

ETERNUS Veritas Operations Manager Storage Insight Plug-in 1.2 User's Guide

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Preface

This manual explains how to use and operate the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

This manual is designed for administrators of a Veritas Operations Manager Management Server that is used with the ETERNUS storage system.

Knowledge of functions and terms for Veritas Operations Manager and the ETERNUS storage system is required.

If Veritas InfoScale Operations Manager is used, replace the following terms as described below while reading this manual.

- Replace "Veritas Operations Manager Management Server" with "Veritas InfoScale Operations Manager Management Server"
- Replace "Veritas Operations Manager" with "Veritas InfoScale Operations Manager"

This manual is created based on the GUI of Veritas Operations Manager. For Veritas InfoScale Operations Manager, details such the a menu name may be different from the descriptions in this manual.

Third Edition
August 2016

High Safety Use



This product is designed, developed and manufactured for general use, including, but not limited to, general office use, personal use, household use, and ordinary industrial use. The product is not designed, developed and manufactured for use in situations that could lead to death, personal injury, severe physical damage or other loss (hereinafter called "High Safety Required Use"). Such usage includes, but is not limited to, nuclear reaction control in nuclear facilities, aircraft flight control, air traffic control, mass transport control, medical life support systems, or missile launch control in weapon systems.

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About This Manual

Organization

This manual is composed of the following seven chapters:

Make sure to read this manual before installing the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 1 Introduction

This chapter provides an overview of the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 2 Operating Environment

This chapter provides support information, required resources, and preliminary settings for the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 3 Installation

This chapter provides the installation procedure for the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 4 Registration and Operation Procedure

This chapter explains how to use the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 5 Function Overview

This chapter provides a functional overview of the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 6 Uninstallation

This chapter provides the uninstallation procedure for the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

- Chapter 7 Obtaining the Required Information for Investigating Failures

This chapter explains how to obtain the required information for investigating a failure when an error occurs with the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

Naming Conventions

The following abbreviations are used for the ETERNUS storage system and its related products.

- "ETERNUS storage system" refers to a storage system that is supported by the ETERNUS Veritas Operations Manager Storage Insight Plug-in. Details on the supported storage systems are available at the following URL.

<http://www.fujitsu.com/global/support/products/computing/storage/download/vomp.html>

- "ETERNUS Web GUI" refers to the Web GUI of an ETERNUS storage system.

Reference Materials

- ETERNUS storage system product information
<http://www.fujitsu.com/global/products/computing/storage/>
- Download page for the ETERNUS Veritas Operations Manager Storage Insight Plug-in where product information is also available.
<http://www.fujitsu.com/global/support/products/computing/storage/download/vomp.html>

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Chapter 1

Introduction

This chapter provides an overview of the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

1.1 ETERNUS Veritas Operations Manager Storage Insight Plug-in

The ETERNUS Veritas Operations Manager Storage Insight Plug-in is provided to link a Veritas Operations Manager Management Server with ETERNUS storage systems. By installing this plug-in, multiple storage information can be managed collectively with the centralized console of Veritas Operations Manager.

Veritas Operations Manager displays the following information.

- Physical Disks
- Raid Groups
- Volumes (Logical Disks)
- Thin Pools
- Volume Mapping to Hosts (Host Affinity)
- Ports
- Adapters
- Replications

More details on Veritas Operations Manager are available on the following Veritas site.

<https://www.veritas.com/product/storage-management/infoscale-operations-manager>

Chapter 2

Operating Environment

This chapter provides support information, required resources, and preliminary settings for the ETERNUS Veritas Operations Manager Storage Insight Plug-in. Make sure to read this chapter before installing the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

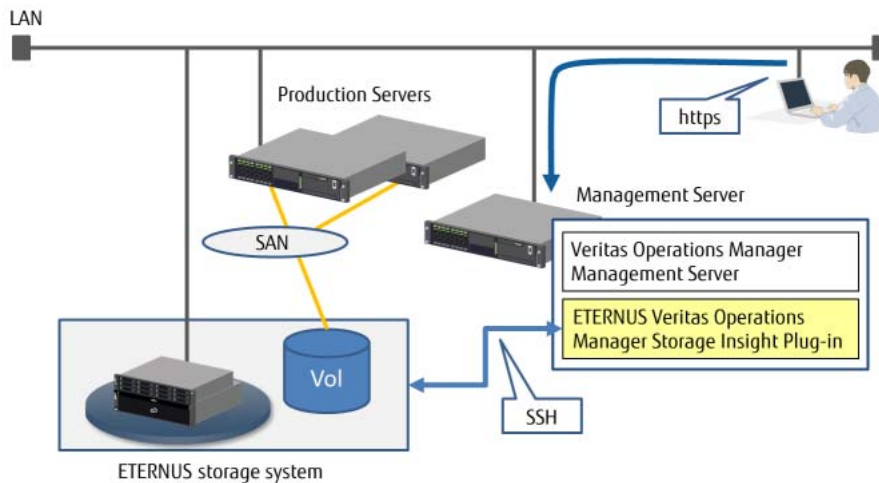
2.1 Support Information

Information on the ETERNUS storage system models, the firmware versions, and the OSs that support the ETERNUS Veritas Operations Manager Storage Insight Plug-in is available at the following URL.

<http://www.fujitsu.com/global/support/products/computing/storage/download/vomp.html>

2.2 Operation Configuration

The ETERNUS Veritas Operations Manager Storage Insight Plug-in is installed in the server in which the Veritas Operations Manager Management Server is installed.



2.3 Required Resources

2.3.1 Required Disk Capacity for Installation

The disk capacity that is required to install the ETERNUS Veritas Operations Manager Storage Insight Plug-in is as follows.

Table 2.1 Required Disk Capacity for Installation

No.	Explanation	Capacity	Folder
1	Plug-in file	5MB	Any folder

2.3.2 Required Disk Capacity for Operation

The disk capacity that is required to operate the ETERNUS Veritas Operations Manager Storage Insight Plug-in is as follows.

Table 2.2 Required Disk Capacity for Operation

No.	Explanation	Capacity	Folder
1	Plug-in file	5MB	Veritas Operations Manager installation directory
2	Trace log	2MB x Number of registered ETERNUS storage systems	

2.4 Preliminary Settings

■ Account registration for the ETERNUS storage system

To access the ETERNUS storage system from the ETERNUS Veritas Operations Manager Storage Insight Plug-in, a user account with "Admin", "Storage Admin", or "Maintainer" as the user level is required. Use the ETERNUS Web GUI or the ETERNUS CLI to register the user account in the ETERNUS storage system. For more details on registration, refer to "ETERNUS Web GUI User's Guide" or "ETERNUS CLI User's Guide".

■ SSH setting of the ETERNUS storage system

Enable the SSH connection to the management target ETERNUS storage system. For details on this procedure, refer to "ETERNUS Web GUI User's Guide".

- Network setting for the server and the ETERNUS storage system

Make sure to enable a network connection between the Veritas Operations Manager Management Server and the ETERNUS storage system.

If the server and the storage system are on different sub-networks, the Allowed IP List setting is required for the ETERNUS storage system. For detailed procedure, refer to "ETERNUS Web GUI User's Guide".

- Installation of the Storage Insight Add-on

To obtain the Storage information, the Storage Insight Add-on must be installed in Veritas Operations Manager.

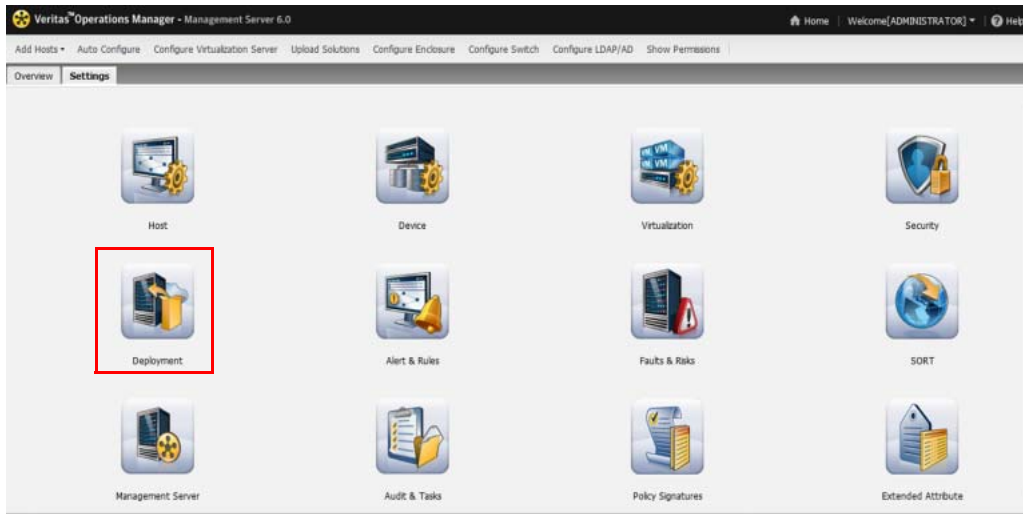
The procedure to install Storage Insight Add-on is as follows:

Procedure

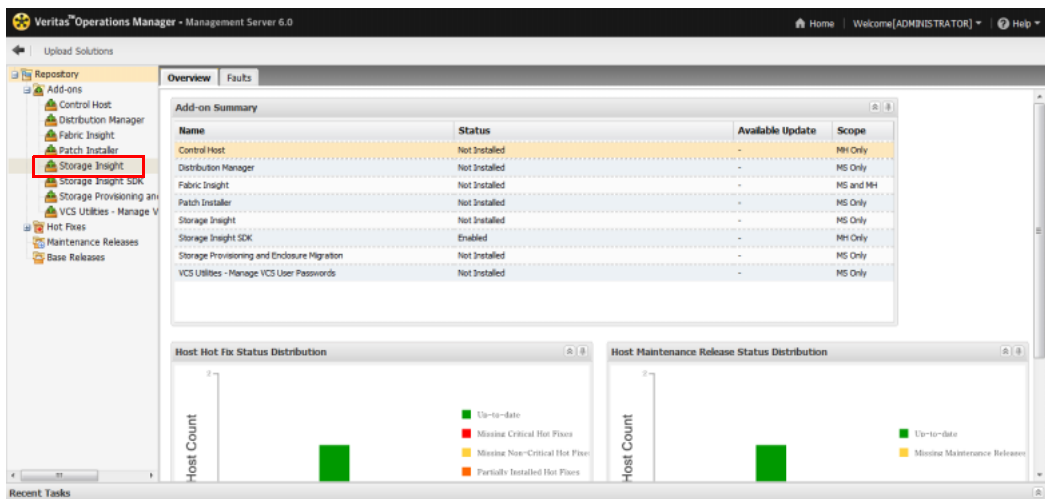
- 1 Start the Veritas Operations Manager Management Server and input the following URL in the browser.
[https:// IP address for the server to which Veritas Operations Manager is installed:14161](https://IP address for the server to which Veritas Operations Manager is installed:14161)
- 2 Click the [Settings] button for the Veritas Operations Manager Management Server.



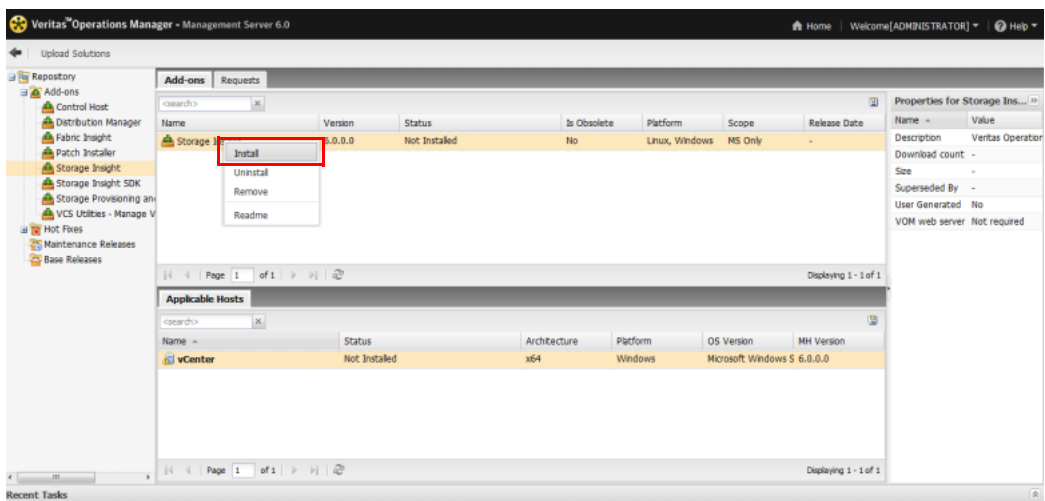
3 Click the [Deployment] button.



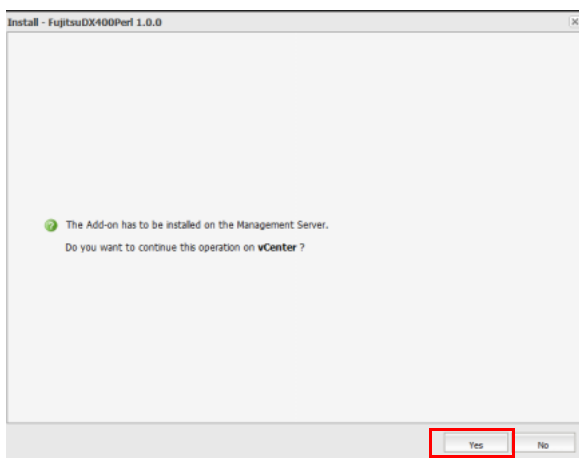
4 Select "Storage Insight".



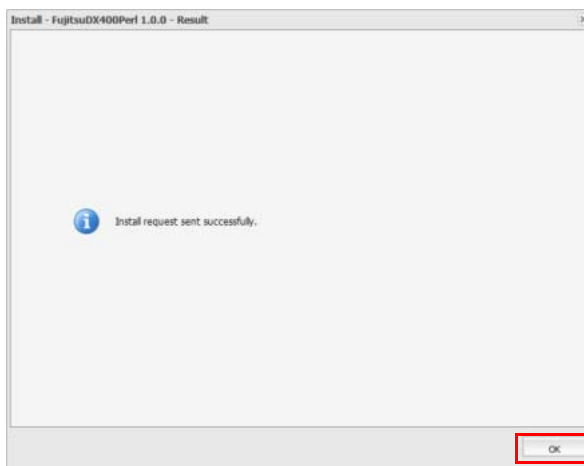
5 Right-click "Storage Insight" and select "Install".



6 Click the [Yes] button.



7 Click the [OK] button.



End of procedure

Chapter 3

Installation

This chapter provides the installation procedure for the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

Before starting installation, download the zip file required for installation from the URL provided below. Extract the downloaded zip file in the terminal to start the management screen of Veritas Operations Manager.

<http://www.fujitsu.com/global/support/products/computing/storage/download/vomp.html>

To install the ETERNUS Veritas Operations Manager Storage Insight Plug-in, upload the data that was extracted in the terminal to the Veritas Operations Manager Management Server. The plug-in file that must be installed depends on the ETERNUS storage system model. Make sure to select the appropriate file.

Table 3.1 Extracted File Configuration

Plug-in file	Supported models
SI_FUJITSU_ETERNUS_DXL_PERL-1.2.0.sfa	ETERNUS DX80 S2/DX90 S2 ETERNUS DX60 S3/DX100 S3/DX200 S3 ETERNUS DX200F
SI_FUJITSU_ETERNUS_DXM_PERL-1.2.0.sfa	ETERNUS DX500 S3/DX600 S3
SI_FUJITSU_ETERNUS_DXH_PERL-1.2.0.sfa	ETERNUS DX8700 S3/DX8900 S3
SI_FUJITSU_ETERNUS_DX400_PERL-1.2.0.sfa	ETERNUS DX410 S2/DX440 S2
SI_FUJITSU_ETERNUS_DX8000_PERL-1.2.0.sfa	ETERNUS DX8100 S2/DX8700 S2

Procedure

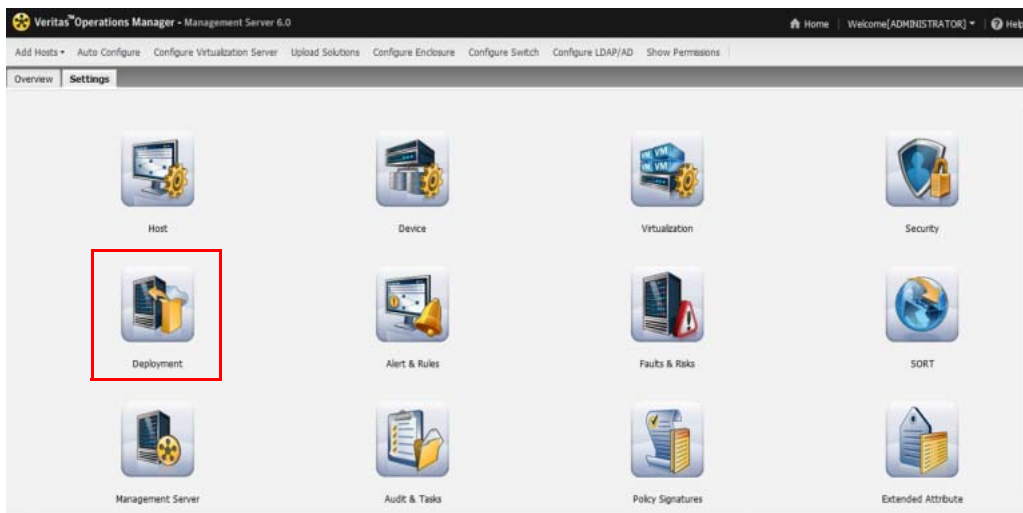
- 1 Start the Veritas Operations Manager Management Server and input the following URL in the browser.

`https://IP address for the server to which Veritas Operations Manager is installed:14161`

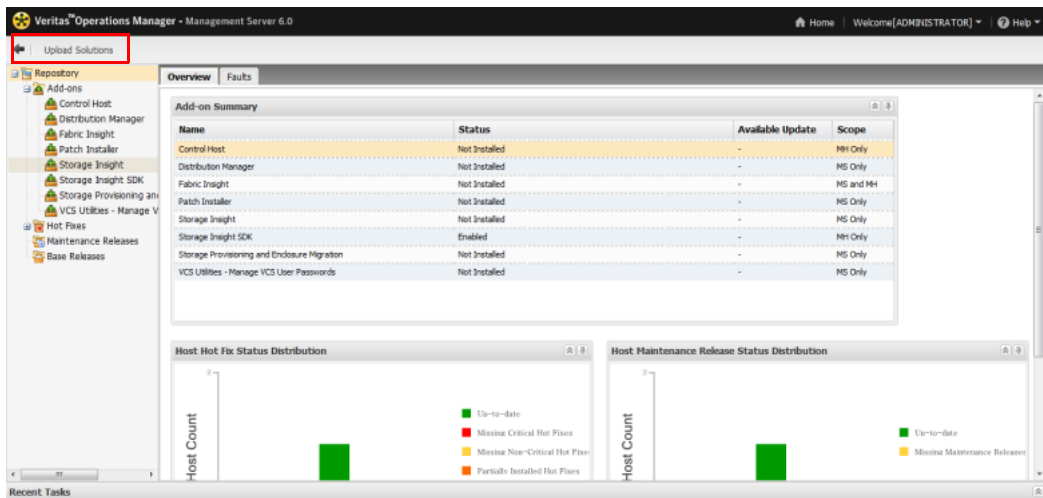
- 2 Click the [Settings] button for the Veritas Operations Manager Management Server.



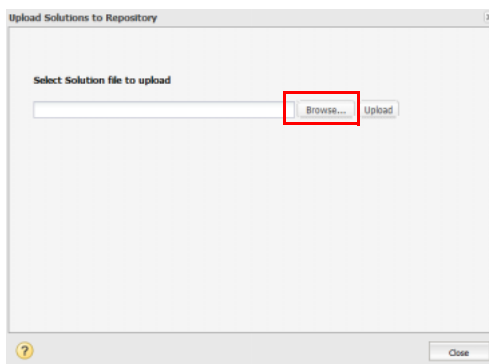
- 3 Click the [Deployment] button.



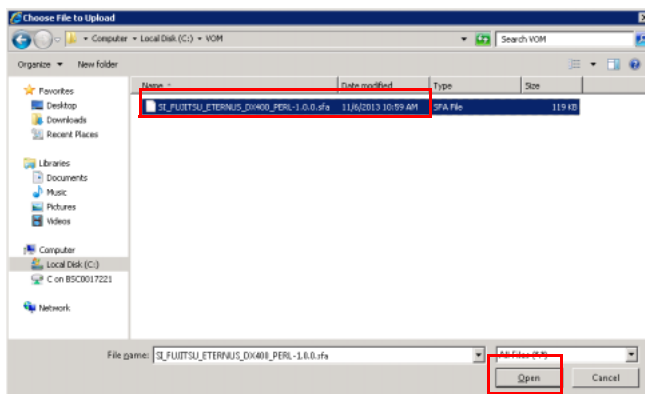
4 Click the [Upload Solutions] button.



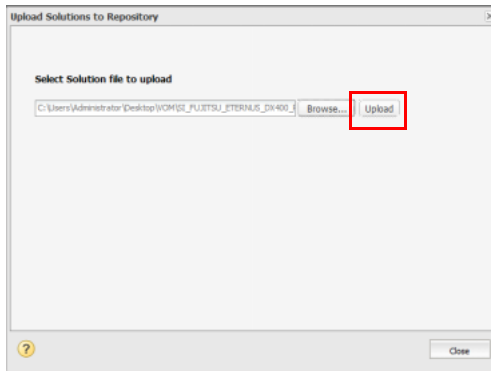
5 Click the [Browse...] button.



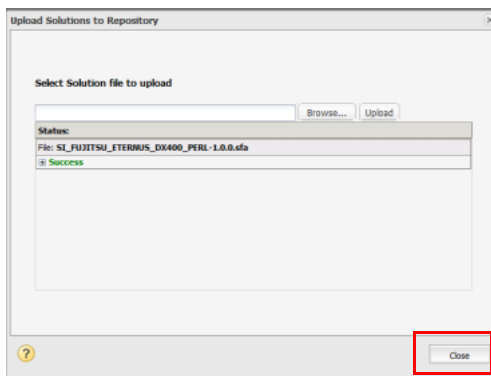
6 Select the plug-in file that is to be uploaded, and click the [Open] button.



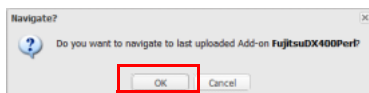
7 Click the [Upload] button.



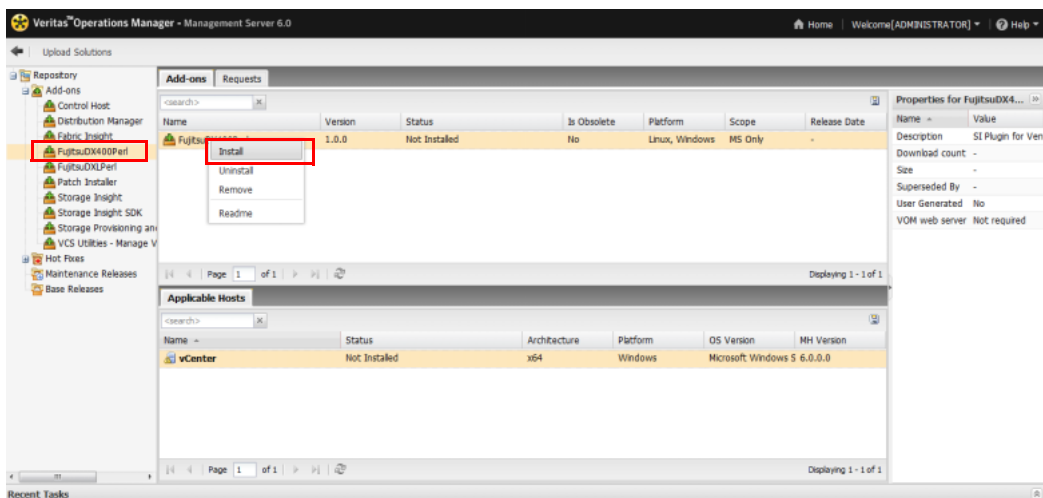
8 Click the [Close] button.



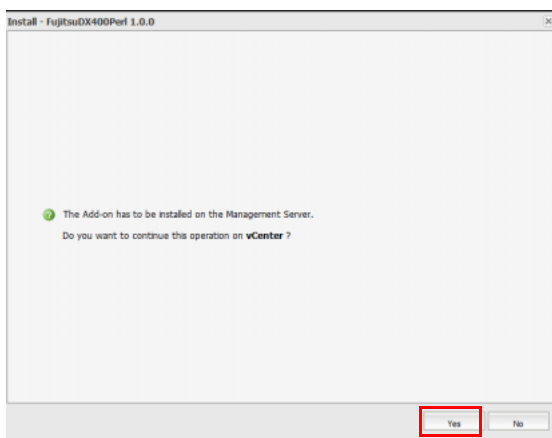
9 Confirm that the correct plug-in file is selected and click the [OK] button.



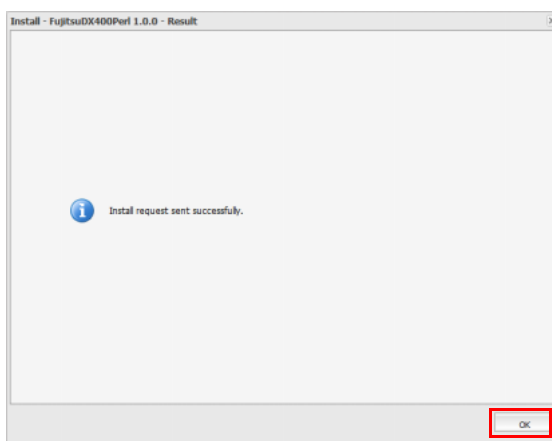
10 Right-click the uploaded plug-in file and select "Install".



11 Click the [Yes] button.



12 Click the [OK] button.



13 To upload and install another plug-in file, start the procedure from [Step 4](#).

End of procedure

Chapter 4

Registration and Operation Procedure

This chapter describes how to use Veritas Operations Manager (for registering, updating, or deleting ETERNUS storage systems).

4.1 Registration of the ETERNUS Storage System

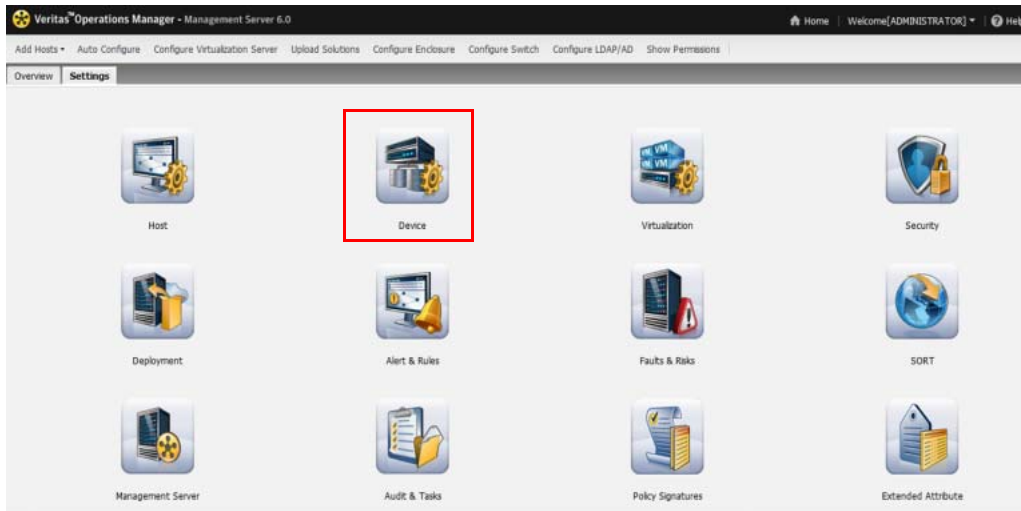
The procedure to register the ETERNUS storage systems in Veritas Operations Manager is as follows.

Procedure

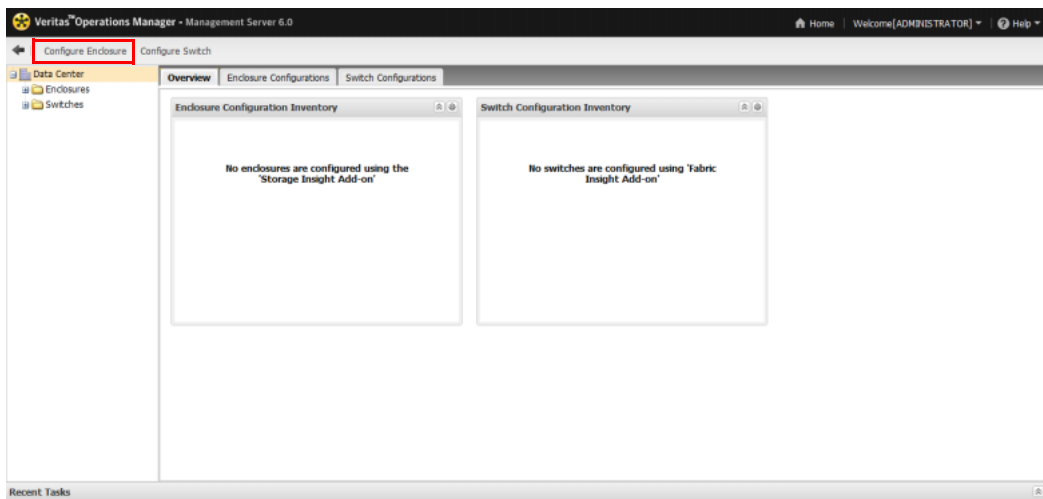
- 1 Start the Veritas Operations Manager Management Server and input the following URL in the browser.
https:// IP address for the server to which Veritas Operations Manager is installed:14161
- 2 Click the [Settings] button for the Veritas Operations Manager Management Server.



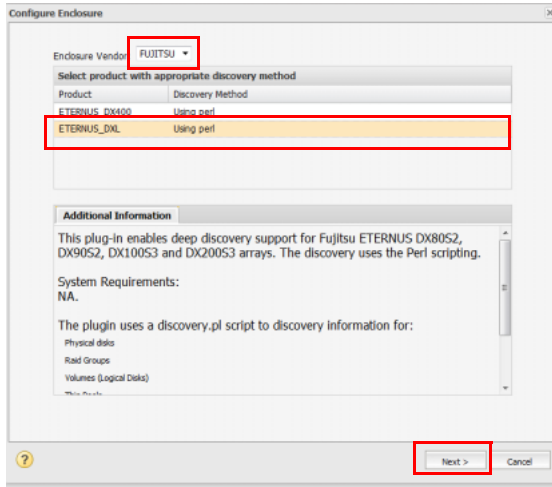
3 Click the [Device] button.



4 Click [Configure Enclosure].

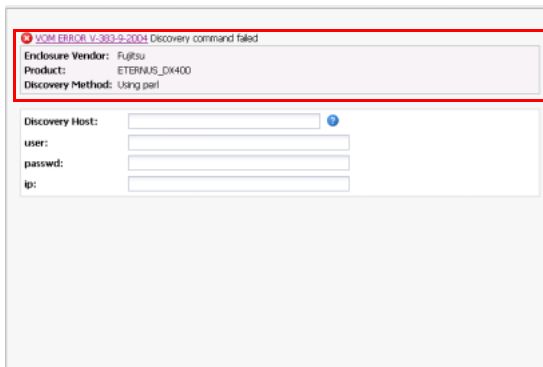


- 5 Set "FUJITSU" for "Enclosure Vendor". Select the plug-in for the ETERNUS storage system that is to be registered and click the [Next] button.

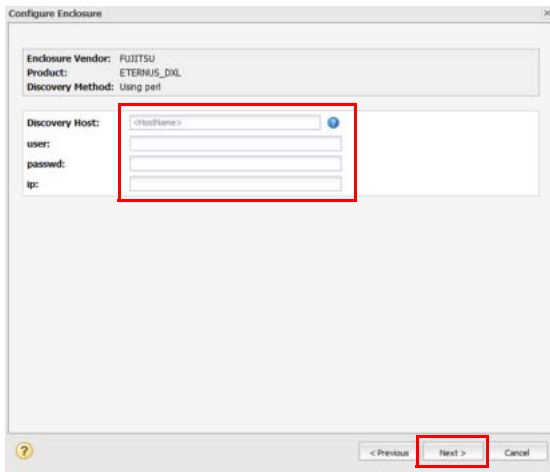


Caution

If the selected plug-in does not support the target ETERNUS storage system, the following error screen appears and the storage system cannot be registered.

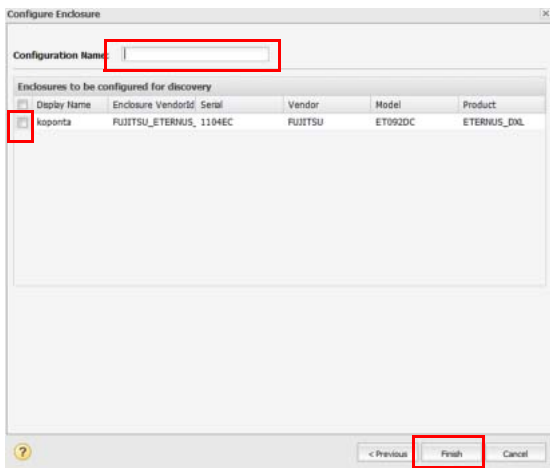


- 6 Input the required information for "Discovery Host", "user", "passwd", and "ip", and click the [Next] button.

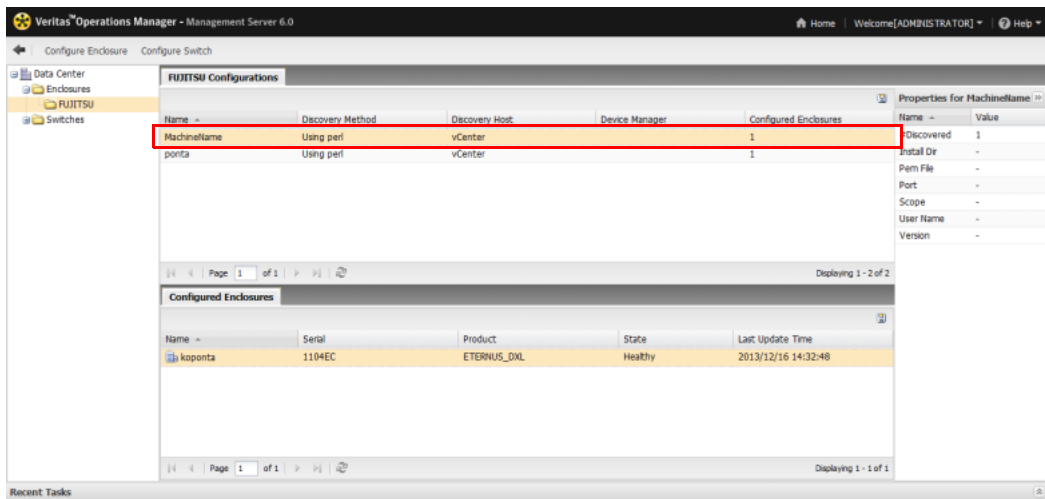
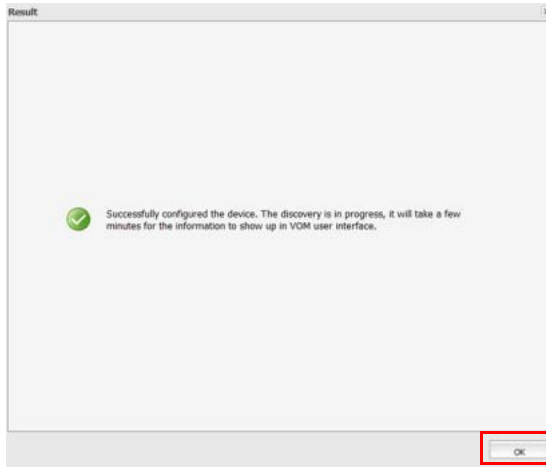


Item	Setting contents
Discovery Host	Veritas Operations Manager Management Server host name
user	User account for the ETERNUS storage system <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Caution</p> <p>Select a user account with "Admin", "Storage Admin", or "Maintainer" as the user level.</p> </div>
passwd	User password for the ETERNUS storage system
ip	IP address for the ETERNUS storage system

- 7 Input a name for "Configuration Name". Select the checkbox for the ETERNUS storage system that is to be registered and click the [Finish] button.



- 8 Click the [OK] button to register the selected ETERNUS storage system.

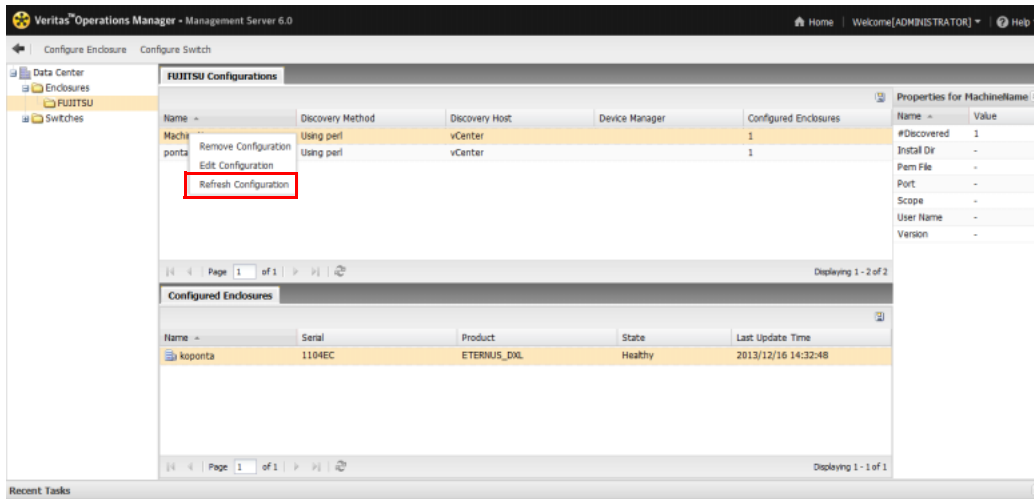


- 9 To register another ETERNUS storage system, perform the procedure from [Step 4](#).

End of procedure

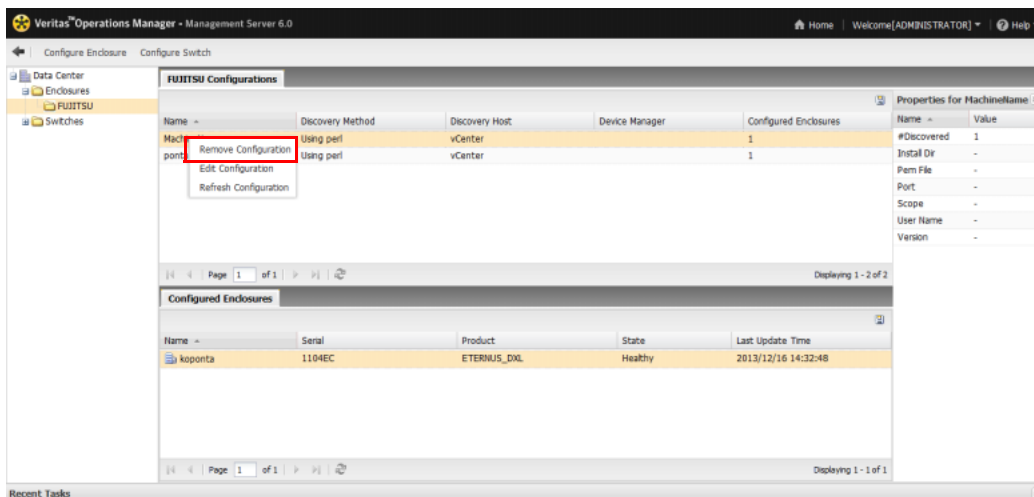
4.2 Updating of the ETERNUS Storage System Information

The ETERNUS storage system information that is registered in Veritas Operations Manager is updated once every 360 minutes.
To update the information immediately, right-click the registered ETERNUS storage system and select "Refresh Configuration".



4.3 Deletion of the ETERNUS Storage System

To delete a registered ETERNUS storage system, right-click the target storage system and select "Remove Configuration".



Chapter 5

Function Overview

This chapter provides a functional overview of the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

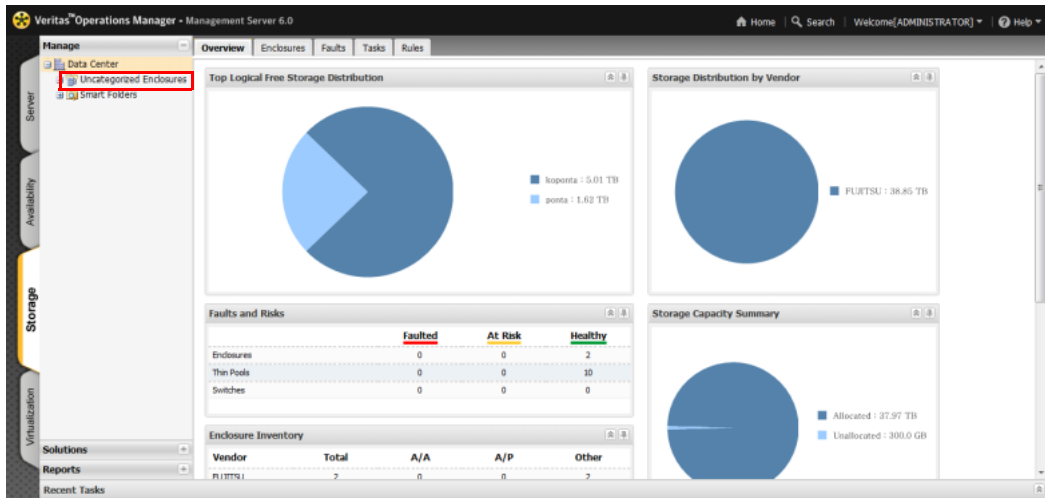
Display the ETERNUS storage system information by using the Veritas Operations Manager Management Server.

Procedure

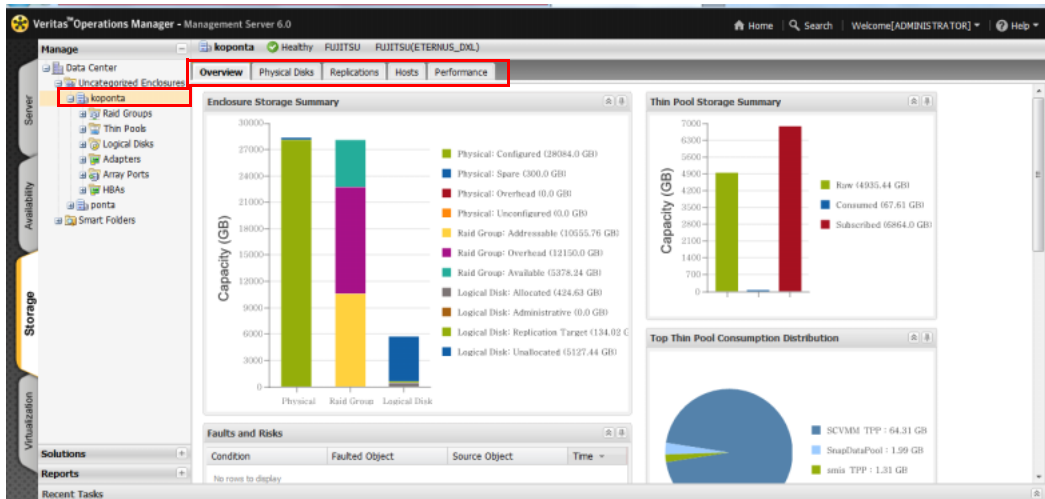
- 1 Start the Veritas Operations Manager Management Server and input the following URL in the browser.
`https://IP address for the server to which Veritas Operations Manager is installed:14161`
- 2 Click the [Storage] button for the Veritas Operations Manager Management Server.



3 Select "Uncategorized Enclosures" for Manager.



4 Select which ETERNUS storage system to display information for. By clicking the tabs, "Overview", "Physical Disks", "Replications", and "Hosts" can be displayed.



Note

- Note that the "Performance" tab is not displayed for the ETERNUS Veritas Operations Manager Storage Insight Plug-in function.
- For the "Hosts" tab, host information is displayed only when the selected ETERNUS storage system is connected to the Veritas Operations Manager Management Server via an FC connection.

5 When one of the items described below is selected, the following information is displayed.

Item	Information
Raid Groups	<ul style="list-style-type: none"> • RAID groups • Volume layout in the RAID group
Thin Pools	<ul style="list-style-type: none"> • Thin Provisioning Pools • Flexible Tier Pools • Snap Data Pools • Volume layout in the pool
Logical Disks	<ul style="list-style-type: none"> • Volume layout • Physical disks that configure volumes <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>Caution</p> <ul style="list-style-type: none"> • Note that RAID groups and physical disks for the following volumes are not displayed. <ul style="list-style-type: none"> - TPV - FTV • For the following volume type, the information of the RAID group and the physical disk that is first in the concatenation order is displayed. <ul style="list-style-type: none"> - LUN concatenated volumes - WSV </div>
Adapters	Channel Adapter
Array Ports	Port
HBAs	Host HBA <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>Caution</p> <p>This item is only displayed when an FC connection is used to connect to the host.</p> </div>

End of procedure

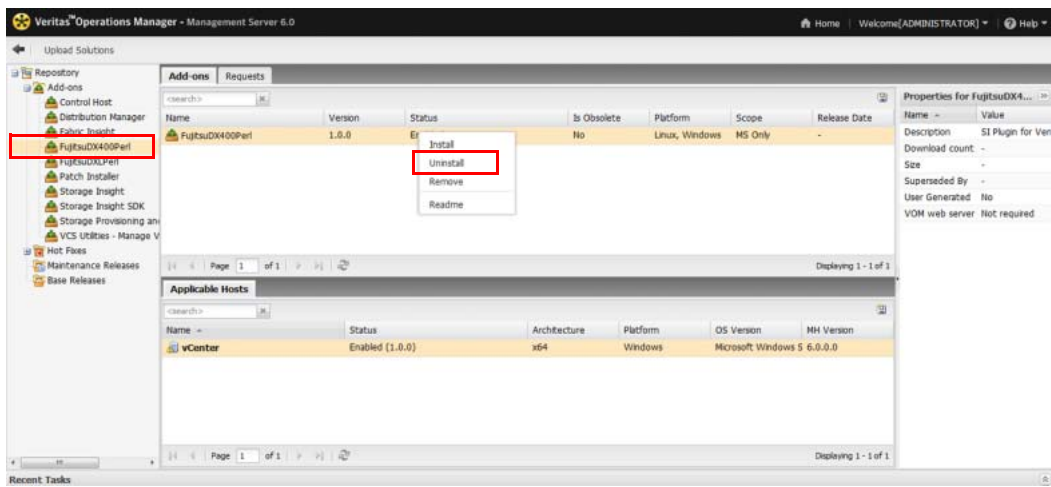
Chapter 6

Uninstallation

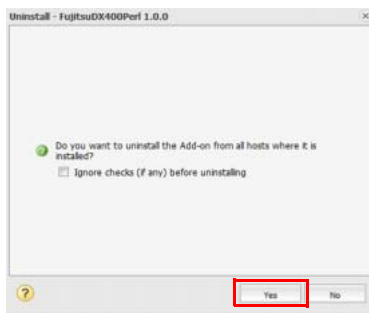
This chapter provides the uninstallation procedure for the ETERNUS Veritas Operations Manager Storage Insight Plug-in.

Procedure

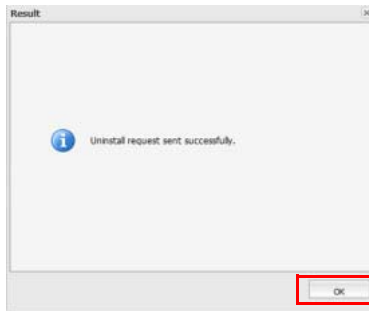
- 1 Right-click the plug-in that is to be uninstalled and select "Uninstall".



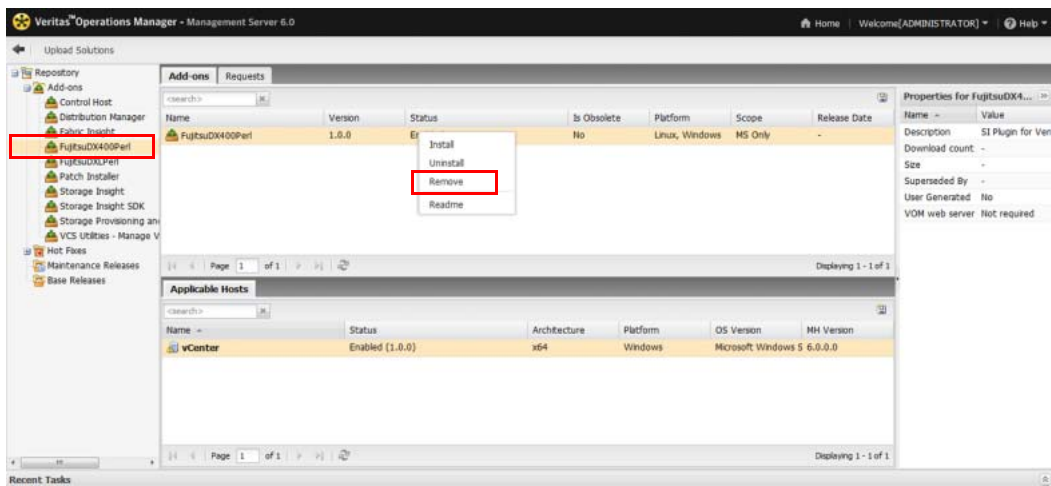
- 2 Click the [Yes] button.



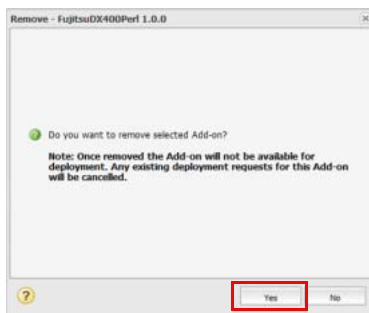
- 3 Click the [OK] button.



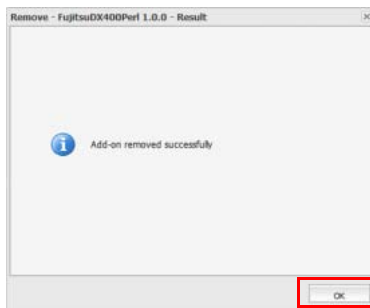
- 4 Right-click the plug-in that is to be uninstalled and select "Remove".



- 5 Click the [Yes] button.



6 Click the [OK] button.



End of procedure

Chapter 7

Obtaining the Required Information for Investigating Failures

When an error occurs, obtain the following information for failure investigations before contacting a Fujitsu engineer.

■ Windows

- The drive in which Veritas Operations Manager is installed/ProgramData/Symantec/VRTSsfmh/tmp
- The drive in which Veritas Operations Manager is installed/ProgramData/Symantec/VRTSsfmh/Plug-in name

■ Linux

- /var/opt/VRTSsfmh/tmp
- /var/opt/VRTSsfmh/Plug-in name

ETERNUS Veritas Operations Manager
Storage Insight Plug-in 1.2
User's Guide

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