ISM Plug-in for SCOM are below.

1. Log in to SCOM.
2. Select the [Administration] tab.

3. Select [Installed Management Packs].
4. Right click [Fujitsu Software Infrastructure Manager].
5. Select [Delete] in context menu to delete Management Pack.
6. Open Control Panel in Windows Server ISM Plug-in for SCOM was installed to.
7. Select [Programs and Features].  
The "Uninstall or change a program" window is displayed.
8. Right click [Infrastructure Manager Plug-in for Microsoft System Center Operations Manager] on the list.
9. Select [Uninstall] on context menu.  
ISM Plug-in for SCOM is removed.

## 1.6 Precautions

---

- To use ISM Management Pack, purchase and installation of ISM are required.  
Refer to "User's Guide" for more details. Without installing ISM, this plug-in does not work properly.
- To use ISM Management Pack, installation in advance of and connection to SCOM are required.  
Refer to the product guides of Microsoft for operations of SCOM.

# Chapter 2 ISM Plug-in for SCVMM 1.2

## 2.1 Product Summary

Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager (ISM Plug-in for SCVMM) is designed to extend the user interface of SCVMM to enable you to use the functions to integrate the infrastructure management of ISM from SCVMM.

This Plug-in software enables you to operate ISM directly from SCVMM.

## 2.2 Contents

This product is composed of the following three (3) files:

- ISMSCVMM\_INSTALL.exe
- Readme.txt
- Readme\_en.txt

## 2.3 System Requirements

For information on the SCVMM system requirements to operate ISM Plug-in for SCVMM, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

For ISM 2.8.0.010 or later, disable Multi-Factor Authentication when using this plug-in.

## 2.4 Installation Procedures

This section explains installation procedures of ISM Plug-in into SCVMM.

### 2.4.1 Installation Preparation

This section explains installation procedures of ISM Plug-in for SCVMM into SCVMM.



#### Point

- Install OpenSSL into a Windows Server that ISM Plug-in for SCVMM will be installed to before execution of following procedures. The version of OpenSSL you install must match the OpenSSL version of ISM.
- For new installations of ISM 2.3.0 or later, TLS v1.2 must be available to the Windows Server and System Center where ISM Plug-in for SCVMM is to be installed.
- If the version of ISM Plug-in for SCVMM is older than the version you want to apply is already installed, uninstall the older version of ISM Plug-in for SCVMM.

### 2.4.2 Store the Install File

Use Remote Desktop to connect to the Windows Server on which you are installing ISM Plug-in for SCVMM.

Transfer the install file to an arbitrary directory on the Windows Server of the connection destination by copying and pasting the file.

## 2.4.3 Execute the Install File

---

1. On the installation destination Windows Server, double-click the install file (ISMSCVMM\_INSTALL.exe) that has been transferred in "2.4.2 Store the Install File."
2. Select a language for the installation procedures.  
When the preparations are completed, the installation wizard with the message "To continue, select Next" is displayed.
3. Select [Next].  
The EULA is displayed.
4. Read the contents and select [I accept the terms]. Select [Next].  
The "Destination Folder" window is displayed.
5. If you change the destination, select [Change], otherwise select [Next].  
If [Change] is selected, "Change Current Destination Folder" is displayed. Select [OK] after change.  
The path to the designated folder is displayed on "Destination Folder."
6. Select [Next] after confirmation of the path correct.  
The "Ready to Install the Program" window is displayed.
7. Select [Install].  
The "InstallShield Wizard Completed" dialog is displayed.
8. Select [Finish] to end.

## 2.4.4 Import Console Add-in

---

1. Log in to SCVMM.
2. On the left pane, under [Settings], select [Import Console Add-in] tab.  
The "Import Console Add-in Wizard" dialog box is displayed.
3. To enter the path of the add-in, select [Browse].
4. In the installation destination folder, select [FujitsuISMVMMPlugin.zip] from [Management Packs], and select [Open].  
Return to [Select an Add-in] window.
5. Check [Continue installing this add-in anyway] and select [Next].



### Point

.....  
When the message "Because you have started the Administrator Console with explicit Windows credentials, you must restart the Administrator Console to finish importing this add-in." is displayed, select [OK] to close.  
.....

- The "Confirm the setting" window is displayed.
6. Select [Finish] to end.
  7. Reboot SCVMM.

## 2.4.5 Register the Information in ISM Plug-in for SCVMM

---

Register information of ISM and SCVMM into ISM Plug-in with command prompt.

1. Start [Command Prompt (Admin)] on the Windows Server where ISM Plug-in for SCVMM is installed.
2. Execute the command below on Command Prompt.  
<Install destination folder name>\IsmServerConfig.exe

3. Follow the directions and enter the information below.

```
Please enter the IP address or FQDN of ISM Server : <IP address or FQDN of ISM Server>
Please enter the port number of ISM Server : <port number of ISM Server>
Please enter the user name of ISM Server : <user name of ISM Server>
Please enter the password for the user name : <password of ISM Server>
Please enter the user name of SCVMM : <user name of SCVMM>
[INFO] Configuration file was updated successfully.
Do you want to continue? [y/n] : n (end with n)
```

4. Enter the "exit" command and close the window.



To reconfigure the server information, just execute Steps 1 - 4 again.

## 2.4.6 How to use the ISM Plug-in for SCVMM



When Multiple-Factor Authentication is enabled, the following error screen is displayed if [Fujitsu ISM] is selected:

```
[ERROR]ISM Login was Failed.
```

1. Log in to SCVMM.
2. Select [All hosts] in the left pane and right click the host name in the middle pane. Then select [Fujitsu ISM].  
Alternatively select the [Fujitsu ISM] tab in the upper right.  
The "Fujitsu SCVMM Plugin" dialog is displayed.
3. When selecting [Profile Assignment], the ISM login console is displayed. After login to ISM, the node registration screen is displayed.

## 2.5 Uninstallation Procedure

Uninstallation procedures of ISM Plug-in are below.

1. Log in to SCVMM.
2. Select the [Administration] tab.
3. Select [Console Add-in].
4. Right click [Infrastructure Manager Plug-in].
5. Select [Delete] in context menu to delete the Plug-in.
6. Open Control Panel in Windows Server ISM Plug-in was installed to.
7. Select [Programs and Features].  
The "Uninstall or change a program" window is displayed.
8. Right click [Infrastructure Manager Plug-in for Microsoft System Center Virtual Machine Manager] on the list.
9. Select [Uninstall] on context menu.  
ISM Plug-in is removed.

## 2.6 Precautions

---

- To use ISM Management Pack, purchase and installation of ISM are required.  
Refer to "User's Guide" for more details. Without installing ISM, this plug-in does not work properly.
- To use ISM Management Pack, installation in advance of and connection to SCVMM are required.  
Refer to the product guides of Microsoft for operations of SCVMM.

# Chapter 3 ISM Plug-in for vCSA 2.1

## 3.1 Product Summary

Infrastructure Manager Plug-in for VMware vCenter Server Appliance (ISM Plug-in for vCSA) is designed to extend the user interface of vCSA to enable you to use functions of ISM on vCSA.

This plug-in software enables you to operate ISM directly from the vCSA.

## 3.2 Contents

This product is composed of the following five (5) files:

- FJSVismvCenterPlugin-x.y.z.tar.gz [Note]
- Readme.txt
- Readme\_en.txt
- open\_source\_license.txt
- VMWARE\_SDK\_OSS\_LICENSE.zip

[Note]: x.y.z represents the latest version.

For the latest version or a different version, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

## 3.3 System Requirements

For information on the vCSA system requirements to operate ISM Plug-in for vCSA, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

ISM Plug-in for vCSA supports vCSA 8.0 or later. If you are using vCSA 7.0U3 or earlier, use ISM Plug-in for vCSA 2.0.3.

For ISM 2.9.0.021 or later, disable Multi-Factor Authentication when using this plug-in.

## 3.4 Installation Procedures

This section explains installation procedures of ISM Plug-in into vCSA.

The service that was running on vCSA from ISM Plug-in for vCSA 2.1 now runs on ISM. In addition, vCSA account information has been added to the registration settings, and a plug-in server has been added to run the service.



Note

The following items and set ups must be completed before installation:

- Activate SSH login on vCSA.

Check the login status via the vCSA web console: [Administration] - [Deployment] - [System Configuration] and select the designated node, [Manage] - [Settings] - [Access]. Then check whether SSH login is enabled or not.

- Install a terminal emulator supporting SSH connections.
- Install a FTP client supporting SFTP connections.

#### Point

- The commands and the messages in a terminal emulator are written in rectangle form.
- The wording of commands may vary depending on the version of the terminal emulator.

## 3.4.1 Installation Preparation

This section explains installation procedures of ISM Plug-in into vCSA.

#### Point

- If the version of ISM Plug-in for vCSA is older than the version you want to apply is already installed, uninstall the older version of ISM Plug-in for vCSA.
- Perform the following steps if you are using Google Chrome 86 or later, Microsoft Edge 86 or later, or Mozilla Firefox 82 or later.

For Google Chrome 86 or later, earlier than 91

1. Start Google Chrome.
2. Type "chrome://flags/" in the URL and press the [Enter] key.
3. Change "SameSite by default cookies" to "Disabled."
4. Select the [Relaunch] button at the bottom right of the screen.

For Google Chrome 91 or later, earlier than 94

1. Start the command prompt.
2. Enter the following and press the [Enter] key.

```
"C:\ProgramFiles(x86)\Google\Chrome\Application\chrome.exe" --disable-features=SameSiteByDefaultCookies
```

For Microsoft Edge 86 or later, earlier than 91

1. Start Microsoft Edge.
2. Type "Edge://flags/" in the URL and press the [Enter] key.
3. Change "SameSite by default cookies" to "Disabled."
4. Select the [Relaunch] button at the bottom right of the screen.

For Microsoft Edge 91 or later, earlier than 94

1. Start the command prompt.
2. Enter the following and press the [Enter] key.

```
"C:\ProgramFiles(x86)\Microsoft\Edge\Application\msedge.exe" --disable-features=SameSiteByDefaultCookies
```

For Mozilla Firefox 82 or later

1. Start Mozilla Firefox.
2. Type "about: config" in the URL and press the [Enter] key.
3. Change "network.cookie.sameSite.laxByDefault" to "false."

- Depending on your using internet browser, the ISM login page may not be displayed correctly due to security settings. Try the following procedures and logging in to ISM again.

Example: Microsoft Edge

[Internet Options] - [Security] - [Local intranet] - [Sites] - [Advanced] - Add the ISM's URL

.....

## 3.4.2 Store Installation Files in ISM

---

Transfer the installation files to ISM-VA.

Forward to: /Administrator/ftp

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

## 3.4.3 Apply ISM Plug-in for vCSA

---

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.
3. Temporarily stops ISM services for plug-in application.

```
# ismadm service stop ism
```

4. Execute the plug-in apply command.

```
# ismadm system plugin-add -file /Administrator/ftp/<Installation Files>
===== Preparing to install... =====
===== Checking install files... =====
===== Install start... =====
Install finished
```

5. After applying the plug-in, restart ISM.

```
# ismadm power restart
```



.....

To see which plug-ins have been applied, execute the following command.

```
# ismadm system plugin-show
FJSVismvCenterPlugin x.y.z
#
```

.....

## 3.4.4 Register Information in ISM Plug-in for vCSA

---

This section explains procedures to register information of vCSA and ISM to ISM Plug-in.

1. Connect to ISM-VA with SSH.
2. Register information for vCSA to connect to ISM.

```
# pluginmgr config-add -vcip <vCSA IP address or FQDN>
Welcome to the setup wizard for ISM vCenter Plug-in. Please enter the following information to register.
```

```
Please enter a valid user name of ISM Server: <ISM user name>
Please enter a password for the user name: <ISM Password>
Please enter the vCenter role name that should login as <ISM Server user name> you specified
above: <vCSA role name>
Please enter a valid user name of vCenter Server: <vCSA user name>
Please enter a password for the user name of vCenter Server: <vCSA password>

Registration completed successfully.
```

To use multiple <vCSA role names>, separate them with a comma ",".

Example: Admin,ReadOnly

### 3. Verify the ISM connection settings of the registered vCSA.

```
# pluginmgr config-show -vcip <vCSA IP address or FQDN>
ISM account: <ISM user name> vCenter role: <vCSA role name> vCenter account: <vCSA user name>
```

To use multiple <vCSA role names>, separate them with a comma ",".

### 4. Verify the registered vCSA.

```
# pluginmgr config-list-show
vCenter: 192.168.1.20 Last Updated: July 26, 2023 1:18 AM
```



## Point

- Only one vCSA can be registered.
  - "Role name of vCSA", which is given by the command "pluginmgr config-add -vcip", has to be the following.
    - If a role is created by "Menu" - "Administration" - "Access Control" - "Roles" on GUI of vCSA as new or cloned  
Specify the created role name.
    - If a pre-defined role is used  
Specify the name, that is on the row "role name" of the table below, by type of role.
- For "Role name as displayed in GUI", check the appropriate language column in "Pre-defined role name on vCSA by language."

Example: If you would like to assign the role "Administrator" in English environment

Role name to give the command is "Admin"

Table 3.1 Standard role name for each vCSA language that corresponds to a CLI standard role setting name

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
Japanese	Admin	システム管理者
	ReadOnly	読み取り専用
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	仮想マシンコンソールユーザー
	InventoryService.Tagging.TaggingAdmin	管理者のタグ付け
English	Admin	Administrator
	ReadOnly	Read-only
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
German	Admin	Administrator

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
	ReadOnly	Nur Lesen
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
French	Admin	Administrateur
	ReadOnly	Lecture seule
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Utilisateur de console de machine virtuelle
	InventoryService.Tagging.TaggingAdmin	Administrateur de balisage
Spanish	Admin	Administrador
	ReadOnly	Solo lectura
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Usuario de consola de máquina virtual
	InventoryService.Tagging.TaggingAdmin	Administrador de etiquetado
Simplified Chinese	Admin	管理员
	ReadOnly	只读
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虚拟机控制台用户
	InventoryService.Tagging.TaggingAdmin	标记管理
Traditional Chinese	Admin	系統管理員
	ReadOnly	唯讀
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虛擬機器主控台使用者
	InventoryService.Tagging.TaggingAdmin	標記管理員
Korean	Admin	관리자
	ReadOnly	읽기 전용
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	가상 시스템 콘솔 사용자
	InventoryService.Tagging.TaggingAdmin	태그 지정 관리자

- If the vCSA user does not have administrator privileges, you must grant "extension" privileges. For details, refer to the product manual from VMware.

### 3.4.5 Start Plug-in Server

From the vCenter GUI, start the plug-in server that provides the web services required to link ISM Plug-in and ISM.



- If you restart ISM, use this command to restart the plug-in server.

- If you have already started the plug-in server for another vCenter, stop the plug-in server and then start it. For information about stopping the plug-in server, refer to [“3.5.2 Stop Plug-in Server.”](#)

1. Connect to ISM-VA with SSH
2. Start the plug-in server

```
# pluginmgr pluginserver-start -vcip <vCSA IP address or FQDN>
.....
Plugin server started successfully.
#
```

This command takes tens of seconds to terminate normally.

3. Verify plug-in server is running

```
# pluginmgr pluginserver-show
plugin server for vCenter: 192.168.1.20
```

## 3.4.6 Modify Information in ISM Plug-in for vCSA

Describes instructions on how to update vCSA and ISM information already registered with the ISM Plug-in.



### Point

This operation is required to change the information registered in [“3.4.4 Register Information in ISM Plug-in for vCSA.”](#) If you are not changing the information, the following procedure is not required.

1. Connect to ISM-VA with SSH.
2. Delete information for vCSA to connect to ISM. If the IP address or FQDN registered in [“3.4.4 Register Information in ISM Plug-in for vCSA”](#) is the same, this procedure is not required.

```
# pluginmgr config-del -vcip <vCSA IP address or FQDN>

Unregistration completed successfully.
```

3. Register information for vCSA to connect to ISM.

```
# pluginmgr config-add -vcip <vCSA IP address or FQDN>
Welcome to the setup wizard for ISM vCenter Plug-in. Please enter the following information to register.
Please enter a valid user name of ISM Server: <ISM user name>
Please enter a password for the user name: <ISM Password>
Please enter the vCenter role name that should login as <ISM Server user name> you specified above: <vCSA role name>
Please enter a valid user name of vCenter Server: <vCSA user name>
Please enter a password for the user name of vCenter Server: <vCSA Password>

Registration completed successfully.
```

To use multiple <vCSA role names>, separate them with a comma ",".

Example: Admin,ReadOnly

4. Verify the ISM connection settings of the registered vCSA.

```
# pluginmgr config-show -vcip <vCSA IP address or FQDN>
ISM account: <ISM user name> vCenter role: <vCSA role name> vCenter account: <vCSA user name>
```

To use multiple <vCSA role names>, separate them with a comma ",".

5. Verify the list of registered vCSAs.

```
# pluginmgr config-list-show
vCenter: 192.168.1.20 Last Updated: July 26, 2023 1:18 AM
```

6. Reflect the updated information.

For procedure on how to reflect the information, execute ["3.4.7 Install ISM Plug-in for vCSA in vCSA."](#)

## Point

- "Role name of vCSA", which is given by the command "pluginmgr config-add -vcip", has to be the following.
  - If a role is created by "Menu" - "Administration" - "Access Control" - "Roles" on GUI of vCSA as new or cloned  
Specify the created role name.
  - If a pre-defined role is used  
Specify the name, that is on the row "role name" of the table below, by type of role.  
For "Role name as displayed in GUI", check the appropriate language column in "Pre-defined role name on vCSA by language."

Example: If you would like to assign the role "Administrator" in English environment

Role name to give the command is "Admin"

Table 3.2 Standard role name for each vCSA language that corresponds to a CLI standard role setting name

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
Japanese	Admin	システム管理者
	ReadOnly	読み取り専用
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	仮想マシンコンソールユーザー
	InventoryService.Tagging.TaggingAdmin	管理者のタグ付け
English	Admin	Administrator
	ReadOnly	Read-only
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
German	Admin	Administrator
	ReadOnly	Nur Lesen
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
French	Admin	Administrateur
	ReadOnly	Lecture seule
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Utilisateur de console de machine virtuelle
	InventoryService.Tagging.TaggingAdmin	Administrateur de balisage
Spanish	Admin	Administrador

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
	ReadOnly	Solo lectura
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Usuario de consola de máquina virtual
	InventoryService.Tagging.TaggingAdmin	Administrador de etiquetado
Simplified Chinese	Admin	管理员
	ReadOnly	只读
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虚拟机控制台用户
	InventoryService.Tagging.TaggingAdmin	标记管理
Traditional Chinese	Admin	系統管理員
	ReadOnly	唯讀
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虛擬機器主控台使用者
	InventoryService.Tagging.TaggingAdmin	標記管理員
Korean	Admin	관리자
	ReadOnly	읽기 전용
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	가상 시스템 콘솔 사용자
	InventoryService.Tagging.TaggingAdmin	태그 지정 관리자

- If the vCSA user does not have administrator privileges, you must grant "extension" privileges. For details, refer to the product manual from VMware.

### 3.4.7 Install ISM Plug-in for vCSA in vCSA

1. Execute the plug-in installation command.

```
# pluginmgr pkg-install -vcip <vCSA IP address or FQDN>

Installation completed successfully.
```

2. Enter the "exit" command to log out of ISM.
3. Open the vSphere Client (HTML5) URL in a web browser and log in.
4. Select [Administration].
5. Select [Solutions] > [Client Plugins].
6. Check that the status of "Fujitsu Software Infrastructure Manager Plug-in" is "Deployed/Enabled."

### 3.4.8 Install SSL Server Certificate of ISM into Web Browser

It is necessary to import the SSL Server Certificate into the devices to connect to vSphere Client (HTML5) in advance.

Refer to "[Appendix A Import the SSL Server Certificate](#)" regarding the SSL Server Certificate settings.

If the SSL Server Certificate is not installed, an error screen displays when using ISM Plug-in.

Install the SSL Server Certificate in the web browser and restart the web browser, and then confirm that the ISM Plug-in displays correctly.

If you reset the SSL Server Certificate, execute "[3.5.1 Uninstall Plug-ins from vCSA](#)," "[3.4.7 Install ISM Plug-in for vCSA in vCSA](#)" and then reinstall the certificate.

## 3.4.9 How to use the ISM Plug-in for vCSA

---



### Note

When Multiple-Factor Authentication is enabled, the following error screen is displayed if [Infrastructure Manager] is selected.

```
Access error to Infrastructure Manager
It cannot access Infrastructure Manager via the account of vCenter being logged to in now.
Please do an appropriate setting to access Infrastructure Manager with CLI of Infrastructure Manager
for plug-in.
```

1. Open URL of vSphere Client (HTML5) and log in with Web browser.
2. Select [Datacenter] or [Cluster], or open [Hosts and Clusters] and select <Target Host>.
3. Select the [Monitor] tab and select [Infrastructure Manager].



### Note

- Register IP address of <Target Host> in [Registered IP Address] of the [OS] tab of the Details of Node screen of ISM.
- If the message below is displayed on [Infrastructure Manager] tab or nothing is displayed on the [Monitor] tab, the setting of ISM Plug-in may be wrong. Reconfigure referring to "[3.4.6 Modify Information in ISM Plug-in for vCSA](#)."

```
Access error to Infrastructure Manager
It cannot access Infrastructure Manager via the account of vCenter being logged to in now.
Please do an appropriate setting to access Infrastructure Manager with CLI of Infrastructure
Manager for plug-in.
```

- If the plug-in server is not started and selecting [Infrastructure Manager], the following error screen "[3.4.5 Start Plug-in Server](#)" is displayed.

```
no healthy upstream
```

4. ISM screen of the target host is displayed in the frame.
  - When the target host is registered for ISM:  
Node details of the target host is displayed.
  - When the target host is not registered with ISM/when you selected [Datacenter] or [Cluster] in step 2 above:  
Node list is displayed.

## 3.5 Uninstallation Procedure

---

Uninstall the ISM Plug-in for vCSA installed in vCSA. The procedure for uninstalling into vCSA is described below.

### 3.5.1 Uninstall Plug-ins from vCSA

---

1. Execute the plug-ins uninstall command.

```
# pluginmgr pkg-uninstall -vcip <vCSA IP address or FQDN>
Uninstall plugin Fujitsu Software Infrastructure Manager Plug-in
```

```
Uninstallation completed successfully.
```

## Point

To confirm the removal of the plug-in, execute the following command.

Check that the vCSA specified in Step 1 does not exist in the results of the command execution.

```
# pluginmgr pkg-install-list-show
#
```

### 3.5.2 Stop Plug-in Server

1. Verify which plug-in server is running.

```
# pluginmgr pluginserver-show
plugin server for vCenter: 192.168.1.20
```

2. Stop the running plug-in server.

```
# pluginmgr pluginserver-stop -vcip <verified vCSA IP address or FQDN in step 1>

ISM Plugin server was stopped successfully.
```

### 3.5.3 Remove a Plug-in from ISM

1. Temporarily stops ISM services to remove the plug-in.

```
# ismadm service stop ism
```

2. Execute the remove plug-in command.

```
# ismadm system plugin-del -name FJSVismvCenterPlugin
Uninstall plugin <FJSVismvCenterPlugin x.y.z> ?
[y/n]:
```

3. Enter [y] to confirm the plug-in removal.

4. After removing the plug-in, restart ISM.

```
# ismadm power restart
```

## 3.6 Export Settings

Exports the vCSA and ISM configuration registered with the ISM Plug-in in order to apply the same configuration when rebuilding ISM. The following procedure describes how to export settings.

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.

3. Execute the export settings command.

```
# pluginmgr config-export -vcip <vCenter IP address or FQDN>

Export config file completed successfully.
```

4. Enter the "exit" command to log out of ISM.



The exported settings are stored in the FTP area "/Administrator/ftp."

Retrieve them as needed.

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

For information on how to transfer using FTP, refer to "2.1.2 FTP Access" in "User's Guide."

Transfer the installation files in binary mode.

## 3.7 Import Settings

Imports the vCSA and ISM configuration registered with the ISM Plug-in in order to apply the same configuration when rebuilding ISM. The following procedure describes how to import settings.

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.

3. Execute the import settings command.

```
# pluginmgr config-import -vcip <vCSA IP address or FQDN>

Import config file completed successfully.
```

4. Enter the "exit" command to log out of ISM.



Imported settings will not take effect unless the plug-in is installed in vCSA.

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

## 3.8 Export Log

Export the log of the ISM with the ISM Plug-in installed for troubleshooting purposes. The following procedure describes how to export log.

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.

3. Execute the export log command.

```
# pluginmgr log-export

Export log file completed successfully.
```

4. Enter the "exit" command to log out of ISM.



The exported log is stored in the FTP area "/Administrator/ftp."

Retrieve them as needed.

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

For information on how to transfer using FTP, refer to "2.1.2 FTP Access" in "User's Guide."

.....

## 3.9 Precautions

---

- To use ISM Plug-in for vCSA, purchase and installation of ISM are required.  
Refer to "User's Guide" for more details. Without ISM, this plug-in does not work properly.
- To use ISM Plug-in for vCSA, deployment in advance of and the availability of vCSA are required.  
Refer to the product guides of VMware for operations of vCSA.

# Chapter 4 ISM Plug-in for vCSA 2.0

## 4.1 Product Summary

Infrastructure Manager Plug-in for VMware vCenter Server Appliance (ISM Plug-in for vCSA) is designed to extend the user interface of vCSA to enable you to use functions of ISM on vCSA.

This plug-in software enables you to operate ISM directly from the vCSA.

## 4.2 Contents

This product is composed of the following three (3) files:

- FJSVismvCenterPlugin-x.y.z.tar.gz [Note]
- Readme.txt
- Readme\_en.txt

[Note]: x.y.z represents the latest version.

For the latest version or a different version, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

## 4.3 System Requirements

For information on the vCSA system requirements to operate ISM Plug-in for vCSA, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

ISM Plug-in for vCSA supports vCSA 7.0U3 or earlier. If you are using vCSA 8.0 or later, use ISM Plug-in for vCSA 2.1.

For ISM 2.8.0.010 or later, disable Multi-Factor Authentication when using this plug-in.

## 4.4 Installation Procedures

This section explains installation procedures of ISM Plug-in into vCSA.



The following items and set ups must be completed before installation:

- Activate SSH login on vCSA.  
Check the login status via the vCSA web console: [Administration] - [Deployment] - [System Configuration] and select the designated node, [Manage] - [Settings] - [Access]. Then check whether SSH login is enabled or not.
- Install a terminal emulator supporting SSH connections.
- Install a FTP client supporting SFTP connections.



## Point

- The commands and the messages in a terminal emulator are written in rectangle form.
- The wording of commands may vary depending on the version of the terminal emulator.

### 4.4.1 Installation Preparation

---

This section explains installation procedures of ISM Plug-in into vCSA.



## Point

- Perform the following steps if you are using ISM 2.7.0 or earlier and Google Chrome 86 or later, Microsoft Edge 86 or later, or Mozilla Firefox 82 or later.

For Google Chrome 86 or later, earlier than 91

1. Start Google Chrome.
2. Type "chrome://flags/" in the URL and press the [Enter] key.
3. Change "SameSite by default cookies" to "Disabled."
4. Select the [Relaunch] button at the bottom right of the screen.

For Google Chrome 91 or later, earlier than 94

1. Start the command prompt.
2. Enter the following and press the [Enter] key.

```
"C:\ProgramFiles(x86)\Google\Chrome\Application\chrome.exe" --disable-features=SameSiteByDefaultCookies
```

For Google Chrome 94 or later

Use ISM 2.7.0.010 or later.

For Microsoft Edge 86 or later, earlier than 91

1. Start Microsoft Edge.
2. Type "Edge://flags/" in the URL and press the [Enter] key.
3. Change "SameSite by default cookies" to "Disabled."
4. Select the [Relaunch] button at the bottom right of the screen.

For Microsoft Edge 91 or later, earlier than 94

1. Start the command prompt.
2. Enter the following and press the [Enter] key.

```
"C:\ProgramFiles(x86)\Microsoft\Edge\Application\msedge.exe" --disable-features=SameSiteByDefaultCookies
```

For Microsoft Edge 94 or later

Use ISM 2.7.0.010 or later.

For Mozilla Firefox 82 or later

1. Start Mozilla Firefox.
2. Type "about: config" in the URL and press the [Enter] key.
3. Change "network.cookie.sameSite.laxByDefault" to "false."

- Depending on your using internet browser, the ISM login page may not be displayed correctly due to security settings. Try the following procedures and logging in to ISM again.

Example: Microsoft Edge

[Internet Options] - [Security] - [Local intranet] - [Sites] - [Advanced] - Add the ISM's URL

.....

## 4.4.2 Store Installation Files in ISM

---

Transfer the installation files to ISM-VA.

Forward to: /Administrator/ftp

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

## 4.4.3 Apply ISM Plug-in for vCSA

---

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.

3. Temporarily stops ISM services for plug-in application.

```
# ismadm service stop ism
```

4. Execute the plug-in apply command.

```
# ismadm system plugin-add -file /Administrator/ftp/<Installation Files>
===== Preparing to install... =====
===== Checking install files... =====
===== Install start... =====
Install finished
```

5. After applying the plug-in, restart ISM.

```
# ismadm power restart
```



Point

.....

To see which plug-ins have been applied, execute the following command.

```
# ismadm system plugin-show
FJSVismvCenterPlugin x.y.z
#
```

.....

## 4.4.4 Register Information in ISM Plug-in for vCSA

---

This section explains procedures to register information of vCSA and ISM to ISM Plug-in.

1. Connect to ISM-VA with SSH.

2. Register information for vCSA to connect to ISM.

```
# pluginmgr config-add -vcip <vCSA IP address>
Welcome to the setup wizard for ISM vCenter Plug-in. Please enter the following information to
register.
Please enter a valid user name of ISM Server: <ISM user name>
Please enter a password for the user name: <ISM Password>
Please enter the vCenter role name that should login as <ISM Server user name> you specified
above: <vCSA role name>
```

Registration completed successfully.

3. Verify the ISM connection settings of the registered vCSA.

```
# pluginmgr config-show -vcip <vCSA IP address>
ISM account: <ISM user name> vCenter role=<vCSA role name>
ISM account: <ISM user name> vCenter role=<vCSA role name>
```

4. Verify the list of registered vCSAs.

```
# pluginmgr config-list-show
vCenter: 192.168.1.20 Last Updated: July 26, 2019 1:18 AM
vCenter: BX920#S1 Last Updated: July 26, 2019 1:25 AM
vCenter: BX920#S3 Last Updated: July 26, 2019 3:40 AM
```

 Point

- "Role name of vCSA", which is given by the command "pluginmgr config-add -vcip", has to be the following.
  - If a role is created by "Menu" - "Administration" - "Access Control" - "Roles" on GUI of vCSA as new or cloned  
Specify the created role name.
  - If a pre-defined role is used  
Specify the name, that is on the row "role name" of the table below, by type of role.  
For "Role name as displayed in GUI", check the appropriate language column in "Pre-defined role name on vCSA by language."

Example: If you would like to assign the role "Administrator" in English environment

Role name to give the command is "Admin"

Table 4.1 Standard role name for each vCSA language that corresponds to a CLI standard role setting name

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
Japanese	Admin	システム管理者
	ReadOnly	読み取り専用
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	仮想マシンコンソールユーザー
	InventoryService.Tagging.TaggingAdmin	管理者のタグ付け
English	Admin	Administrator
	ReadOnly	Read-only
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
German	Admin	Administrator
	ReadOnly	Nur Lesen
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
French	Admin	Administrateur
	ReadOnly	Lecture seule

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Utilisateur de console de machine virtuelle
	InventoryService.Tagging.TaggingAdmin	Administrateur de balisage
Spanish	Admin	Administrador
	ReadOnly	Solo lectura
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Usuario de consola de máquina virtual
	InventoryService.Tagging.TaggingAdmin	Administrador de etiquetado
Simplified Chinese	Admin	管理员
	ReadOnly	只读
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虚拟机控制台用户
	InventoryService.Tagging.TaggingAdmin	标记管理
Traditional Chinese	Admin	系統管理員
	ReadOnly	唯讀
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虛擬機器主控台使用者
	InventoryService.Tagging.TaggingAdmin	標記管理員
Korean	Admin	관리자
	ReadOnly	읽기 전용
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	가상 시스템 콘솔 사용자
	InventoryService.Tagging.TaggingAdmin	태그 지정 관리자

- If the vCSA user does not have administrator privileges, you must grant "extension" privileges. For details, refer to the product manual from VMware.

## 4.4.5 Modify Information in ISM Plug-in for vCSA

Describes instructions on how to update vCSA and ISM information already registered with the ISM Plug-in.

### Point

This operation is required to change the information registered in "4.4.4 Register Information in ISM Plug-in for vCSA." If you are not changing the information, the following procedure is not required.

1. Connect to ISM-VA with SSH.
2. Delete information for vCSA to connect to ISM.

```
# pluginmgr config-del -vcip <vCSA IP address>
Welcome to the setup wizard for ISM vCenter Plug-in. Please enter the following information to
unregister.
```

```
Please enter the vCenter role name : <vCSA role name>
```

```
Unregistration completed successfully.
```

### 3. Register information for vCSA to connect to ISM.

```
# pluginmgr config-add -vcip <vCSA IP address>
Welcome to the setup wizard for ISM vCenter Plug-in. Please enter the following information to register.
Please enter a valid user name of ISM Server: <ISM user name>
Please enter a password for the user name: <ISM Password>
Please enter the vCenter role name that should login as <ISM Server user name> you specified above: <vCSA role name>

Registration completed successfully.
```

### 4. Verify the ISM connection settings of the registered vCSA.

```
# pluginmgr config-show -vcip <vCSA IP address>
ISM account: <ISM user name> vCenter role: <vCSA role name>
ISM account: <ISM user name> vCenter role: <vCSA role name>
```

### 5. Verify the list of registered vCSAs.

```
# pluginmgr config-list-show
vCenter: 192.168.1.20 Last Updated: July 26, 2023 1:18 AM
vCenter: BX920#S1 Last Updated: July 26, 2023 1:25 AM
vCenter: BX920#S3 Last Updated: July 26, 2023 3:40 AM
```

### 6. Reflect the updated information.

For procedure on how to reflect the information, execute "[4.4.6 Install ISM Plug-in for vCSA in vCSA.](#)"

## Point

- "Role name of vCSA", which is given by the command "pluginmgr config-add -vcip", has to be the following.
  - If a role is created by "Menu" - "Administration" - "Access Control" - "Roles" on GUI of vCSA as new or cloned  
Specify the created role name.
  - If a pre-defined role is used  
Specify the name, that is on the row "role name" of the table below, by type of role.  
For "Role name as displayed in GUI", check the appropriate language column in "Pre-defined role name on vCSA by language."

Example: If you would like to assign the role "Administrator" in English environment

Role name to give the command is "Admin"

Table 4.2 Standard role name for each vCSA language that corresponds to a CLI standard role setting name

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
Japanese	Admin	システム管理者
	ReadOnly	読み取り専用
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	仮想マシンコンソールユーザー
	InventoryService.Tagging.TaggingAdmin	管理者のタグ付け
English	Admin	Administrator

Language	role name CLI standard role setting name	Pre-defined role name on vCSA by language
	ReadOnly	Read-only
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
German	Admin	Administrator
	ReadOnly	Nur Lesen
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Virtual Machine console user
	InventoryService.Tagging.TaggingAdmin	Tagging Admin
French	Admin	Administrateur
	ReadOnly	Lecture seule
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Utilisateur de console de machine virtuelle
	InventoryService.Tagging.TaggingAdmin	Administrateur de balisage
Spanish	Admin	Administrador
	ReadOnly	Solo lectura
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	Usuario de consola de máquina virtual
	InventoryService.Tagging.TaggingAdmin	Administrador de etiquetado
Simplified Chinese	Admin	管理员
	ReadOnly	只读
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虚拟机控制台用户
	InventoryService.Tagging.TaggingAdmin	标记管理
Traditional Chinese	Admin	系統管理員
	ReadOnly	唯讀
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	虛擬機器主控台使用者
	InventoryService.Tagging.TaggingAdmin	標記管理員
Korean	Admin	관리자
	ReadOnly	읽기 전용
	AutoUpdateUser	AutoUpdateUser
	VirtualMachineConsoleUser	가상 시스템 콘솔 사용자
	InventoryService.Tagging.TaggingAdmin	태그 지정 관리자

- If the vCSA user does not have administrator privileges, you must grant "extension" privileges. For details, refer to the product manual from VMware.

## 4.4.6 Install ISM Plug-in for vCSA in vCSA

---

1. Execute the plug-in installation command

```
# pluginmgr pkg-install -vcip <vCSA IP address>
Welcome to the install wizard for ISM vCenter Plug-in. Please enter the following information to
install.
Please enter a valid user name of vCenter Server: <vCSA user name>

Please enter a password for the user name of vCenter Server: <vCSA Password>

Installation completed successfully.
```

2. Enter the "exit" command to log out of ISM.
3. Open the vSphere Client (HTML5) URL in a web browser and log in.
4. Select [Administration].
5. Select [Solutions] > [Client Plugins].
6. Check that the status of "Fujitsu Software Infrastructure Manager Plug-in" is "Deployed/Enabled".

## 4.4.7 Install SSL Server Certificate of ISM into Web Browser

---

It is necessary to import the SSL Server Certificate into the devices to connect to vSphere Client (HTML5) in advance.

Refer to "[Appendix A Import the SSL Server Certificate](#)" regarding the SSL Server Certificate settings.

If the SSL Server Certificate is not installed, an error screen displays when using ISM Plug-in.

Install the SSL Server Certificate in the web browser and restart the web browser, and then confirm that the ISM Plug-in displays correctly.

If you reset the SSL Server Certificate, execute "[4.5.1 Uninstall Plug-ins from vCSA](#)," "[4.4.6 Install ISM Plug-in for vCSA in vCSA](#)" and then reinstall the certificate.

## 4.4.8 How to use the ISM Plug-in for vCSA

---



When Multiple-Factor Authentication is enabled, the following error screen is displayed if [Infrastructure Manager] is selected.

```
Access error to Infrastructure Manager
It cannot access Infrastructure Manager via the account of vCenter being logged to in now.
Please do an appropriate setting to access Infrastructure Manager with CLI of Infrastructure Manager
for plug-in.
```

1. Open URL of vSphere Client (HTML5) and log in with Web browser.
2. Select [Datacenter] or [Cluster], or open [Hosts and Clusters] and select <Target Host>.
3. Select the [Monitor] tab and select [Infrastructure Manager].



- Register IP address of <Target Host> in [Registered IP Address] in the [OS] tab on the Details of Node screen of ISM.
- If the message below is displayed on [Infrastructure Manager] tab or nothing is displayed on the [Monitor] tab, the setting of ISM Plug-in may be wrong. Reconfigure referring to "[4.4.5 Modify Information in ISM Plug-in for vCSA](#)."

```
Access error to Infrastructure Manager
It cannot access Infrastructure Manager via the account of vCenter being logged to in now.
```

Please do an appropriate setting to access Infrastructure Manager with CLI of Infrastructure Manager for plug-in.

4. ISM screen of the target host is displayed in the frame.

- When the target host is registered for ISM:

Node details of the target host is displayed.

- When the target host is not registered with ISM/when you selected [Datacenter] or [Cluster] in step 2 above:

Node list is displayed.

## 4.5 Uninstallation Procedure

Uninstall the ISM Plug-in for vCSA installed in vCSA. The procedure for uninstalling into vCSA is described below.

### 4.5.1 Uninstall Plug-ins from vCSA

1. Execute the plug-ins uninstall command.

```
# pluginmgr pkg-uninstall -vcip <vCSA IP address>
Welcome to the install wizard for ISM vCenter Plug-in. Please enter the following information to
install.
Please enter a valid user name of vCenter Server: <vCSA user name>

Please enter a password for the user name of vCenter Server: <vCSA Password>

Uninstallation completed successfully.
```



#### Point

To confirm the removal of the plug-in, execute the following command.

Check that the vCSA specified in Step 1 does not exist in the results of the command execution.

```
# pluginmgr pkg-install-list-show
vCenter: 192.168.1.20 Plugin Version: x.y.z Last Updated: June 26, 2021 1:18 AM
vCenter: BX920#S1 Plugin Version: x.y.z Last Updated: June 26, 2021 1:25 AM
vCenter: BX920#S3 Plugin Version: x.y.z Last Updated: June 26, 2021 3:40 AM
```

### 4.5.2 Remove a Plug-in from ISM

1. Temporarily stops ISM services to remove the plug-in.

```
# ismadm service stop ism
```

2. Execute the remove plug-in command.

```
# ismadm system plugin-del -name FJSVismvCenterPlugin
Uninstall plugin <FJSVismvCenterPlugin x.y.z> ?
[y/n]:
```

3. Enter [y] to confirm the plug-in removal.

4. After removing the plug-in, restart ISM.

```
# ismadm power restart
```

## 4.6 Export Settings

---

Exports the vCSA and ISM configuration registered with the ISM Plug-in in order to apply the same configuration when rebuilding ISM. The following procedure describes how to export settings.

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.
3. Execute the export settings command.

```
# pluginmgr config-export -vcip <vCenter IP address>

Export config file completed successfully.
```

4. Enter the "exit" command to log out of ISM.



.....

The exported settings are stored in the FTP area "/Administrator/ftp."

Retrieve them as needed.

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

For information on how to transfer using FTP, refer to "2.1.2 FTP Access" in "User's Guide."

Transfer the installation files in binary mode.

.....

## 4.7 Import Settings

---

Imports the vCSA and ISM configuration registered with the ISM Plug-in in order to apply the same configuration when rebuilding ISM. The following procedure describes how to import settings.

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.
3. Execute the import settings command.

```
# pluginmgr config-import -vcip <vCSA IP address>

Import config file completed successfully.
```

4. Enter the "exit" command to log out of ISM.



.....

Imported settings will not take effect unless the plug-in is installed in vCSA.

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

.....

## 4.8 Export Log

---

Export the log of the ISM with the ISM Plug-in installed for troubleshooting purposes. The following procedure describes how to export log.

1. Connect to ISM-VA with SSH.

Some terminal emulators display security-warning messages, but proceed as it is.

2. Log in as administrator user.
3. Execute the export log command.

```
# pluginmgr log-export  
Export log file completed successfully.
```

4. Enter the "exit" command to log out of ISM.



## Point

The exported log is stored in the FTP area "/Administrator/ftp."

Retrieve them as needed.

For information on GUI forwarding, refer to "4.23 File Upload Using the GUI" in "User's Guide."

For information on how to transfer using FTP, refer to "2.1.2 FTP Access" in "User's Guide."

## 4.9 Precautions

---

- To use ISM Plug-in for vCSA, purchase and installation of ISM are required.  
Refer to "User's Guide" for more details. Without ISM, this plug-in does not work properly.
- To use ISM Plug-in for vCSA, deployment in advance of and the availability of vCSA are required.  
Refer to the product guides of VMware for operations of vCSA.

# Chapter 5 ISM Plug-in for WAC 1.0

## 5.1 Product Summary

Infrastructure Manager Plug-in for Microsoft Windows Admin Center (ISM Plug-in for WAC) is designed to extend the user interface of WAC to enable you to use the functions to integrate the infrastructure management of ISM from the WAC.

This Plug-in software enables you to operate ISM directly from WAC.

## 5.2 Contents

This product is composed of the following three (3) files:

- fujitsu.sme.infrastructure-manager.x.y.z.nupkg [Note]
- Readme.txt
- Readme\_en.txt

[Note]: x.y.z represents the latest version.

For the latest version or a different version, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

## 5.3 System Requirements

For information on the WAC system requirements to operate ISM Plug-in for WAC, refer to "Support Matrix."

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

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

Select [DOWNLOADS] and select the target operating system.

The reference procedures are subject to change without notice.

For ISM 2.8.0.010 or later, disable Multi-Factor Authentication when using this plug-in.

## 5.4 Installation Procedures

This section explains installation procedures of ISM Plug-in for WAC into WAC.

### 5.4.1 Store the Install File

Use Remote Desktop to connect to the Windows Server on which you are installing ISM Plug-in for WAC.

Transfer the install file to an arbitrary directory on the Windows Server of the connection destination by copying and pasting the file.

### 5.4.2 Installation Procedures

1. Open Windows Admin Center in a web browser using the following URL.  
`https:// <WAC_Server_FQDN_or_IP_address>: <WAC_Server_Port>`
2. Select the gear icon in the upper right corner of the screen to display the setting screen.
3. Select [Gateway > Extensions] from the left pane.

4. Select [Feeds] in the right pane.
5. Select [+ Add] in the right pane.
6. Enter the path to the directory where you stored the installation files in "5.4.1 Store the Install File" in [Extension feed URL or path] and click [Add].
7. Check that the directory specified in [Package feeds] on the "Feeds" screen is displayed.
8. Select [Available extensions].
9. Select [Fujitsu Software Infrastructure Manager].
10. Select [Install].
11. Select [Installed extensions] and check that [Fujitsu Software Infrastructure Manager] is installed.

### 5.4.3 Register Information in ISM Plug-in for WAC

This section explains procedures to register information of ISM to ISM Plug-in for WAC.

1. Open Windows Admin Center in a web browser using the following URL.  
 <WAC\_Server\_FQDN\_or\_IP\_address>: <WAC\_Server\_Port>
2. Select [>] at the top of the "WAC" screen and select [Fujitsu Software Infrastructure Manager Suite] from the installed solutions.
3. Select the [+ Add] button.  
 The "Connection tags" screen is displayed.
4. Enter the following settings.

Item	Description
IP Address (imperative)	Input IP address of target ISM (ex. 192.168.100.10)
Port Number (imperative)	Input port number of target ISM (ex. 25566)
User Name (imperative)	Input username of target ISM (ex. Administrator)
Password (imperative)	Input password of target ISM

5. Select the [Add] button.



#### Note

If you change an ISM configuration item that is already registered, you must delete it and re-register it.

For example, here is the procedure for changing the ISM password.

1. Open Windows Admin Center in a web browser using the following URL.  
 https:// <WAC\_Server\_FQDN\_or\_IP\_address>: <WAC\_Server\_Port>
2. Select [>] at the top of the "WAC" screen and select [Fujitsu Software Infrastructure Manager Suite] from the installed solutions.
3. Select the row you want to modify.
4. Select the [Remove] button.
5. Select [Yes] from the "Remove Connection(s)" window.
6. Change the ISM password.  
 For details on how to change the password, refer to "2.3.1.2 Edit users" in "Operating Procedures."
7. Reregister the information you changed in ISM with the ISM Plug-in for WAC.

For the registration procedures, refer to Step 3 or later in "5.4.3 Register Information in ISM Plug-in for WAC."

## 5.4.4 Install SSL Server Certificate of ISM into Web Browser

It is necessary to import the SSL Server Certificate into the devices to connect to WAC in advance.

Refer to "[Appendix A Import the SSL Server Certificate](#)" regarding the SSL Server Certificate settings.

Without a Certificate, an error message appears.

If you reset the SSL Server Certificate, reinstall the certificate.

## 5.4.5 How to use the ISM Plug-in for WAC



### Note

If the plug-in is newly installed and Multiple-Factor Authentication is enabled, the following error screen is displayed.

Error connecting to Server. Failed to log in. The authentication code has not been entered.

During operation, if Multiple-Factor Authentication is enabled, any data is displayed on the "Overview" screen. The following error screens are displayed in "Nodes", "Events", and "Firmware" screens.

No records found.

1. Open Windows Admin Center in a web browser using the following URL.  
`https:// <WAC_Server_FQDN_or_IP_address>:<WAC_Server_Port>`
2. Select [>] at the top of the "WAC" screen and select [Fujitsu Software Infrastructure Manager Suite] from the installed solutions.
3. Select the IP address for ISM.
4. Select from the menu on the left of the screen to move to each screen.
  - Overview
  - Nodes
  - Events
  - Firmware
  - Settings

### "Overview" screen

ISM version information, and status information for nodes being managed by ISM can be displayed in the WAC.

### "Nodes" screen

Detailed information of the nodes being managed by ISM (Hardware information, tree structures between nodes, etc.) can be displayed in the WAC.



### Note

After selecting the target node from the [Node] tab, collapse the lower target node details area, and then expand it to display the tabs other than [General]. Collapse and expand the details area can be executed by selecting the bottom of the details of 'node name'. When selecting other nodes, collapse the current node details area and select other nodes, and then expand the details area. Although each tab in the details area may take some time to display and if the tab area does not return from the loading status, restart your browser. Also, after selecting a node group, select the bottom of the details of 'node-name' and collapse it, and then expand it again to display the correct tabs for the node group.

### "Events" screen

Event information maintained by ISM can be displayed in the WAC. Also, if there are a large number of events, you can export them locally to analyze trends or investigate causes by transitioning to ISM.



#### Note

The event information displayed on the WAC depends on the ISM language settings.

Therefore, you should set the language settings in WAC and ISM.

#### "Firmware" screen

Firmware information of the nodes being managed by ISM can be displayed in the WAC.

You can also update the firmware by transitioning to ISM.



#### Note

If ISM data is not available on each screen, the ISM connection information may be incorrectly configured.

Refer to "[5.4.3 Register Information in ISM Plug-in for WAC](#)" to remove ISM connection information and re-register.

## 5.5 Uninstallation Procedure

---

Uninstallation procedures of ISM Plug-in for WAC are below.

1. Open Windows Admin Center in a web browser using the following URL.  
`https:// <WAC_Server_FQDN_or_IP_address>: <WAC_Server_Port>`
2. Select the gear icon in the upper right corner of the screen to display the setting screen.
3. Select [Gateway > Extensions] from the left pane.
4. Select [Installed extensions] in the right pane.
5. Select [Fujitsu Software Infrastructure Manager] and select the [Uninstall] button.
6. Check that [Fujitsu Software Infrastructure Manager] is not displayed in the [Installed extensions] list.

## 5.6 Precautions

---

- To use ISM Plug-in for WAC, purchase and installation of ISM are required.  
Refer to "User's Guide" for more details. Without installing ISM, this plug-in does not work properly.
- To use ISM Plug-in for WAC, installation in advance of and connection to WAC are required.  
Refer to the product guides of Microsoft for operations of WAC.

## Chapter 6 Latest Information

For the latest information about ISM Plug-in, contact your local Fujitsu customer service partner.

## Appendix A Import the SSL Server Certificate

If the SSL server certificate is not set on the terminal connecting to vSphere Client (HTML5) or WAC, an error screen appears when using the ISM Plug-in.

An example with Microsoft Edge is below.

1. Prepare the SSL Server Certificate.



- Prepare the SSL Server Certificate referring to "4.7.1 Deployment of SSL Certificates" in "User's Guide." Make sure to complete the certificate import on the intended devices that connects to the vSphere Client (HTML5) or WAC.
- If you created a self-signed SSL server certificate, you must register the CA certificate that you downloaded in "4.7.5 Download of CA Certificates" in "User's Guide."
- If using other than Microsoft Edge, refer to "2.1.1 GUI" in "User's Guide" to complete the certificate import.

2. With Microsoft Edge, select [...] button in the upper right, and select [Settings].
3. Select [Privacy, search, and services].
4. Select [Manage certificates].  
The "Certificates" dialog box is displayed.
5. Select the [Personal] tab.
6. Select [Import] to import from here.
7. When import is completed, reboot the browser.
8. Login to ISM and confirm that there are no errors.