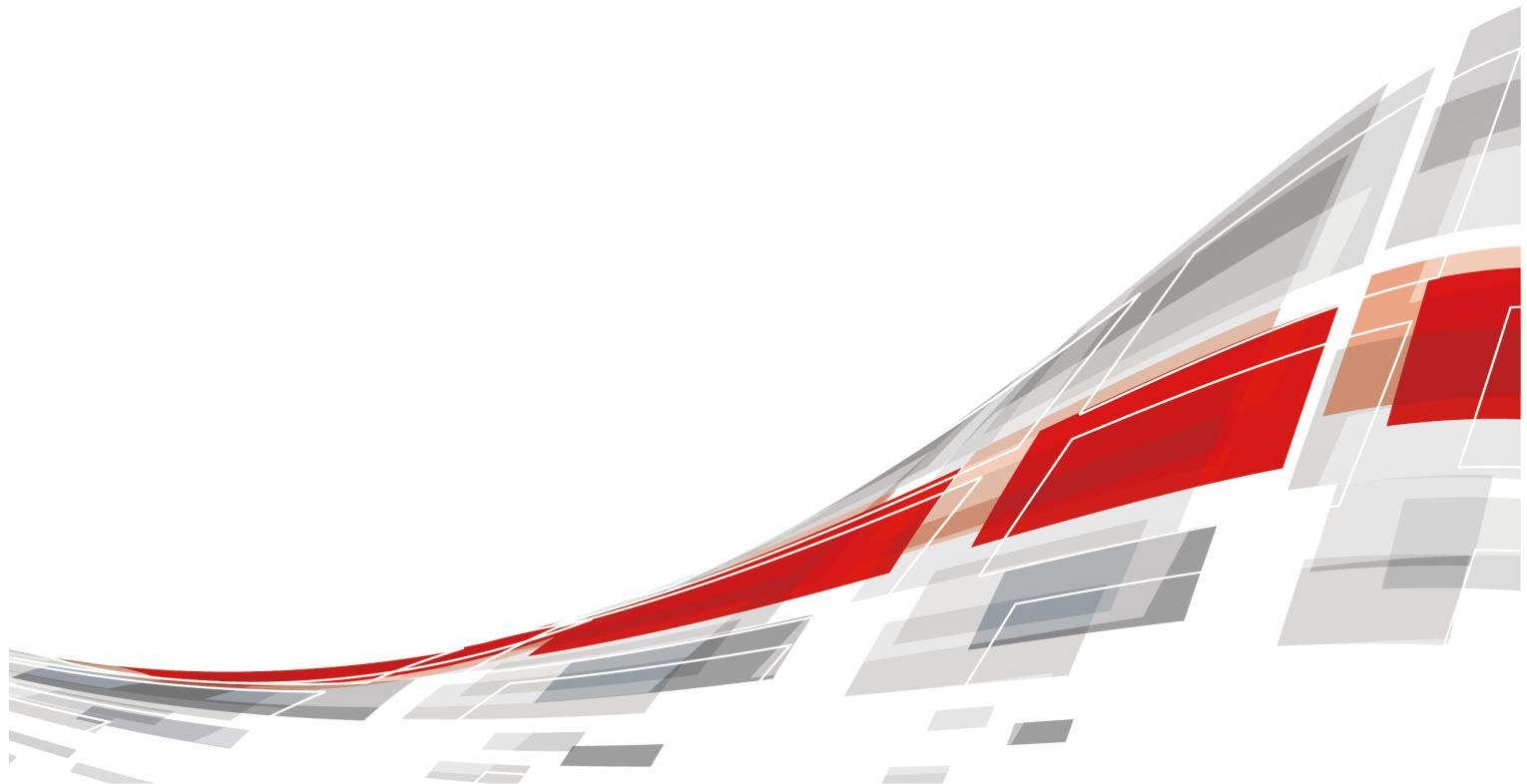


# **XFUSION FusionDirector for vROps**

## **2.1.0**

## **User Guide**

**Issue** 02  
**Date** 2023-09-30



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# About this Document

## Overview

This guide describes how to install and maintain the vRealize Operations Manager (vROps) plug-in.

## Intended Audience

This guide is intended for:

- Technical support engineers
- System maintenance engineers

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results.  NOTICE is used to address practices not related to personal injury.
	Calls attention to important information, best practices, and tips.  NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

## Change History

Changes between document issues are cumulative. The latest document issue contains all the changes made in earlier issues.

Issue	Date	Description
02	2023-09-30	Added VMware Aria Operations 8.12 version.
01	2023-03-30	The issue is the first official release.

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# 1 Overview

## Function Description

The FusionDirector for vROps plug-in can be used to manage and monitor servers. Only vRealize Operations Manager 8.0, 8.1, 8.12 and SaaS are supported. This document uses vRealize Operations Manager 8.1, 8.12 and SaaS as an example.

The FusionDirector for vROps plug-in provides the following functions:

- Query the basic information about servers and enclosures (also referred to as chassis).
- Query the alert information about servers and enclosures.
- Query the health status of servers and enclosures.
- Query statistics about the FusionDirector, servers, and enclosures using the dashboard.

## Servers supported by the FusionDirector for vROps plug-in

[Table Servers supported by the FusionDirector for vROps plug-in.](#) lists servers supported by the FusionDirector for vROps plug-in.

**Table 1-1** Servers supported by the FusionDirector for vROps plug-in.

Type	Server Model
Rack	1288H V5
	2288H V5
	2488 V5
	2488H V5
	8100 V5
	RH2288H V3
	1288H V6
	2288H V6

Type	Server Model
	1288H V7
	2288H V7
	5288 V7
Blade	CH121 V5
	CH242 V5
	CH121 V3
	CH242 V3
Chassis	E9000 (MM920)

## Matching Versions

Software	Matching Versions
FusionDirector	FusionDirector: 1.6.0.SPC1 or later

## Software Requirements

Type	Version
vROPS	vROPS 8.0 vROPS 8.1 vROPS 8.12 vROPS SaaS

# 2 Managing the vROps Plug-in

---

[2.1 Installation](#)

[2.2 Uninstallation](#)

[2.3 Upgrade](#)

## 2.1 Installation

### 2.1.1 Installing the vROps plug-in for versions 8.1 or earlier

#### Prerequisites

You have obtained the vROps plug-in software package and verified its integrity.

**Step 1** Obtain the vROps plug-in software package (for example, **XFUSION\_FusionDirector\_For\_vROps\_2.0.2.zip**) and its SHA256 verification file (for example, **XFUSION\_FusionDirector\_For\_vROps.sha256\_2.0.2.sum**) from [GitHub](#).

**Step 2** Verify the integrity of the vROps plug-in software package(on Linux).

1. Go to the directory where the plug-in installation package and SHA256 verification file are stored.
2. Run the **sha256sum -c <(grep software package name sha256 verification file name)** command to verify the software package.  
Example: **sha256sum -c <(grep XFUSION\_FusionDirector\_For\_vROps\_2.0.2.zip XFUSION\_FusionDirector\_For\_vROps\_2.0.2.sha256.summ)**
3. Check whether the verification result is **OK**.
  - If yes, the software package has not been tampered with and can be used.
  - If no, the software package has been tampered with. Obtain a new software package.

**----End**

## Procedure

Install the vROps plug-in.

**Step 1** Decompress the installation package.

Obtain the installer, such as  
**XFUSIONFusionDirectorManagementPack\_X.X.X.pak**.

**Step 2** On the vROps WebUI, choose **Administration**.

The **Administration** page is displayed.

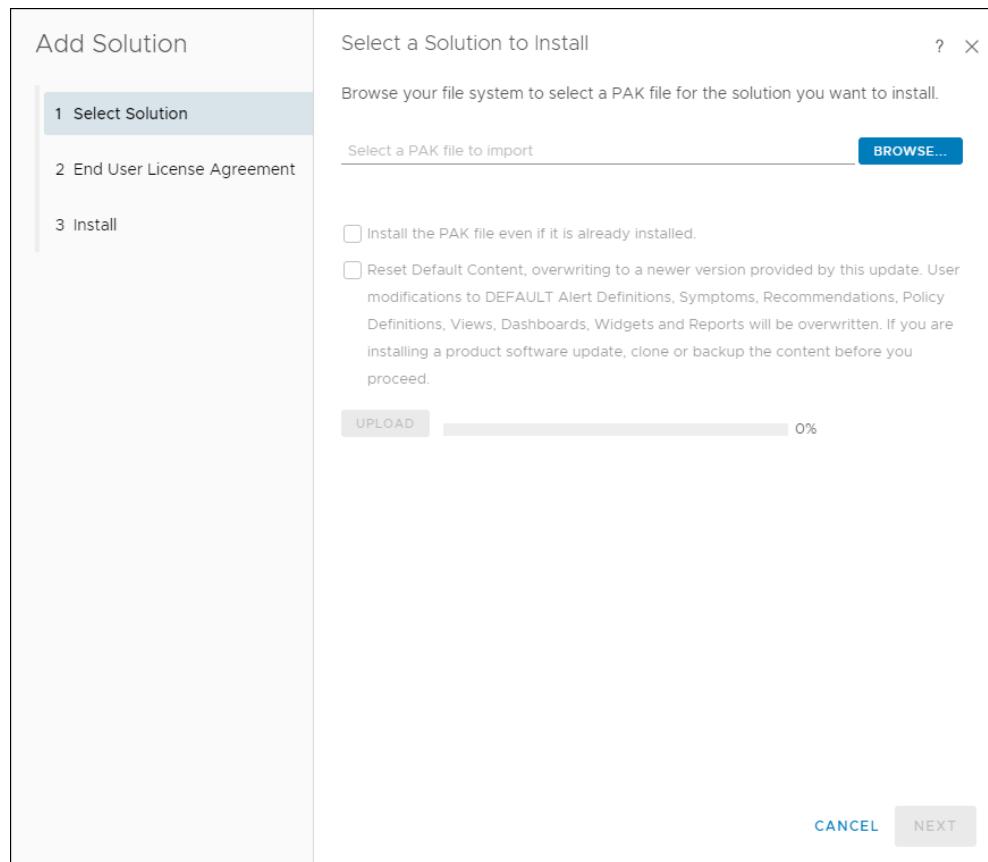
**Step 3** In the navigation pane on the left, choose **Repository**.

The **Repository** page is displayed.

**Step 4** In the lower part of the page, click **ADD/UPGRADE**.

The **Add Solution** dialog box is displayed, as shown in [Figure Add Solution](#).

**Figure 2-1** Add Solution



**Step 5** On the **Select Solution** tab page, click **BROWSE** and select the plug-in installation file.

**Step 6** Select **Install the PAK file even if it is already installed**.

**Step 7** Click **UPLOAD** and upload the installation file.

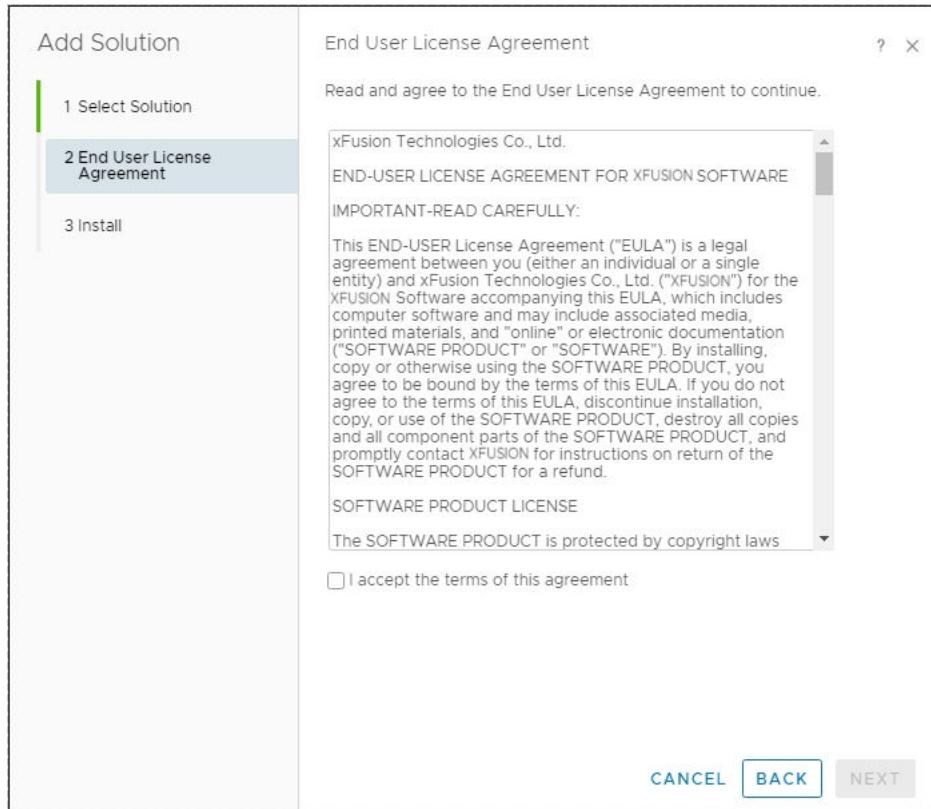
**Step 8** Click **NEXT**.

The **Confirmation** dialog box is displayed.

**Step 9** Click **Yes**.

The **End User License Agreement** tab page is displayed, as shown in [Figure End User License Agreement](#).

**Figure 2-2** End User License Agreement



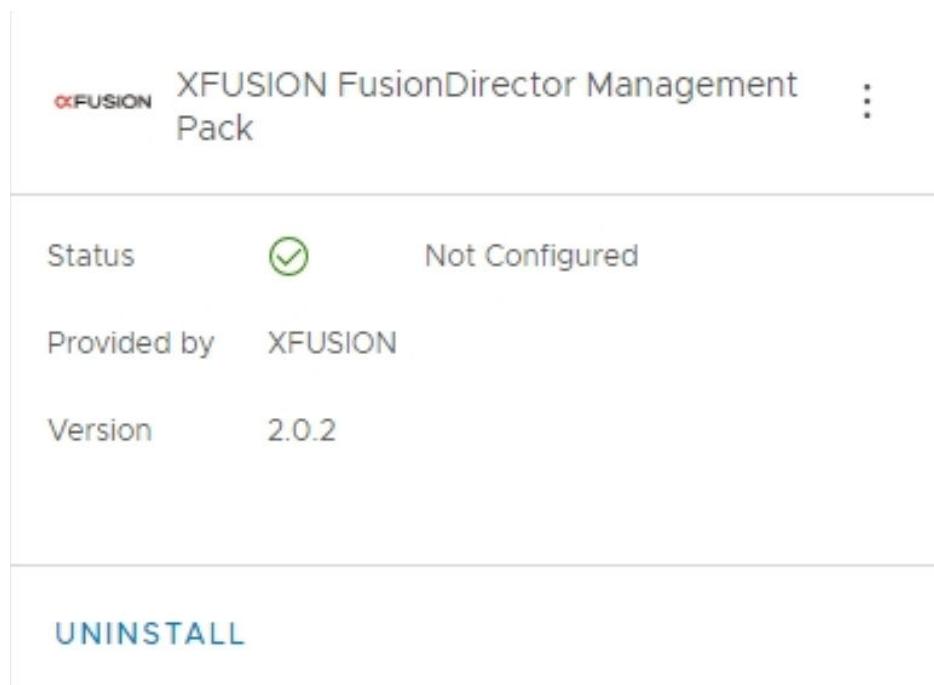
**Step 10** Select **I accept the terms of this agreement** and click **NEXT**.

The **Installation** tab page is displayed.

**Step 11** After the installation is complete, click **FINISH**.

In the lower part of the **Repository** page, view the installed vROps plug-in, as shown in [Figure Viewing the installed vROps plug-in](#).

**Figure 2-3** Viewing the installed vROps plug-in



----End

## 2.1.2 Installing the vROps plug-in for version 8.12

### Procedure

Install the vROps plug-in.

**Step 1** Decompress the installation package.

Obtain the installer, such as  
**XFUSIONFusionDirectorManagementPack\_X.X.X.pak**.

**Step 2** On the vROps WebUI, choose **Data Sources > Integrations**.

The **Integrations** page is displayed.

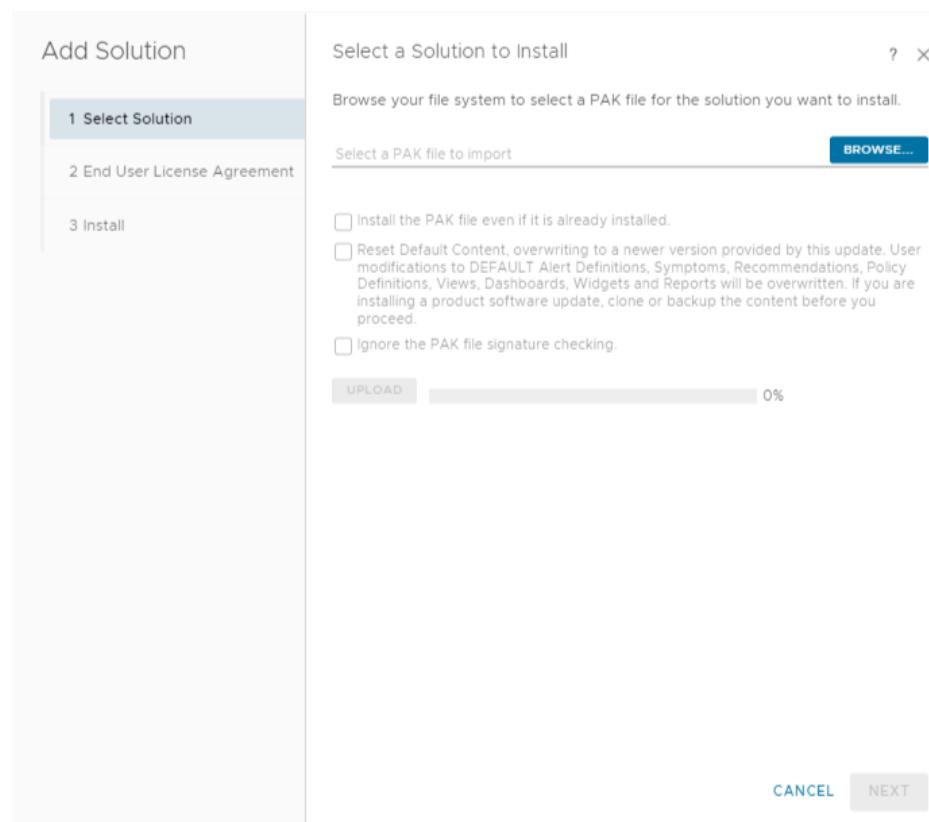
**Step 3** In the Integrations page, choose **Repository**.

The **Repository** page is displayed.

**Step 4** In the upper part of the page, click **ADD**.

The **Add Solution** dialog box is displayed, as shown in [Figure Add Solution](#).

**Figure 2-4** Add Solution



**Step 5** On the **Select Solution** tab page, click **BROWSE** and select the plug-in installation file.

**Step 6** Select **Ignore the PAK file signature checking**.

**Step 7** Click **UPLOAD** and upload the installation file.

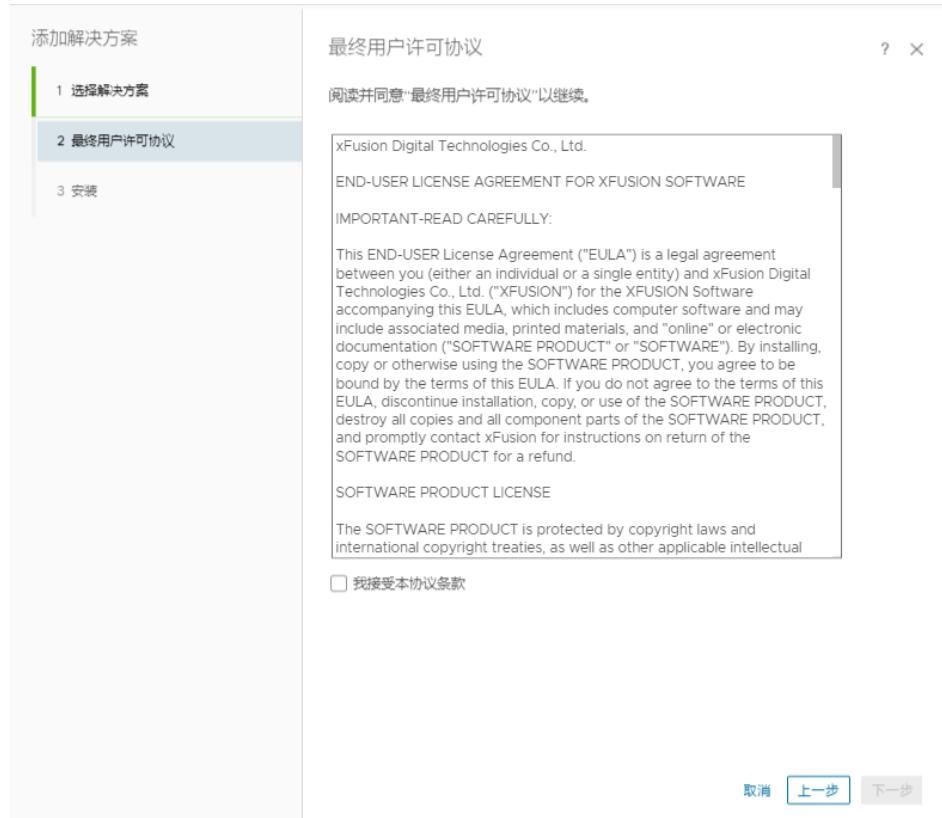
**Step 8** Click **NEXT**.

The **Confirmation** dialog box is displayed.

**Step 9** Click **Yes**.

The **End User License Agreement** tab page is displayed, as shown in [Figure 2-5](#)

**Figure 2-5 End User License Agreement**



**Step 10** Select **I accept the terms of this agreement** and click **NEXT**.

The **Installation** tab page is displayed.

**Step 11** After the installation is complete, click **FINISH**.

In the lower part of the **Repository** page, view the installed vROps plug-in, as shown in [Figure 2-6](#).

**Figure 2-6** Viewing the installed vROps plug-in



----End

## 2.1.3 Installing the vROps plug-in for versions SaaS

**Step 1** Log in to VMware Aria Operations.

**Step 2** Configure cloud proxies. For details, see [Configuring Cloud Proxies in VMware Aria Operations](#).

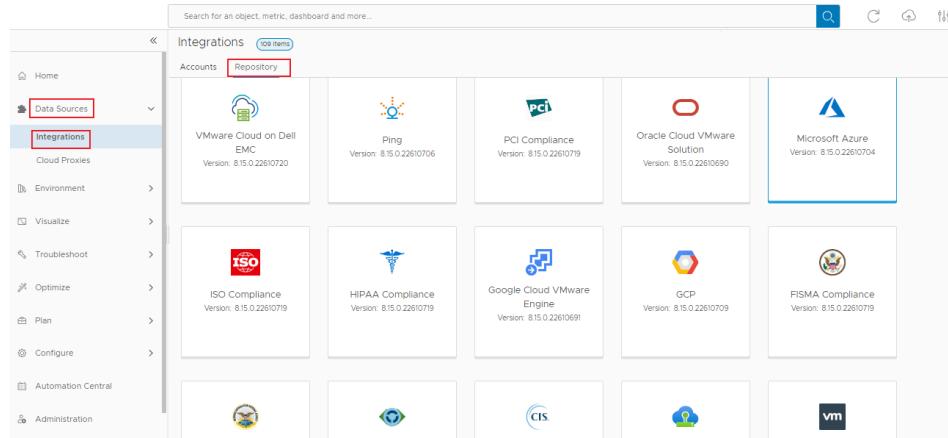
### NOTE

If cloud proxies fail to be configured, you need to check whether the network and DNS parameters are correctly configured.

**Step 3** On the VMware Aria Operations WebUI, choose **Data Sources > Integrations > Repository**.

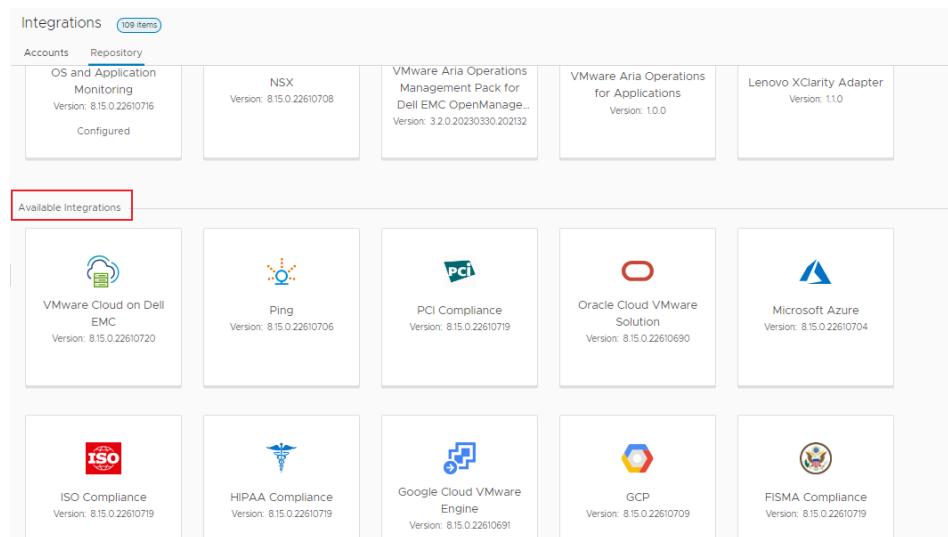
The **Repository** page is displayed, as shown in [Figure 2-7](#)

**Figure 2-7** Repository



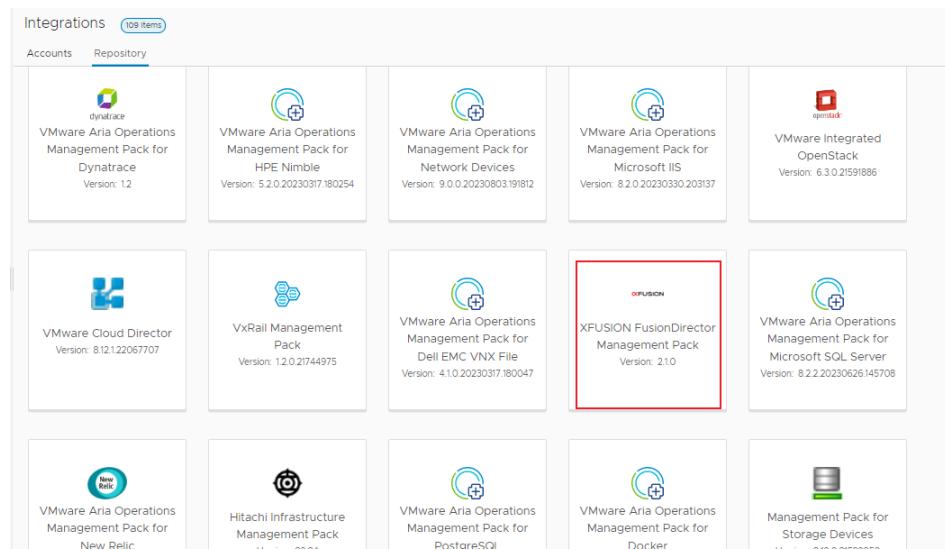
**Step 4** In the Repository page, go to the **Available Integrations** area, as shown in [Figure 2-8](#).

**Figure 2-8** Available Integrations



**Step 5** Click XFUSION FusionDirector Management Pack, as shown in [Figure 2-9](#).

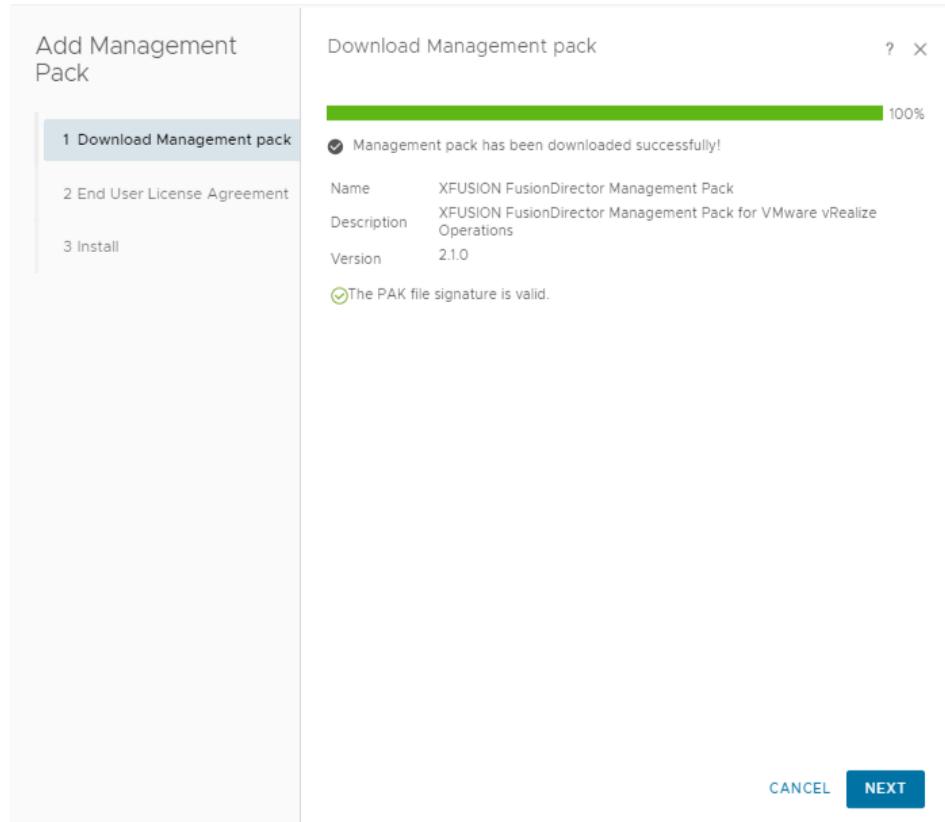
**Figure 2-9 XFUSION FusionDirector Management Pack**



**Step 6 Click GET.**

The **Add Management Pack** dialog box is displayed, as shown in [Figure Add Solution](#).

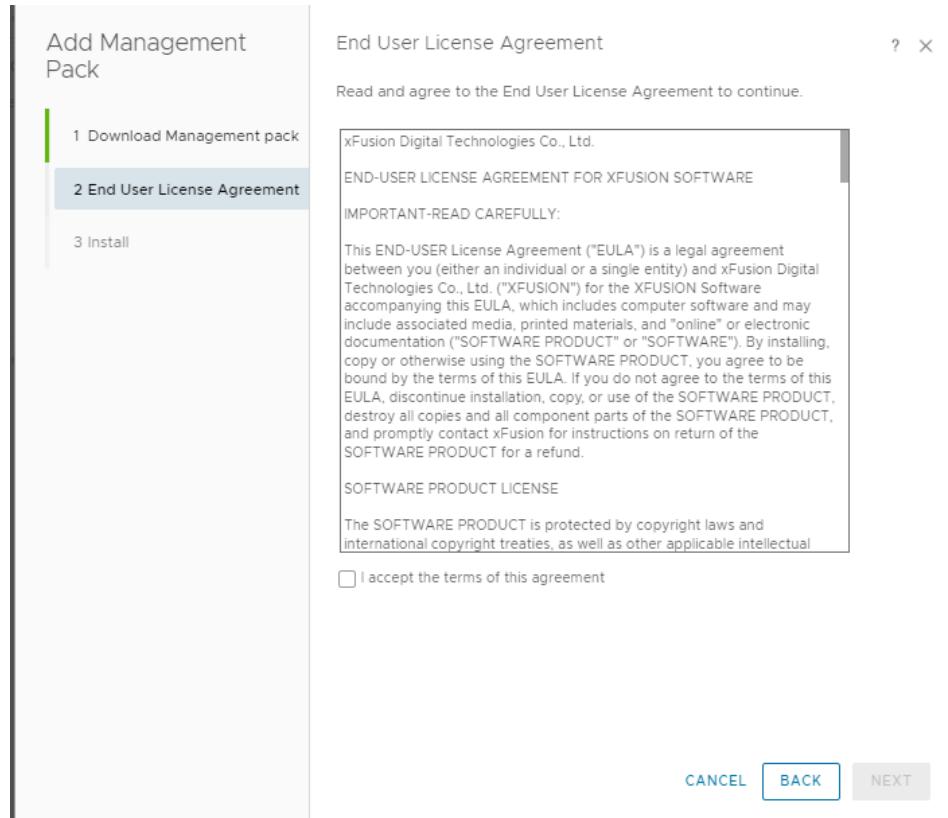
**Figure 2-10 Add Management Pack**



**Step 7 Click NEXT.**

The **End User License Agreement** tab page is displayed, as shown in [Figure 2-11](#).

**Figure 2-11 End User License Agreement**



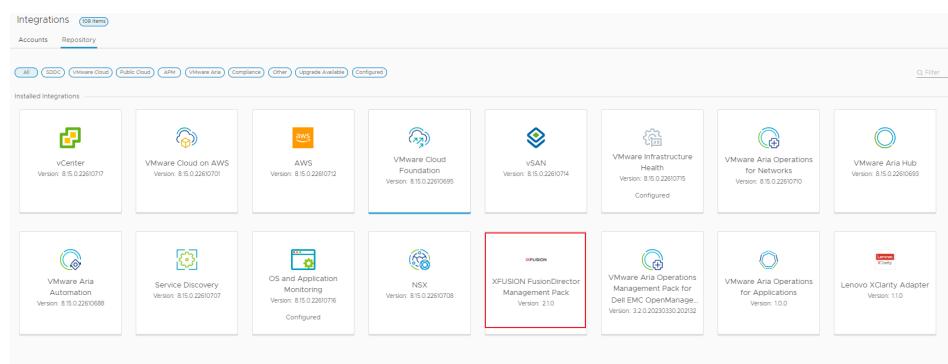
**Step 8** Select **I accept the terms of this agreement** and click **NEXT**.

The **Installation** tab page is displayed.

**Step 9** After the installation is complete, click **FINISH**.

In the **Repository** page, view the installed vROps plug-in, as shown in **Figure 2-12**.

**Figure 2-12 Viewing the installed vROps plug-in**



----End

## 2.2 Uninstallation

## 2.2.1 Uninstalling the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Administration**.

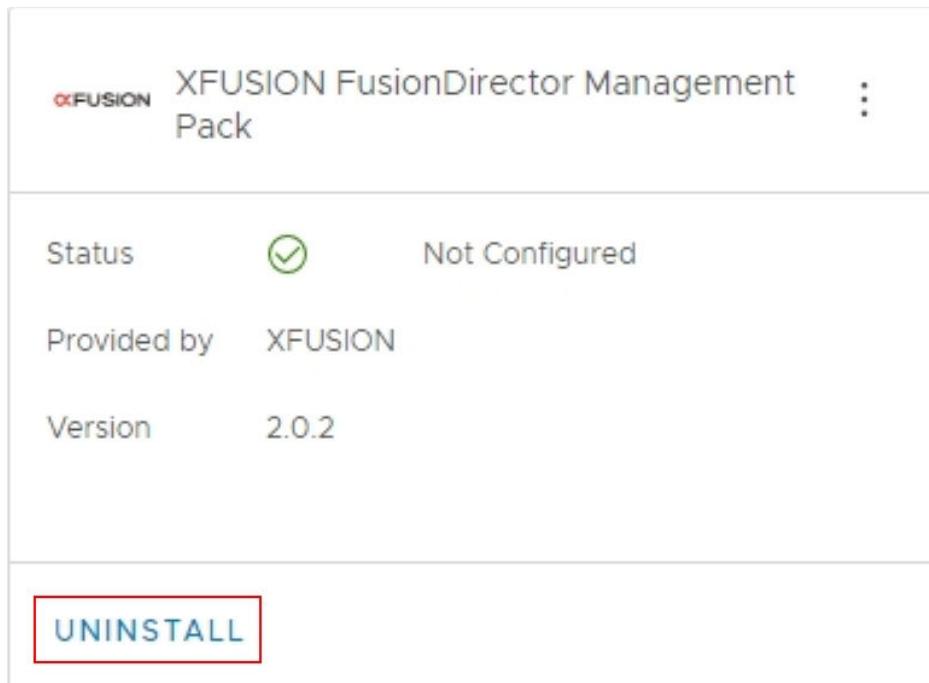
The **Administration** page is displayed.

**Step 2** In the navigation pane on the left, choose **Repository**.

The **Repository** page is displayed.

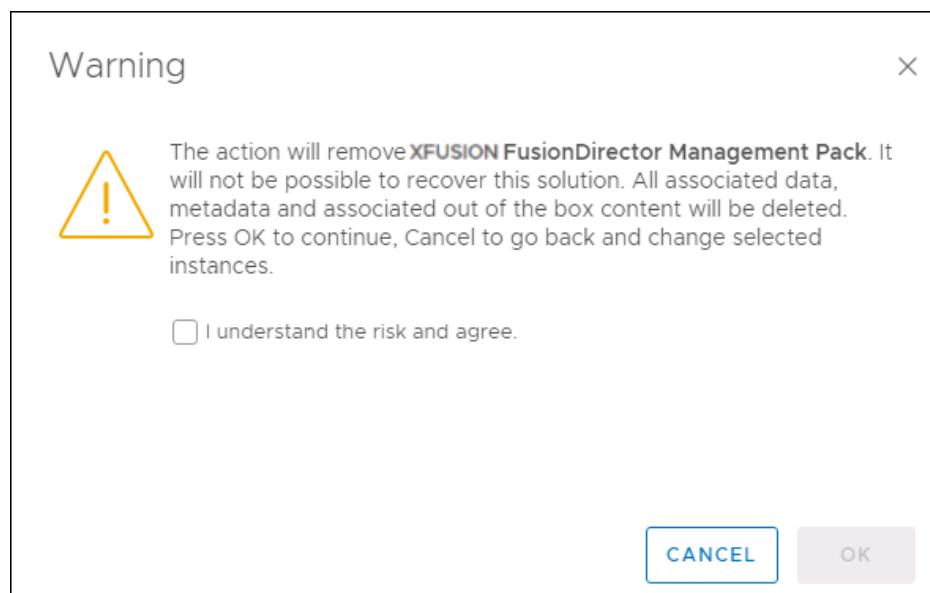
**Step 3** In the lower part of the page, select the vROps plug-in to be uninstalled and click **UNINSTALL**, as shown in [Figure 2-13](#).

**Figure 2-13** Uninstalling the vROps plug-in



The **Warning** dialog box is displayed, as shown in [Figure 2-14](#).

**Figure 2-14** Warning dialog box



**Step 4** Select **I understand the risk and agree.** and click **OK**.

The vROps plug-in is uninstalled.

**Step 5** You are advised to manually delete the dashboard after the plug-in is uninstalled.

1. On the vROps WebUI, choose **Dashboards**.

The **Dashboards** page is displayed.

2. In the **Dashboards** page, choose **Dashboards > Fusion Director Overview Dashboard**.

The **Fusion Director Overview Dashboard** page is displayed.

3. Click **Operation** next to the **Fusion Director Overview Dashboard**, the operation list is expanded.

4. Click **Delete**.

----End

## 2.2.2 Uninstalling the vROps plug-in version 8.12

**Step 1** On the vROps WebUI, choose **Data Sources > Integrations**.

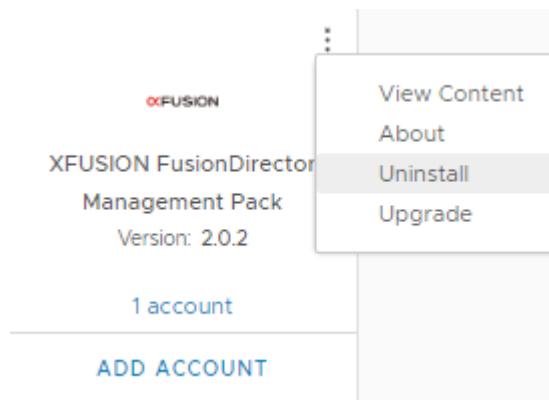
The **Integrations** page is displayed.

**Step 2** In the **Integrations** page, choose **Repository**.

The **Repository** page is displayed.

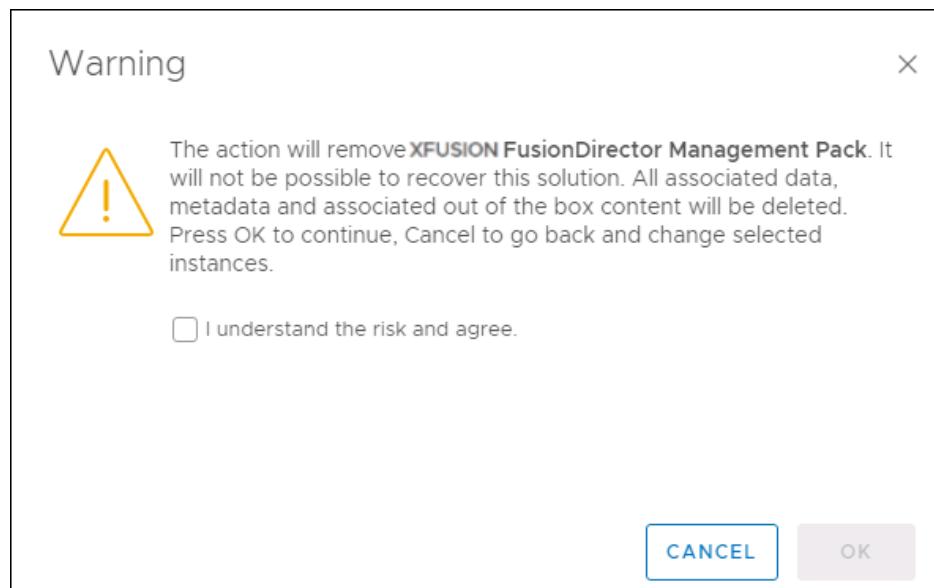
**Step 3** In the page, select the vROps plug-in to be uninstalled and click > **UNINSTALL**, as shown in [Figure 2-15](#).

**Figure 2-15** Uninstalling the vROps plug-in



The **Warning** dialog box is displayed, as shown in [Figure 2-16](#).

**Figure 2-16** Warning dialog box



**Step 4** Select **I understand the risk and agree.** and click **OK**.

The vROps plug-in is uninstalled.

**Step 5** You are advised to manually delete the dashboard after the plug-in is uninstalled.

1. On the vROps WebUI, choose **Visualize > Dashboards > Manage**.  
The **Manage** page is displayed.
2. In the **Manage** page, choose **Fusion Director Overview Dashboard**.  
The **Fusion Director Overview Dashboard** page is displayed.
3. Click **Operation** next to the **Fusion Director Overview Dashboard**, the operation list is expanded.
4. Click **Delete**.

----End

## 2.2.3 Uninstalling the vROps plug-in for versions SaaS

**Step 1** On the VMware Aria Operations WebUI, choose **Data Sources > Integrations > Repository**.

The **Repository** page is displayed, as shown in [Figure 2-17](#)

**Figure 2-17** Repository

The screenshot shows the 'Integrations' section of the VMware Aria Operations WebUI. The left sidebar has 'Data Sources' and 'Integrations' highlighted. The main area shows a grid of integration cards. One card, 'Microsoft Azure', is selected and highlighted with a blue border. Other cards include 'VMware Cloud on Dell EMC', 'Ping', 'PCI Compliance', 'Oracle Cloud VMware Solution', 'ISO Compliance', 'HIPAA Compliance', 'Google Cloud VMware Engine', 'GCP', and 'FISMA Compliance'. Each card displays its name, icon, and version number.

**Step 2** In the page, select the vROps plug-in to be uninstalled.,.

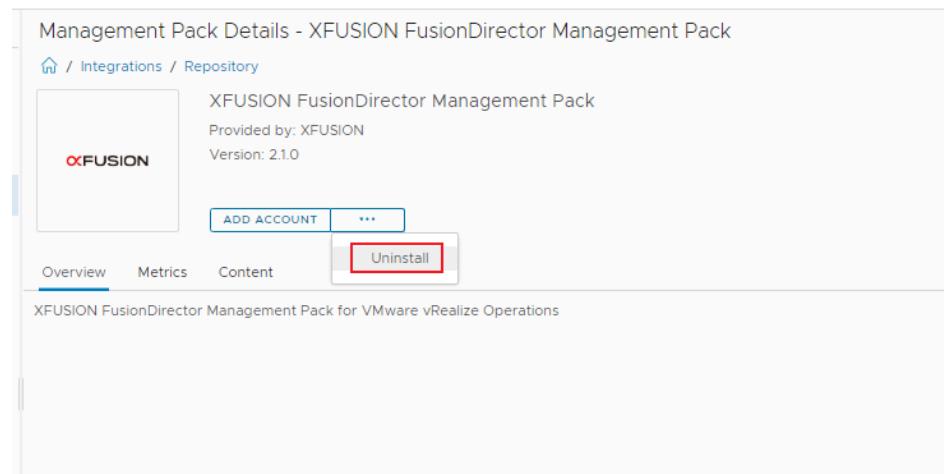
The **Management Pack Details** page is displayed, as shown in [Figure 2-18](#).

**Figure 2-18** Management Pack Details

The screenshot shows the 'Management Pack Details - XFUSION FusionDirector Management Pack' page. The top navigation bar includes 'Management Pack Details - XFUSION FusionDirector Management Pack', 'Integrations / Repository', and a search bar. The main content area displays the management pack details: 'XFUSION FusionDirector Management Pack', 'Provided by: XFUSION', and 'Version: 2.1.0'. Below this are 'ADD ACCOUNT' and '...' buttons. The bottom section shows tabs for 'Overview', 'Metrics', and 'Content', with the 'Overview' tab currently selected. The content area contains the text 'XFUSION FusionDirector Management Pack for VMware vRealize Operations'.

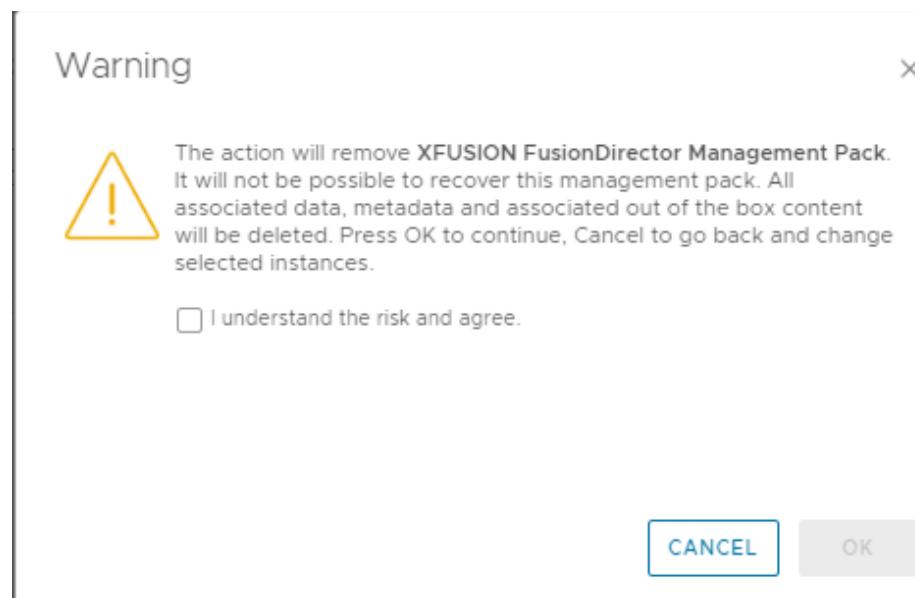
**Step 3** Click > **Uninstall**, as shown in [Figure 2-19](#).

**Figure 2-19** Uninstall



The **Warning** dialog box is displayed, as shown in [Figure 2-20](#).

**Figure 2-20** Warning dialog box



**Step 4** Select **I understand the risk and agree.** and click **OK**.

The vROps plug-in is uninstalled.

----End

## 2.3 Upgrade

## 2.3.1 Upgrading the vROps plug-in for versions 8.1 or earlier

### Procedure

- Step 1** (Optional) Uninstall the vROps plug-in of the earlier version. For details, see [2.2.1 Uninstalling the vROps plug-in for versions 8.1 or earlier](#).
- Step 2** Install the vROps plug-in of the new version. For details, see [2.1.1 Installing the vROps plug-in for versions 8.1 or earlier](#).

----End

## 2.3.2 Upgrading the vROps plug-in for version 8.12

- Step 1** On the vROps WebUI, choose **Data Sources > Integrations**.

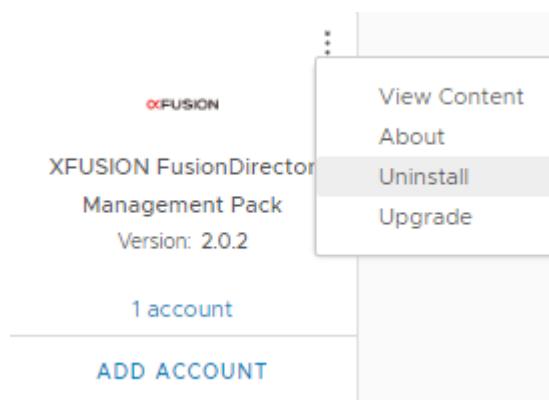
The **Integrations** page is displayed.

- Step 2** In the **Integrations** page, choose **Repository**.

The **Repository** page is displayed.

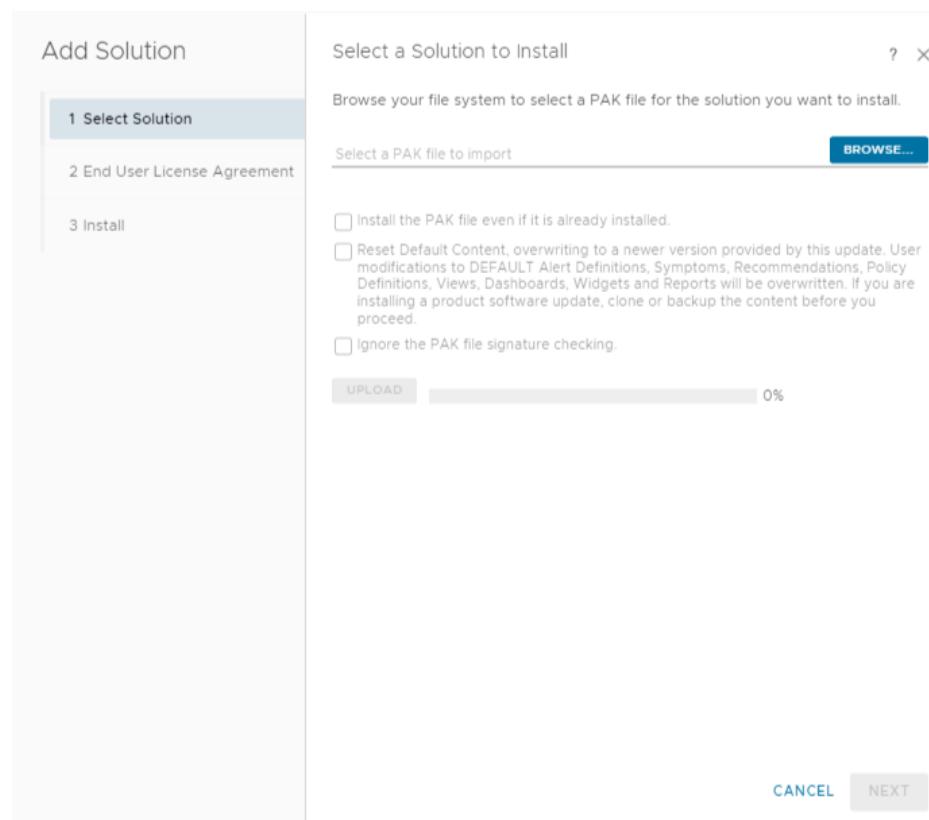
- Step 3** In the page, select the vROps plug-in to be uninstalled and click  > **Upgrade**, as shown in [Figure 2-21](#).

**Figure 2-21** Upgrading the vROps plug-in



- Step 4** The **Add Solution** dialog box is displayed, as shown in [Figure Add Solution](#).

**Figure 2-22 Add Solution**



**Step 5** On the **Select Solution** tab page, click **BROWSE** and select the plug-in installation file.

**Step 6** Select **Install the PAK file even if it is already installed** and **Ignore the PAK file singnature checking**.

**Step 7** Click **UPLOAD** and upload the installation file.

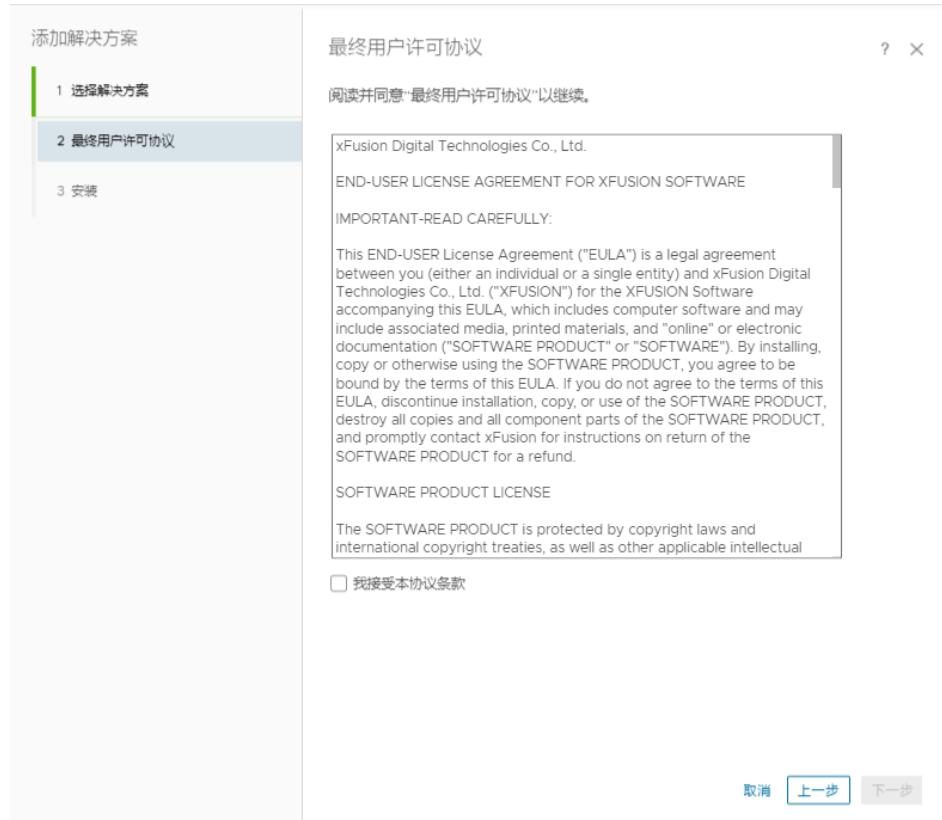
**Step 8** Click **NEXT**.

The **Confirmation** dialog box is displayed.

**Step 9** Click **Yes**.

The **End User License Agreement** tab page is displayed, as shown in [Figure 2-5](#)

**Figure 2-23 End User License Agreement**



**Step 10** Select **I accept the terms of this agreement** and click **NEXT**.

The **Installation** tab page is displayed.

**Step 11** After the installation is complete, click **FINISH**.

In the lower part of the **Repository** page, view the installed vROps plug-in, as shown in [Figure 2-6](#).

**Figure 2-24** Viewing the installed vROps plug-in



----End

## 2.3.3 Upgrading the vROps plug-in for version SaaS

Upgrade the vROps plug-in for version SaaS. For details, see [Upgrading Integrations in VMware Aria Operations Cloud](#).

# 3 Configuring FusionDirector

---

- [3.1 Adding FusionDirector](#)
- [3.2 Modifying FusionDirector](#)
- [3.3 Deleting FusionDirector](#)

## 3.1 Adding FusionDirector

### 3.1.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Administration**.

The **Administration** page is displayed.

**Step 2** In the navigation tree on the left, choose **Other Accounts**.

The **Other Accounts** page is displayed.

**Step 3** Click **ADD ACCOUNT**.

**Step 4** Select the type of the account to be added, for example, **FusionDirectorAdapter**.

The **New Account** page is displayed, as shown in [Figure 3-1](#).

**Figure 3-1** New Account

New Account

Cloud Account Information

Name	<input type="text" value="Add account name"/>
Description	<input type="text" value="Add a short description for this account"/>

Connect Information

Server IP	<input type="text"/>
Server Port	443
Device Classification Method	<input type="text" value="Model Type"/>
SSL Certificate Path(.crt)	<input type="text"/>
Credential	<input type="text" value="--Select--"/> <span style="color: blue;">+ </span>
Collector / Group	<input type="text" value="Default collector group"/>

**VALIDATE CONNECTION**

**ADD** **CANCEL**

**Step 5** Set the following parameters:

- **Name:** user-defined name to identify different FusionDirector instances

- **Description:** (optional) user-defined description to describe a FusionDirector instance
- **Server IP:** FusionDirector IP address
- **Server Port:** FusionDirector port number, which is **443** by default.
- **Device Classification Method:** way to classify servers
  - **Model Type:** type view
  - **Group Type:** group view
- **SSL Certificate Path(.crt):** (optional) path of the certificate in the vROps

---

**NOTICE**

You are advised to upload the SSL certificate for security. For details about how to upload the certificate, see [Step 6](#) to [Step 7](#).

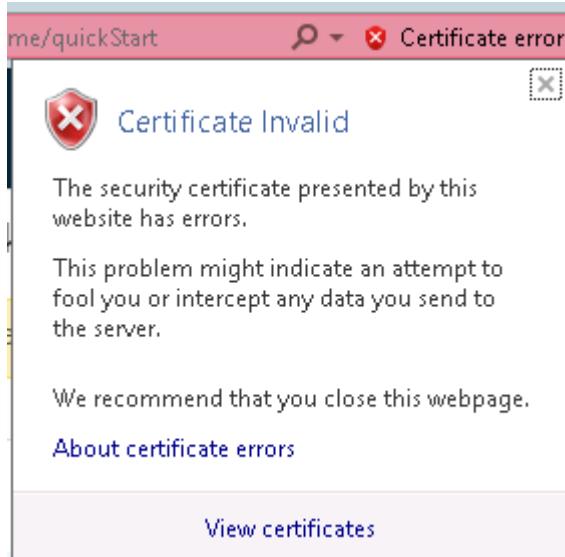
---

**Step 6** (Optional) Obtain the certificate.

1. Access the FusionDirector WebUI.
2. Click **Certificate error** in the address box of the browser.

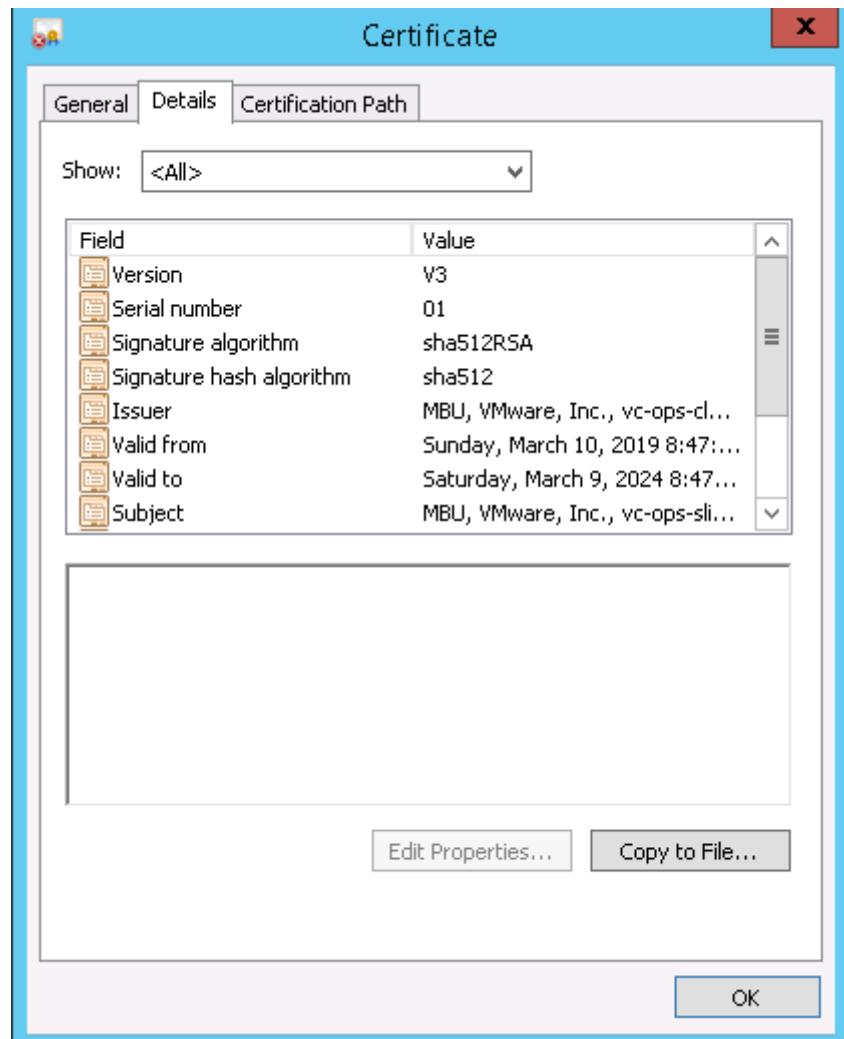
The **Certificate Invalid** dialog box is displayed, as shown in [Figure 3-2](#).

**Figure 3-2** Invalid certificate



3. Click **View certificates**.  
The **Certificate** dialog box is displayed.
4. Click the **Details** tab.  
The **Details** tab is displayed, as shown in [Figure 3-3](#).

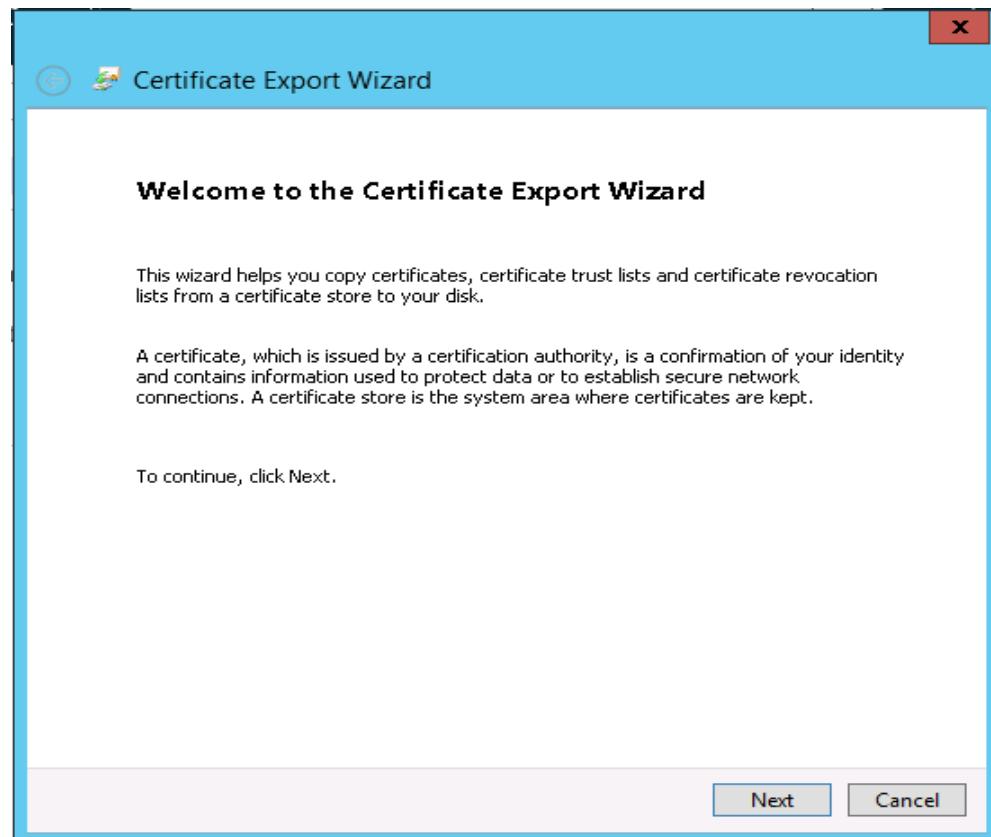
**Figure 3-3 Details**



5. Click **Copy to File....**

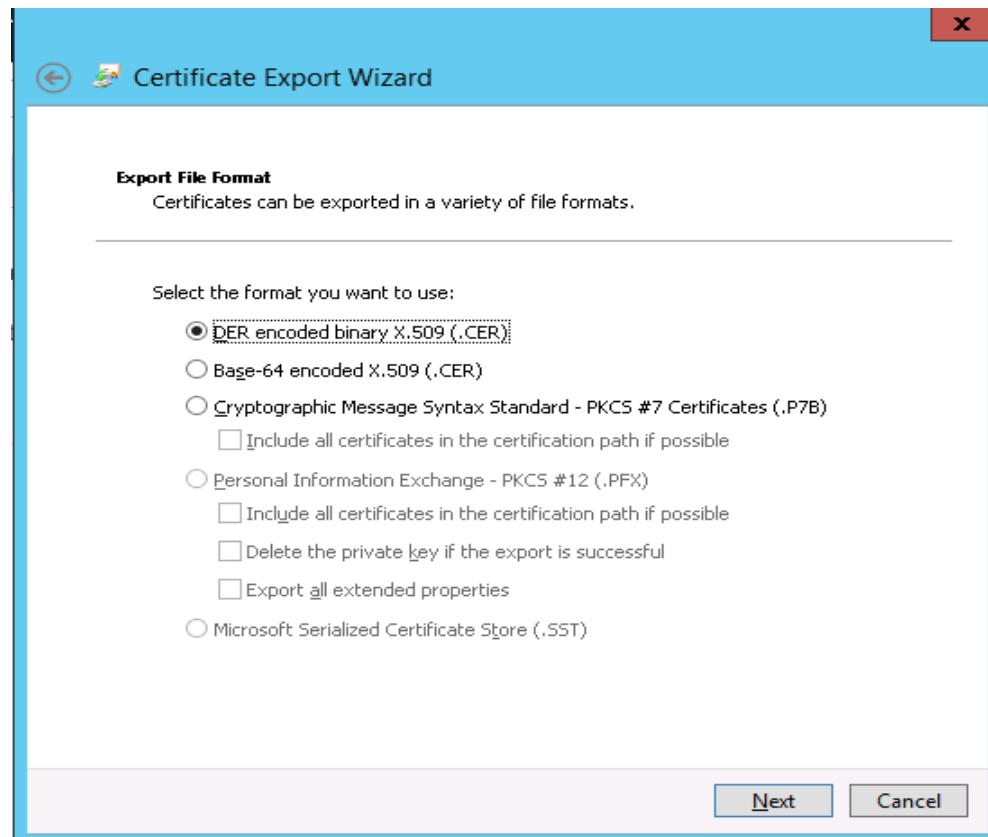
The **Certificate Export Wizard** is displayed, as shown in [Figure 3-4](#).

**Figure 3-4 Certificate Export Wizard**



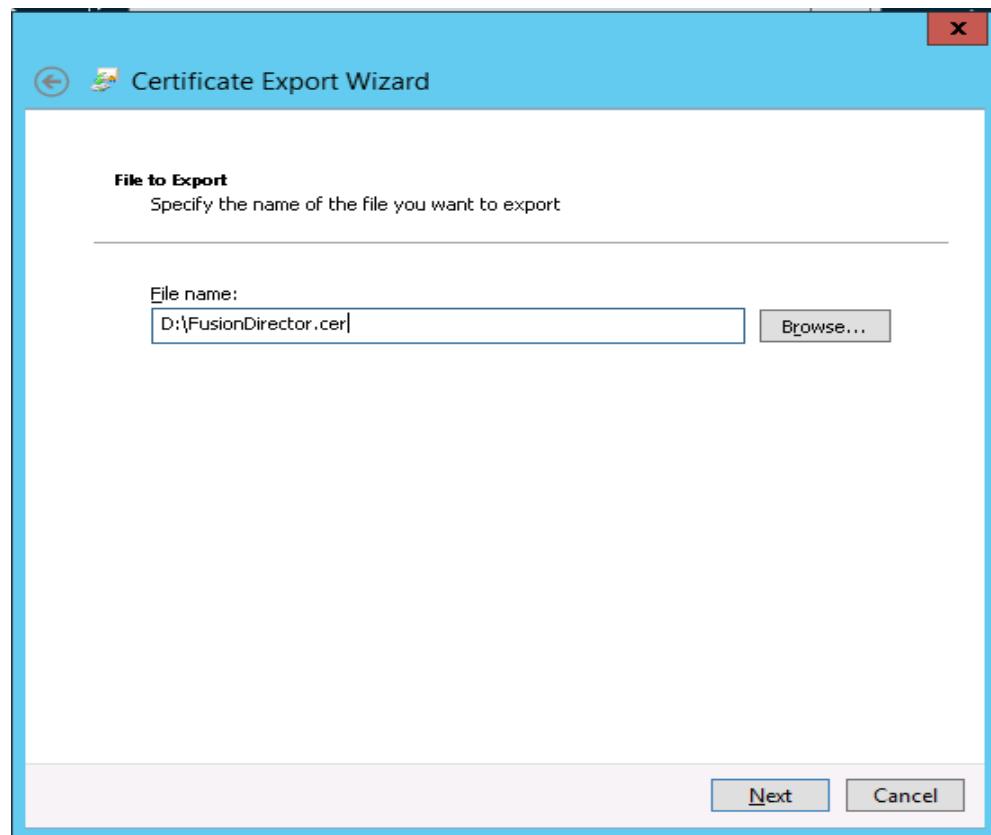
6. Click **Next**. In the **Certificate Export Wizard** dialog box, select **DER encoding binary X.509 (.CER)**, as shown in [Figure 3-5](#).

**Figure 3-5** Setting the format of files to be exported



7. Click **Next**. In the **Certificate Export Wizard** dialog box, click **Browse...**, select the certificate export path, and enter the certificate file name, as shown in [Figure 3-6](#).

**Figure 3-6** Service certificate

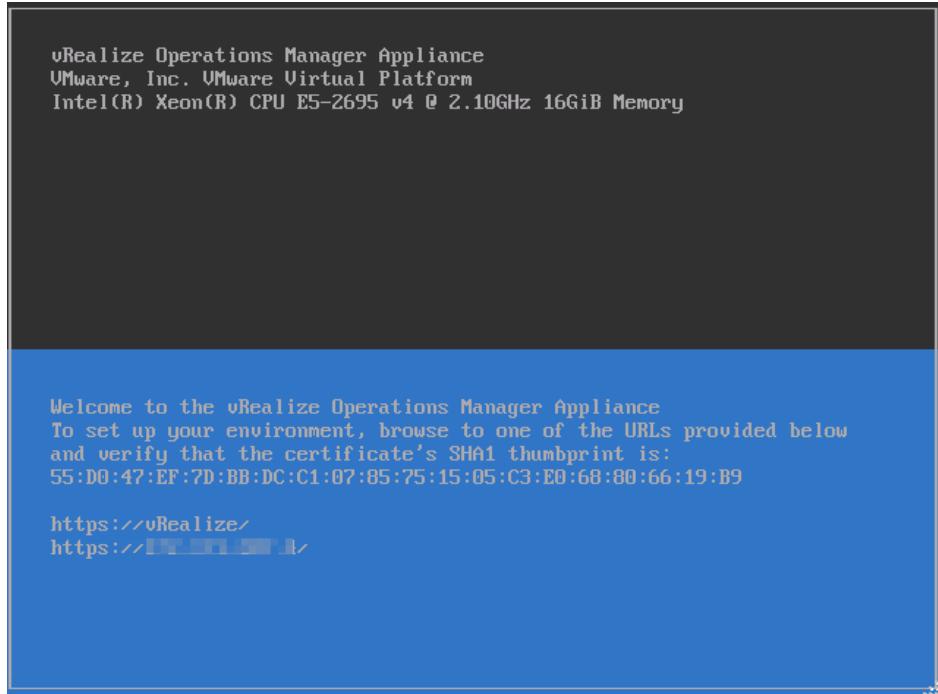


8. Click **Next** to complete certificate export.

**Step 7** (Optional) Import the certificate file to the vROps backend.

1. Configure the SSH access permission for the vROps.
  - a. The vROps backend is displayed, as shown in [Figure 3-7](#).

Figure 3-7 vROps backend



- b. Press **Alt+F1** and enter the username and password to log in to the vROps, as shown in [Figure 3-8](#).

NOTE

- The username is **root** and the initial password is blank.
- When you log in for the first time, you need to change the initial password, press **Enter**, enter previous and new passwords, and confirm the new password. The new password must contain uppercase letters, lowercase letters, digits, and special characters.

Figure 3-8 Logging in to the vROps

```
vRealize Operations Manager Appliance
vRealize login: root
Password:
vRealize:~ #
```

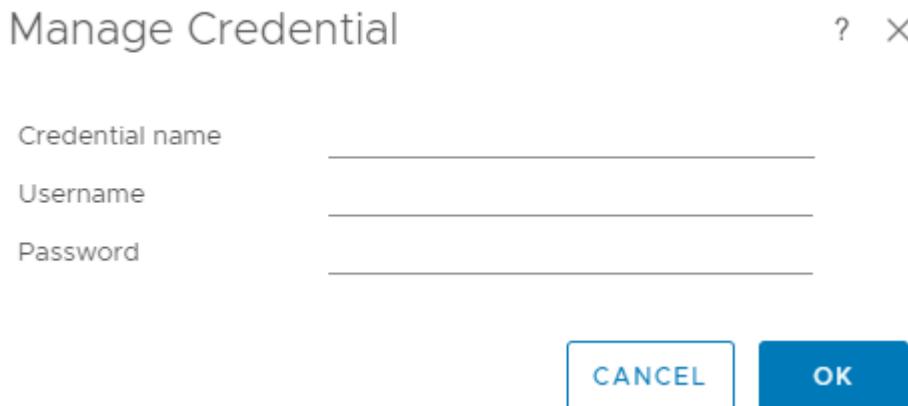
- c. Run the **vi /etc/ssh/sshd\_config** command to edit the configuration file **sshd\_config**.  
Change the value of **MaxSession** to **20** and the value of **AllowTcpForwarding** to **yes**.
- d. Run the **service sshd start** command to start the SSHD service.
- e. Run the **chkconfig sshd on** command to enable the SSHD service.
- f. Run the **service vmware-vcops-firewall stop** command to disable the firewall.
- g. Run the **chkconfig vmware-vcops-firewall off** command to disable the firewall upon startup.

2. Use the SSH tool to upload the certificate file to **/usr/lib/vmware-vcops/user/plugins/inbound**.
3. Enter the SSL certificate path **/usr/lib/vmware-vcops/user/plugins/inbound/FusionDirector.crt** in **Step 5**.

**Step 8** In the **Credential** field, click .

The **Manage Credentials** dialog box is displayed, as shown in [Figure 3-9](#).

**Figure 3-9** Manage Credentials



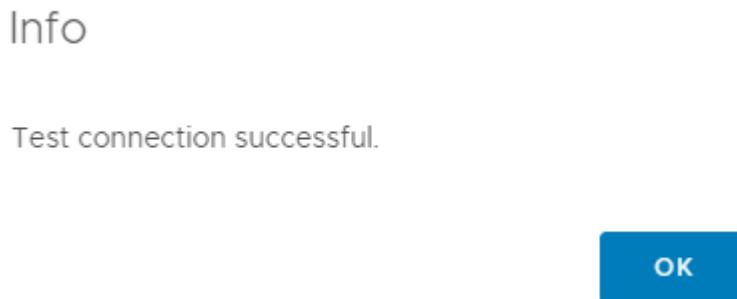
**Step 9** Set the following parameters and click **OK**.

- **Credential name:** user-defined name to identify different credentials
- **Username:** FusionDirector username to access the Redfish API. The default username is **rootRedfish**.
- **Password:** FusionDirector password to access the Redfish API. The default password is **Machine@123**.

**Step 10** Click **VALIDATE CONNECTION**.

If the test connection is successful, a dialog box is displayed, as shown in [Figure 3-10](#). Click **OK**. If the test connection fails, the failure cause is displayed. Modify the FusionDirector information as prompted.

**Figure 3-10** Successful test connection



**Step 11** Click **ADD**.

The FusionDirector instance is added.

On the **Other Accounts** page, view the added FusionDirector instance, as shown in [Figure 3-11](#).

**Figure 3-11** Viewing the added account

Name	Status	Description	Collector
... 2215	⚠ Warning	vRealize Operations Man...	
... 2219	✓ OK	vRealize Operations Man...	
... FD for vROps	✓ OK	vRealize Operations Man...	
... FD for VROps2	⚠ Warning	vRealize Operations Man...	

----End

### 3.1.2 For the vROps plug-in for version 8.12

**Step 1** On the vROps WebUI, choose **Data Sources > Integrations**.

The **Integrations** page is displayed.

**Step 2** In the **Integrations** page, choose **Accounts**.

The **Accounts** page is displayed.

**Step 3** Click **Add Account**.

**Step 4** Select the type of the account to be added, for example, **FusionDirectorAdapter**.

The **Add Account** page is displayed, as shown in [Figure 3-12](#).

**Figure 3-12 Add Account**

The screenshot shows the 'Add Account - FusionDirectorAdapter' dialog box. It has two main sections: 'Cloud Account Information' and 'Connect Information'. In the 'Cloud Account Information' section, there are fields for 'Name' (with placeholder 'Add account name') and 'Description' (with placeholder 'Add a short description for this account'). In the 'Connect Information' section, there are fields for 'Server IP' (empty), 'Server Port' (set to 443), 'Device Classification Method' (set to 'Model Type'), 'SSL Certificate Path(.crt)' (empty), 'Credential' (with a dropdown menu showing '--Select--' and a '+' icon with a pencil), and 'Collector / Group' (set to 'Default collector group'). Below these fields is a 'VALIDATE CONNECTION' button. At the bottom of the dialog are two buttons: a blue 'ADD' button and a white 'CANCEL' button.

**Step 5** Set the following parameters:

- **Name**: user-defined name to identify different FusionDirector instances
- **Description**: (optional) user-defined description to describe a FusionDirector instance
- **Server IP**: FusionDirector IP address
- **Server Port**: FusionDirector port number, which is **443** by default.
- **Device Classification Method**: way to classify servers
  - **Model Type**: type view
  - **Group Type**: group view
- **SSL Certificate Path(.crt)**: (optional) path of the certificate in the vROps

**NOTICE**

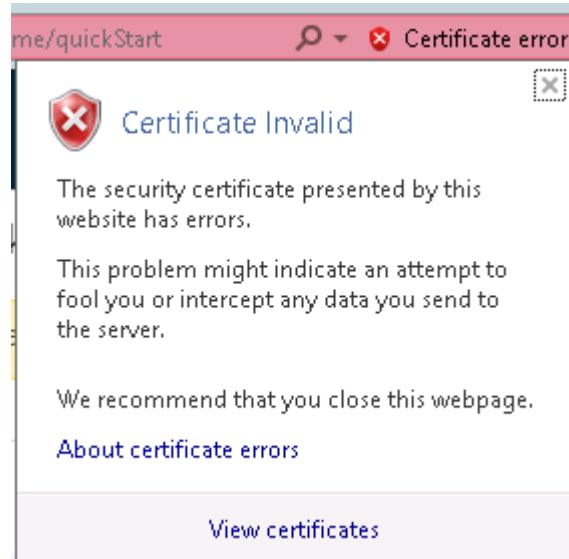
You are advised to upload the SSL certificate for security. For details about how to upload the certificate, see **Step 5** to **Step 6**.

**Step 6** (Optional) Obtain the certificate.

1. Access the FusionDirector WebUI.
2. Click **Certificate error** in the address box of the browser.

The **Certificate Invalid** dialog box is displayed, as shown in [Figure 3-13](#).

**Figure 3-13** Invalid certificate



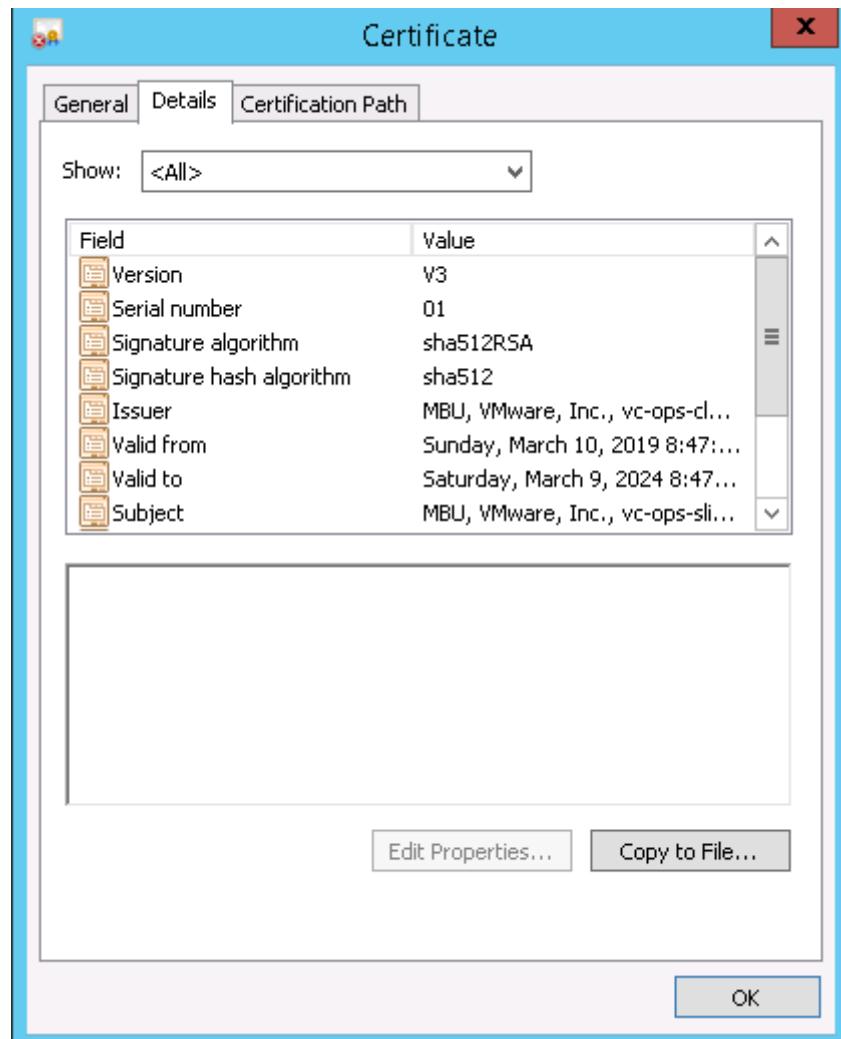
3. Click **View certificates**.

The **Certificate** dialog box is displayed.

4. Click the **Details** tab.

The **Details** tab is displayed, as shown in [Figure 3-14](#).

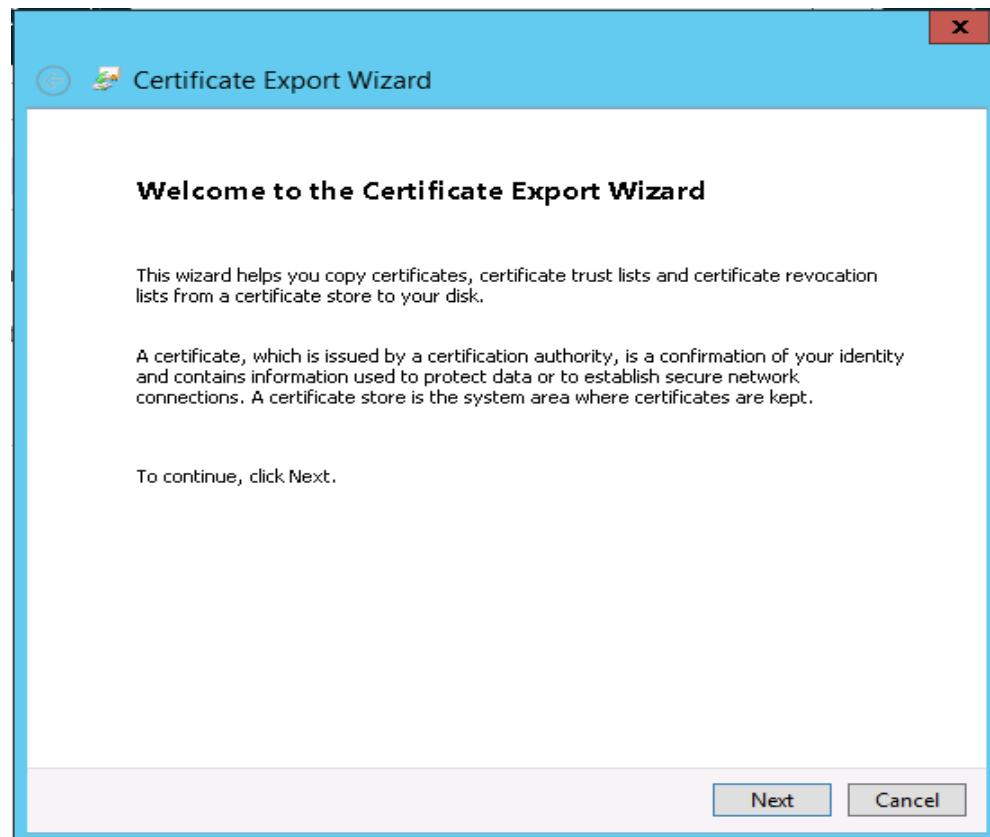
**Figure 3-14 Details**



5. Click **Copy to File....**

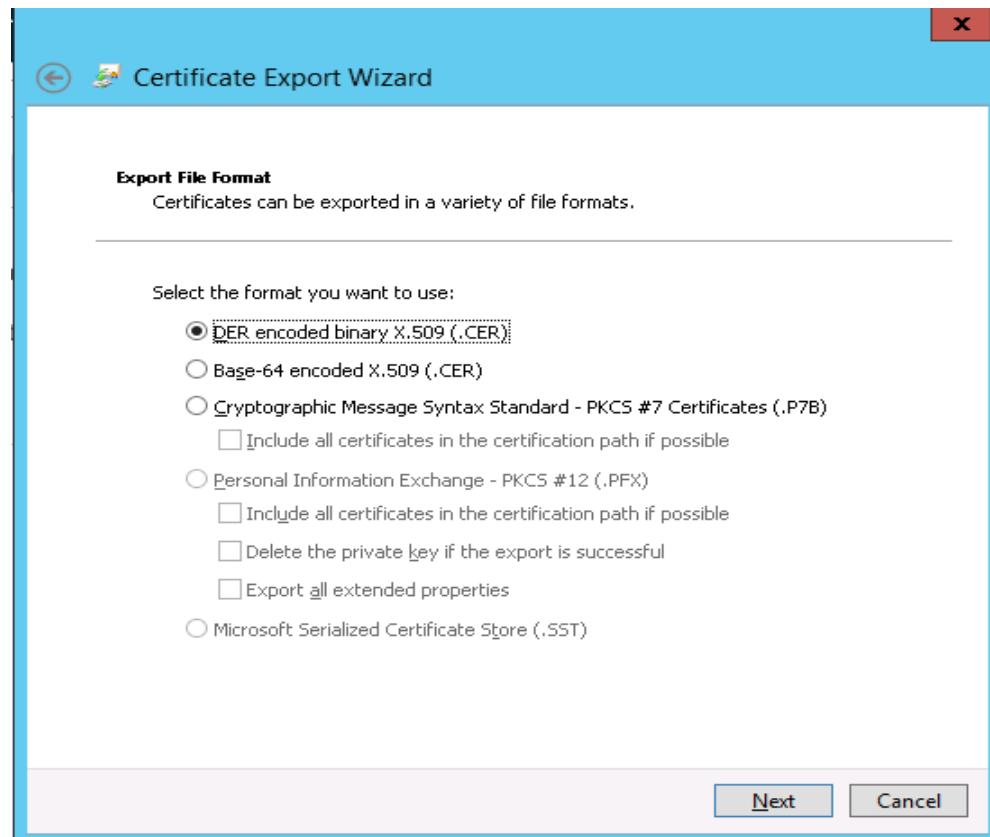
The **Certificate Export Wizard** is displayed, as shown in [Figure 3-15](#).

**Figure 3-15 Certificate Export Wizard**



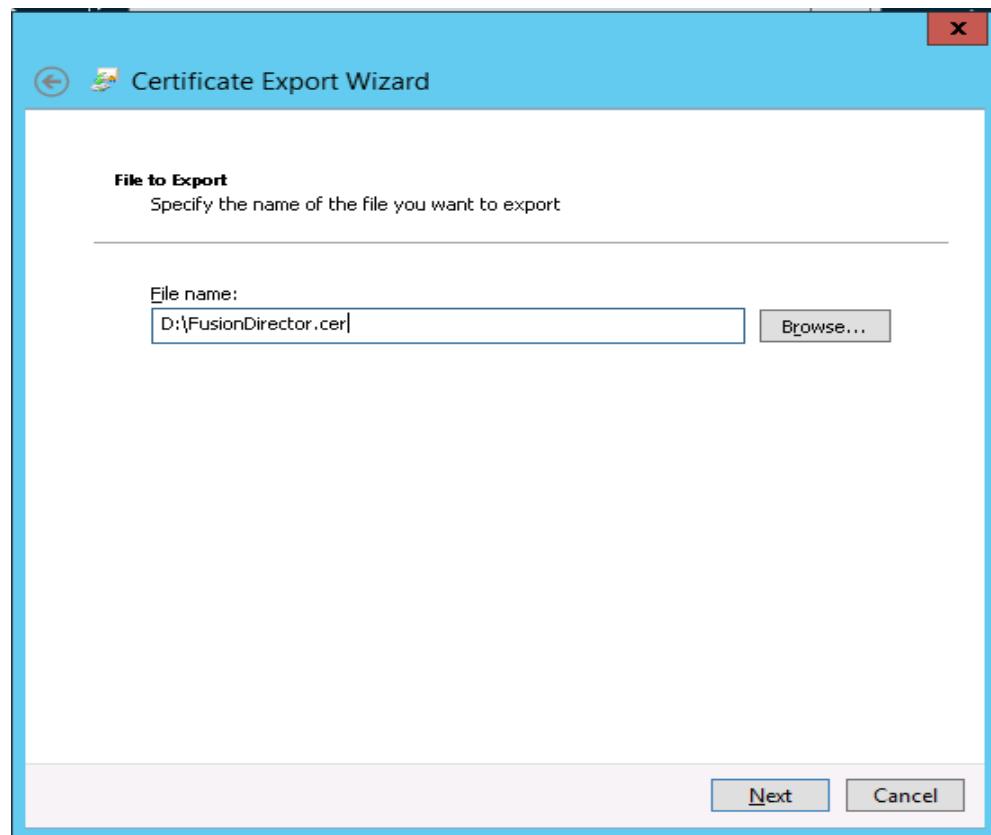
6. Click **Next**. In the **Certificate Export Wizard** dialog box, select **DER encoding binary X.509 (.CER)**, as shown in [Figure 3-16](#).

**Figure 3-16** Setting the format of files to be exported



7. Click **Next**. In the **Certificate Export Wizard** dialog box, click **Browse...**, select the certificate export path, and enter the certificate file name, as shown in [Figure 3-17](#).

**Figure 3-17** Service certificate

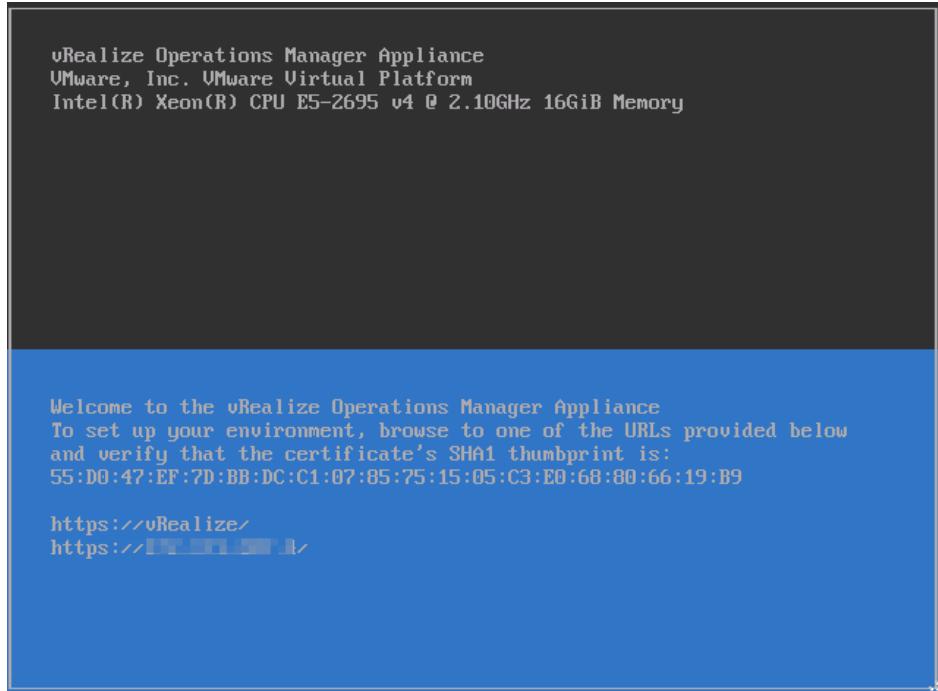


8. Click **Next** to complete certificate export.

**Step 7** (Optional) Import the certificate file to the vROps backend.

1. Configure the SSH access permission for the vROps.
  - a. The vROps backend is displayed, as shown in [Figure 3-18](#).

Figure 3-18 vROps backend



- b. Press **Alt+F1** and enter the username and password to log in to the vROps, as shown in [Figure 3-19](#).

NOTE

- The username is **root** and the initial password is blank.
- When you log in for the first time, you need to change the initial password, press **Enter**, enter previous and new passwords, and confirm the new password. The new password must contain uppercase letters, lowercase letters, digits, and special characters.

Figure 3-19 Logging in to the vROps

```
vRealize Operations Manager Appliance
vRealize login: root
Password:
vRealize:~ #
```

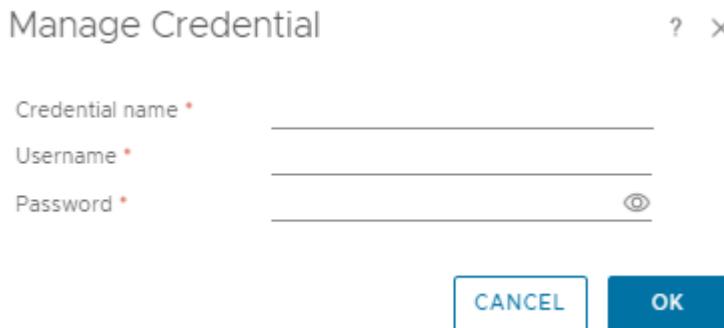
- c. Run the **vi /etc/ssh/sshd\_config** command to edit the configuration file **sshd\_config**.  
Change the value of **MaxSession** to **20** and the value of **AllowTcpForwarding** to **yes**.
- d. Run the **service sshd start** command to start the SSHD service.
- e. Run the **chkconfig sshd on** command to enable the SSHD service.
- f. Run the **service vmware-vcops-firewall stop** command to disable the firewall.
- g. Run the **chkconfig vmware-vcops-firewall off** command to disable the firewall upon startup.

2. Use the SSH tool to upload the certificate file to **/usr/lib/vmware-vcops/user/plugins/inbound**.
3. Enter the SSL certificate path **/usr/lib/vmware-vcops/user/plugins/inbound/FusionDirector.crt** in **Step 5**.

**Step 8** In the **Credential** field, click .

The **Manage Credentials** dialog box is displayed, as shown in [Figure 3-20](#).

**Figure 3-20** Manage Credentials



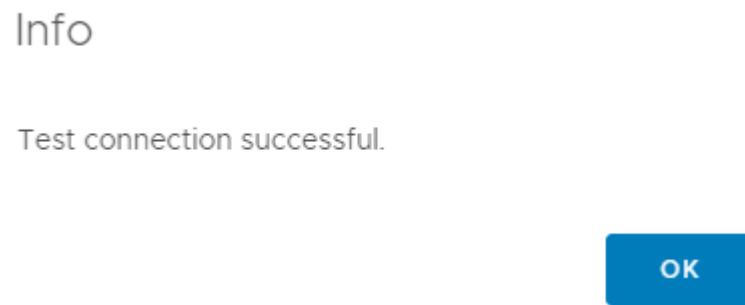
**Step 9** Set the following parameters and click **OK**.

- **Credential name:** user-defined name to identify different credentials
- **Username:** FusionDirector username to access the Redfish API. The default username is **rootRedfish**.
- **Password:** FusionDirector password to access the Redfish API. The default password is **Machine@123**.

**Step 10** Click **VALIDATE CONNECTION**.

If the test connection is successful, a dialog box is displayed, as shown in [Figure 3-21](#). Click **OK**. If the test connection fails, the failure cause is displayed. Modify the FusionDirector information as prompted.

**Figure 3-21** Successful test connection



**Step 11** Click **ADD**.

The FusionDirector instance is added.

On the **Accounts** page, view the added FusionDirector instance, as shown in [Figure 3-22](#).

**Figure 3-22** Viewing the added account

Name	Status	Description	Collector
FusionDirectorAdapter	OK		vRealize Operations Collector:VMware Aria Op...

----End

### 3.1.3 For the vROps plug-in for version SaaS

**Step 1** On the VMware Aria Operations WebUI, choose **Data Sources > Integrations > Repository**.

The **Repository** page is displayed, as shown in [Figure 3-23](#)

**Figure 3-23** Repository

VMware Cloud on Dell EMC Version: 8.15.0.22610720	Ping Version: 8.15.0.22610706	PCI Compliance Version: 8.15.0.22610719	Oracle Cloud VMware Solution Version: 8.15.0.22610690	Microsoft Azure Version: 8.15.0.22610704
ISO Compliance Version: 8.15.0.22610719	HIPAA Compliance Version: 8.15.0.22610719	Google Cloud VMware Engine Version: 8.15.0.22610691	GCP Version: 8.15.0.22610709	FISMA Compliance Version: 8.15.0.22610719

**Step 2** In the page, select the installed vROps plug-in.,.

The **Management Pack Details** page is displayed, as shown in [Figure 3-24](#).

**Figure 3-24** Management Pack Details

Management Pack Details - XFUSION FusionDirector Management Pack

/ Integrations / Repository

XFUSION FusionDirector Management Pack  
Provided by: XFUSION  
Version: 2.1.0

ADD ACCOUNT ...

Overview Metrics Content

XFUSION FusionDirector Management Pack for VMware vRealize Operations

**Step 3** Click Add Account.

**Step 4** Select the type of the account to be added, for example, **FusionDirectorAdapter**.

The **Add Account** page is displayed, as shown in **Figure 3-25**.

**Figure 3-25** Add Account

The screenshot shows the 'Add Account - FusionDirectorAdapter' configuration page. It has two main sections: 'Cloud Account Information' and 'Connect Information'. In 'Cloud Account Information', there are fields for 'Name' (with placeholder 'Add account name') and 'Description' (with placeholder 'Add a short description for this account'). In 'Connect Information', there are fields for 'Server IP' (placeholder ''), 'Server Port' (value '443'), 'Device Classification Method' (dropdown menu showing 'Model Type'), 'SSL Certificate Path(.crt)' (placeholder ''), 'Credential' (button 'Click + to add new credential' with a '+' icon), and 'Collector / Group' (dropdown menu showing '--Select--'). At the bottom are 'ADD' and 'CANCEL' buttons, and a 'VALIDATE CONNECTION' button.

**Step 5** Set the following parameters:

- **Name**: user-defined name to identify different FusionDirector instances
- **Description**: (optional) user-defined description to describe a FusionDirector instance
- **Server IP**: FusionDirector IP address
- **Server Port**: FusionDirector port number, which is **443** by default.
- **Device Classification Method**: way to classify servers
  - **Model Type**: type view
  - **Group Type**: group view
- **SSL Certificate Path(.crt)**: (optional) path of the certificate in the vROps

---

**NOTICE**

You are advised to upload the SSL certificate for security. For details about how to upload the certificate, see **Step 6** to **Step 7**.

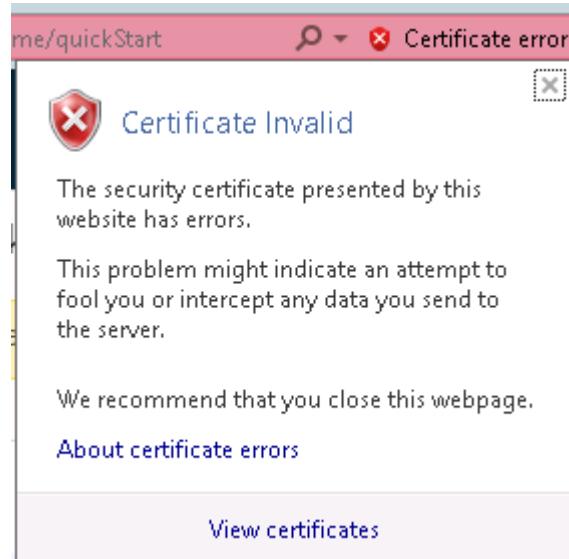
---

**Step 6** (Optional) Obtain the certificate.

1. Access the FusionDirector WebUI.
2. Click **Certificate error** in the address box of the browser.

The **Certificate Invalid** dialog box is displayed, as shown in [Figure 3-26](#).

**Figure 3-26** Invalid certificate



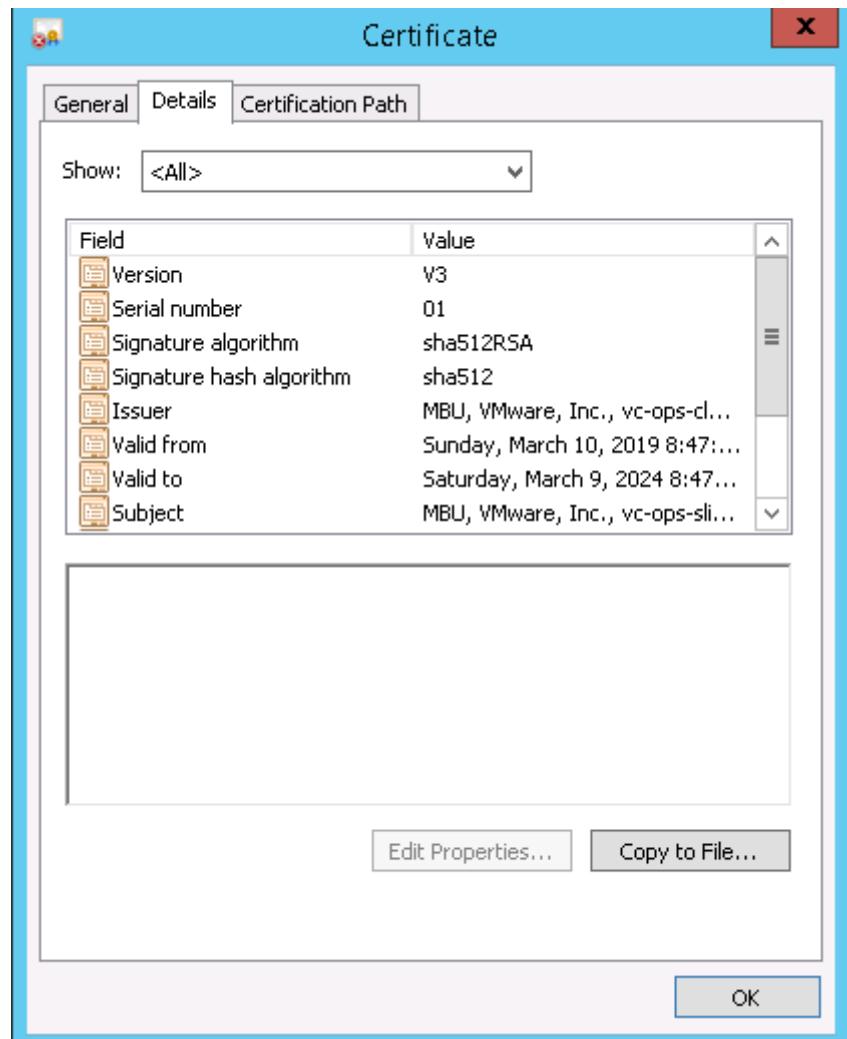
3. Click **View certificates**.

The **Certificate** dialog box is displayed.

4. Click the **Details** tab.

The **Details** tab is displayed, as shown in [Figure 3-27](#).

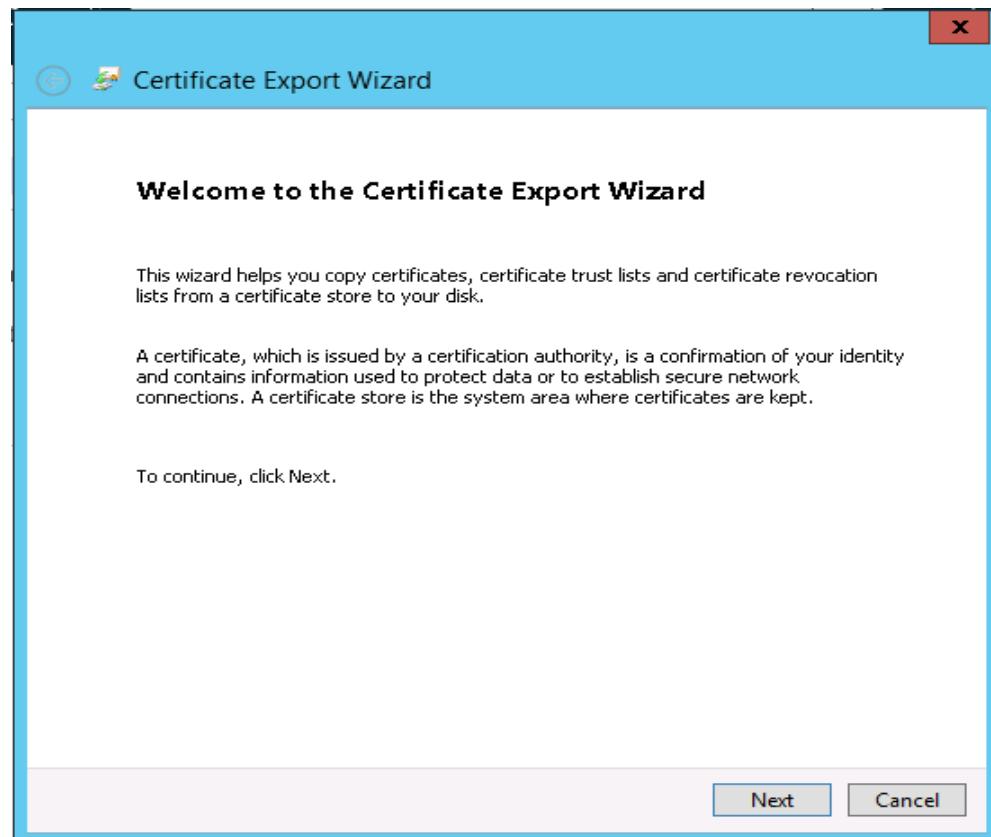
**Figure 3-27 Details**



5. Click **Copy to File....**

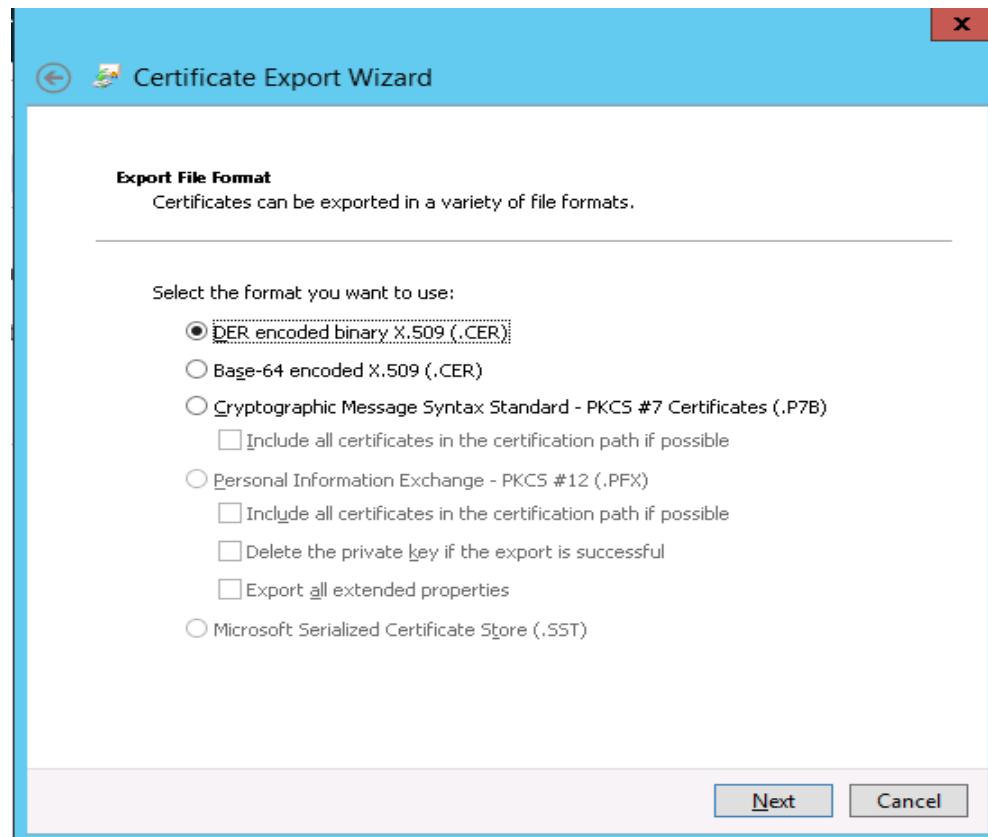
The **Certificate Export Wizard** is displayed, as shown in [Figure 3-28](#).

**Figure 3-28** Certificate Export Wizard



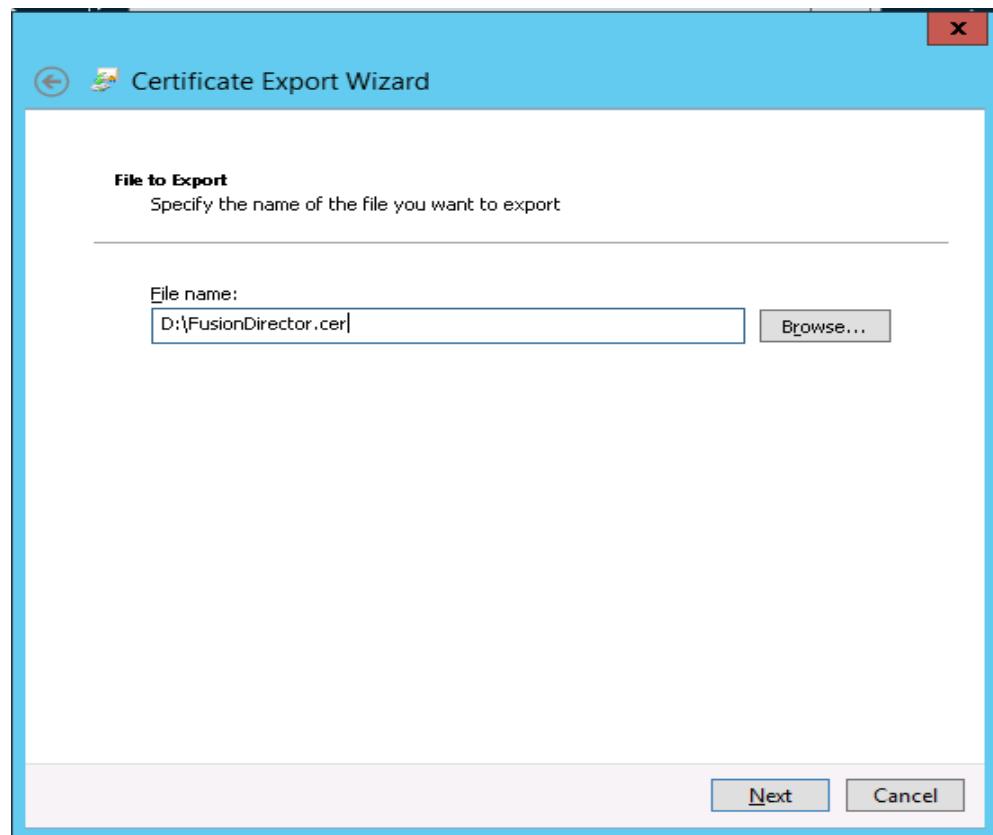
6. Click **Next**. In the **Certificate Export Wizard** dialog box, select **DER encoding binary X.509 (.CER)**, as shown in [Figure 3-29](#).

**Figure 3-29** Setting the format of files to be exported



7. Click **Next**. In the **Certificate Export Wizard** dialog box, click **Browse...**, select the certificate export path, and enter the certificate file name, as shown in [Figure 3-30](#).

**Figure 3-30** Service certificate

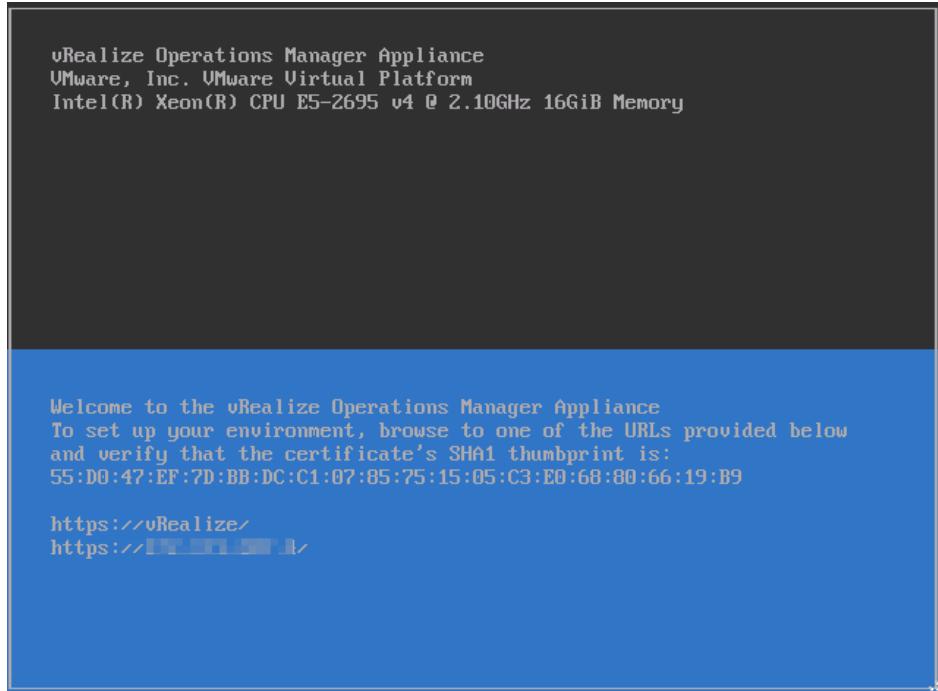


8. Click **Next** to complete certificate export.

**Step 7** (Optional) Import the certificate file to the vROps backend.

1. Configure the SSH access permission for the vROps.
  - a. The vROps backend is displayed, as shown in [Figure 3-31](#).

Figure 3-31 vROps backend



- b. Press **Alt+F1** and enter the username and password to log in to the vROps, as shown in [Figure 3-32](#).

NOTE

- The username is **root** and the initial password is blank.
- When you log in for the first time, you need to change the initial password, press **Enter**, enter previous and new passwords, and confirm the new password. The new password must contain uppercase letters, lowercase letters, digits, and special characters.

Figure 3-32 Logging in to the vROps

```
vRealize Operations Manager Appliance
vRealize login: root
Password:
vRealize:~ #
```

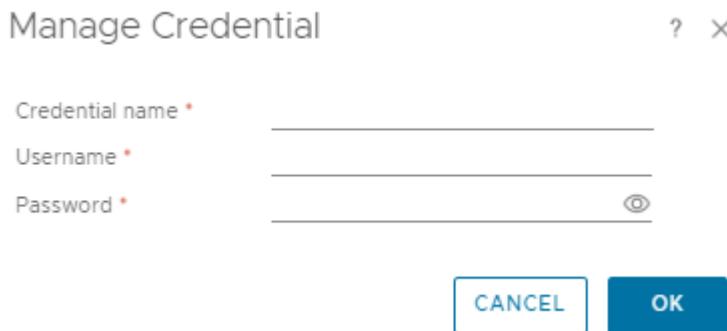
- c. Run the **vi /etc/ssh/sshd\_config** command to edit the configuration file **sshd\_config**.  
Change the value of **MaxSession** to **20** and the value of **AllowTcpForwarding** to **yes**.
- d. Run the **service sshd start** command to start the SSHD service.
- e. Run the **chkconfig sshd on** command to enable the SSHD service.
- f. Run the **service vmware-vcops-firewall stop** command to disable the firewall.
- g. Run the **chkconfig vmware-vcops-firewall off** command to disable the firewall upon startup.

2. Use the SSH tool to upload the certificate file to **/usr/lib/vmware-vcops/user/plugins/inbound**.
3. Enter the SSL certificate path **/usr/lib/vmware-vcops/user/plugins/inbound/FusionDirector.crt** in **Step 5**.

**Step 8** In the **Credential** field, click .

The **Manage Credentials** dialog box is displayed, as shown in [Figure 3-33](#).

**Figure 3-33** Manage Credentials



**Step 9** Set the following parameters and click **OK**.

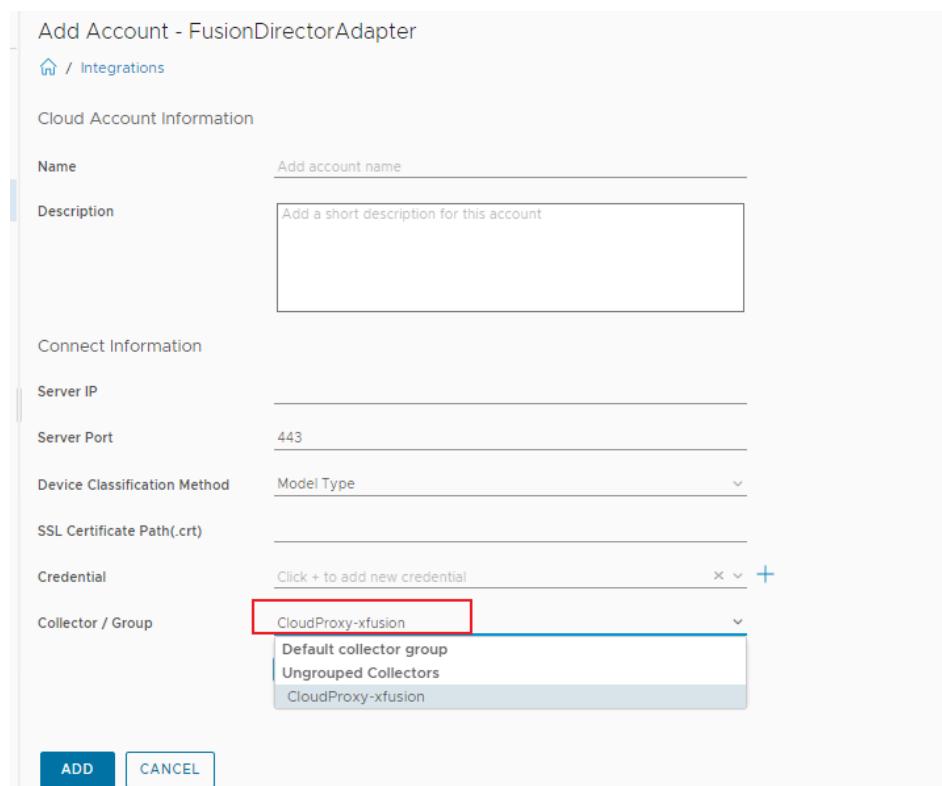
- **Credential name:** user-defined name to identify different credentials
- **Username:** FusionDirector username to access the Redfish API. The default username is **rootRedfish**.
- **Password:** FusionDirector password to access the Redfish API. The default password is **Machine@123**.

**Step 10** In **Collector/Group** select the collector/group generated when configuring the cloud proxy in [2.1.3 Installing the vROps plug-in for versions SaaS](#).

 **NOTE**

When configuring the cloud proxy, you can customize the collector/group name, usually named CloudProxy-xxx.

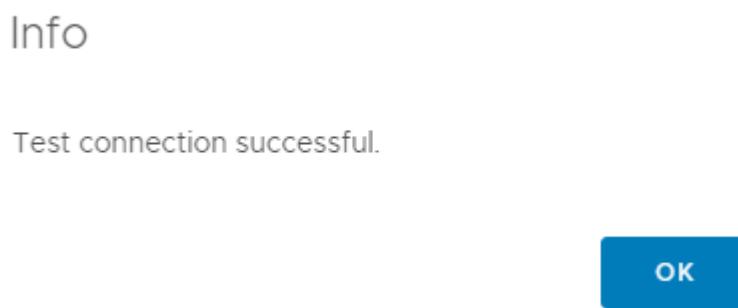
**Figure 3-34 Collector/Group**



**Step 11 Click VALIDATE CONNECTION.**

If the test connection is successful, a dialog box is displayed, as shown in [Figure 3-35](#). Click **OK**. If the test connection fails, the failure cause is displayed. Modify the FusionDirector information as prompted.

**Figure 3-35 Successful test connection**

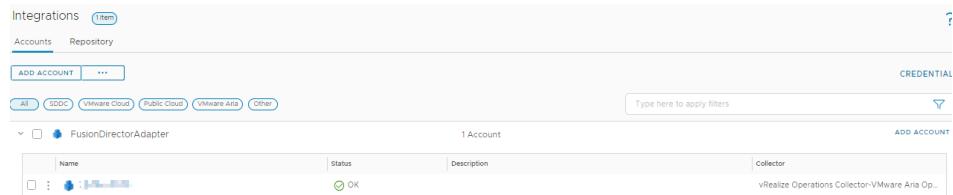


**Step 12 Click ADD.**

The FusionDirector instance is added.

On the **Accounts** page, view the added FusionDirector instance, as shown in [Figure 3-36](#).

**Figure 3-36** Viewing the added account



----End

## 3.2 Modifying FusionDirector

### 3.2.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Administration**.

The **Administration** page is displayed.

**Step 2** In the navigation tree on the left, choose **Other Accounts**.

The **Other Accounts** page is displayed, as shown in [Figure 3-37](#).

**Figure 3-37** Other Accounts

Other Accounts			
4 items			
ADD ACCOUNT		All Filters Quick filter	
Name	Status	Description	Collector
... 2215	⚠ Warning		vRealize Operations Man...
... 2219	✓ OK		vRealize Operations Man...
... FD for vROps	✓ OK		vRealize Operations Man...
... FD for vROps2	⚠ Warning		vRealize Operations Man...

**Step 3** Click the name of the FusionDirector instance to be modified, for example, **FD for vROps**.

The FusionDirector information page is displayed, as shown in [Figure 3-38](#).

**Figure 3-38** FusionDirector information page

FD for vROps

Cloud Account Information

Name	FD for vROps
Description	Add a short description for this account

Connect Information

Server IP	[REDACTED]
Server Port	443
Device Classification Method	Model Type
SSL Certificate Path(.crt)	[REDACTED]
Credential	FD 212 <span style="float: right;">x ▾ + ⚒</span>
Collector / Group	Default collector group <span style="float: right;">▼</span>

**VALIDATE CONNECTION**

**SAVE** **CANCEL**

**Step 4** Modify the following parameters as required:

- **Display name:** user-defined name to identify different FusionDirector instances
- **Description:** (optional) user-defined description to describe a FusionDirector instance
- **Server IP:** FusionDirector IP address
- **Server Port:** FusionDirector port number, which is **443** by default.
- **Device Classification Method:** way to classify servers
  - **Model Type:** classify servers by type
  - **Group Type:** classify servers by group
- **SSL Certificate Path(.crt):** (optional) path of the certificate in the vROps
- **Credential:** Click  to change the credential name, username, and password.

 NOTE

If the FusionDirector port number, username, or password is changed after the FusionDirector connection, you need to synchronize the new port number, user name, or password to the FusionDirector. Otherwise, server management is affected.

**Step 5** Check whether the information in the **Connect Information** area is modified.

- If yes, click **VALIDATE CONNECTION**.  
If the test connection is successful, a dialog box is displayed. Click **OK**. If the test connection fails, the failure cause is displayed. Modify the FusionDirector information as prompted.
- If no, go to **Step 6**.

**Step 6** Click **SAVE**.

The **Other Accounts** page is displayed. You can view the modified FusionDirector information.

----End

### 3.2.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Data Sources > Integrations**.

The **Integrations** page is displayed.

**Step 2** In the **Integrations** page, choose **Accounts**.

The **Accounts** page is displayed.

**Step 3** Click .

The account list is displayed.

**Step 4** Click the name of the FusionDirector instance to be modified, for example, **FD for vROps**.

The FusionDirector information page is displayed, as shown in [Figure 3-39](#).

**Figure 3-39** FusionDirector information page

The screenshot shows the 'FD for vROps' configuration page. It is divided into two main sections: 'Cloud Account Information' and 'Connect Information'. In the 'Cloud Account Information' section, the 'Name' is set to 'FD for vROps' and the 'Description' field contains the placeholder 'Add a short description for this account'. In the 'Connect Information' section, the 'Server IP' field is blurred, 'Server Port' is set to '443', 'Device Classification Method' is set to 'Model Type', 'SSL Certificate Path(.crt)' is empty, 'Credential' is set to 'FD 212' with a '+' icon for adding more, and 'Collector / Group' is set to 'Default collector group'. At the bottom right of the form is a 'VALIDATE CONNECTION' button. At the very bottom are 'SAVE' and 'CANCEL' buttons.

Cloud Account Information	
Name	FD for vROps
Description	Add a short description for this account

Connect Information	
Server IP	[REDACTED]
Server Port	443
Device Classification Method	Model Type
SSL Certificate Path(.crt)	[REDACTED]
Credential	FD 212 <span>x</span> <span>+</span> <span>edit</span>
Collector / Group	Default collector group

**VALIDATE CONNECTION**

**SAVE** **CANCEL**

**Step 5** Modify the following parameters as required:

- **Display name:** user-defined name to identify different FusionDirector instances

- **Description:** (optional) user-defined description to describe a FusionDirector instance
- **Server IP:** FusionDirector IP address
- **Server Port:** FusionDirector port number, which is **443** by default.
- **Device Classification Method:** way to classify servers
  - **Model Type:** classify servers by type
  - **Group Type:** classify servers by group
- **SSL Certificate Path(.crt):** (optional) path of the certificate in the vROps
- **Credential:** Click  to change the credential name, username, and password.

 NOTE

If the FusionDirector port number, username, or password is changed after the FusionDirector connection, you need to synchronize the new port number, user name, or password to the FusionDirector. Otherwise, server management is affected.

**Step 6** Check whether the information in the **Connect Information** area is modified.

- If yes, click **VALIDATE CONNECTION**.  
If the test connection is successful, a dialog box is displayed. Click **OK**. If the test connection fails, the failure cause is displayed. Modify the FusionDirector information as prompted.
- If no, go to **Step 6**.

**Step 7** Click **SAVE**.

The **Other Accounts** page is displayed. You can view the modified FusionDirector information.

---End

## 3.3 Deleting FusionDirector

### 3.3.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Administration**.

The **Administration** page is displayed.

**Step 2** In the navigation tree on the left, choose **Other Accounts**.

The **Other Accounts** page is displayed, as shown in [Figure 3-40](#).

**Figure 3-40** Other Accounts

Name	Status	Description	Collector
:  221.5	 Warning		vRealize Operations Man...
:  221.9	 OK		vRealize Operations Man...
:  FD for vROps	 OK		vRealize Operations Man...
:  FD for VROps2	 Warning		vRealize Operations Man...

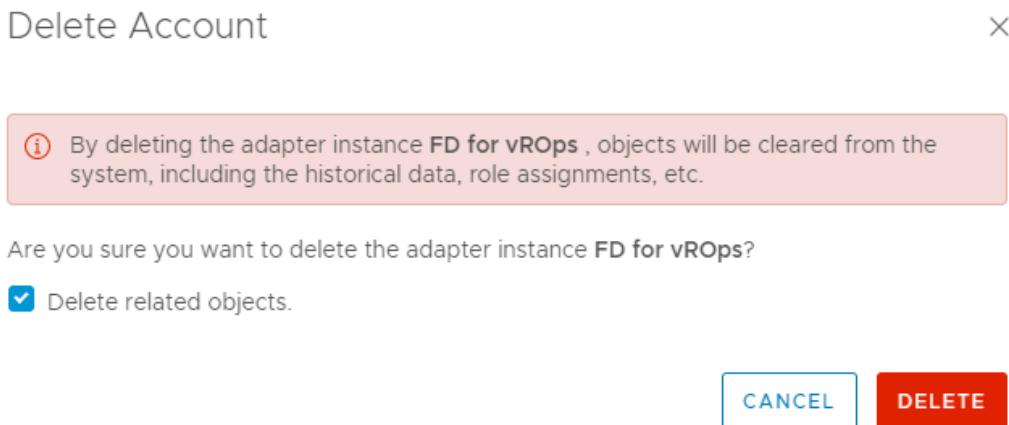
**Step 3** Click  next to the name of the FusionDirector instance to be deleted.

The operation selection list is displayed.

**Step 4** Click **Delete**.

A confirmation dialog box is displayed, as shown in **Figure 3-41**.

**Figure 3-41** Deletion confirmation dialog box



**Step 5** Select **Delete related objects**. (which is selected by default) and click **DELETE**.

The FusionDirector instance is deleted.

----End

### 3.3.2 For the vROps plug-in for version 8.12 and SaaS

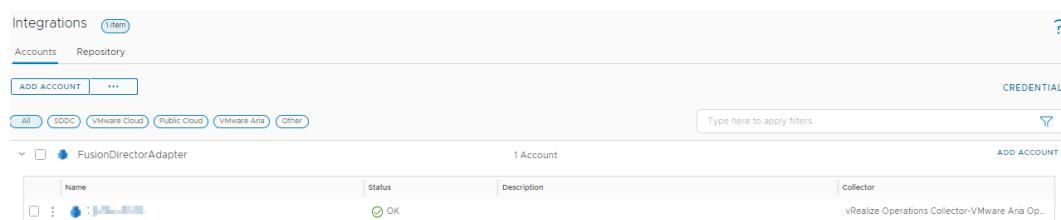
**Step 1** On the vROps WebUI, choose **Data Sources > Integrations**.

The **Integrations** page is displayed.

**Step 2** In the **Integrations** page, choose **Accounts**.

The **Accounts** page is displayed.

**Figure 3-42 Accounts**



The screenshot shows the 'Accounts' page under the 'Integrations' section. At the top left is the title 'Integrations' with a search bar '(Item)' and tabs for 'Accounts' and 'Repository'. Below the tabs are buttons for 'ADD ACCOUNT' and '...'. At the top right are 'CREDENTIAL' and 'ADD ACCOUNT' buttons. A filter bar 'Type here to apply filters' is located at the top right. Below the filter is a table header with columns: Name, Status, Description, and Collector. The table shows one account named 'FusionDirectorAdapter' with status 'OK' and collector 'vRealize Operations Collector-VMware Aria Op...'. There are also buttons for 'Edit' and 'Delete' next to each account row.

**Step 3** Click .

The account list is displayed.

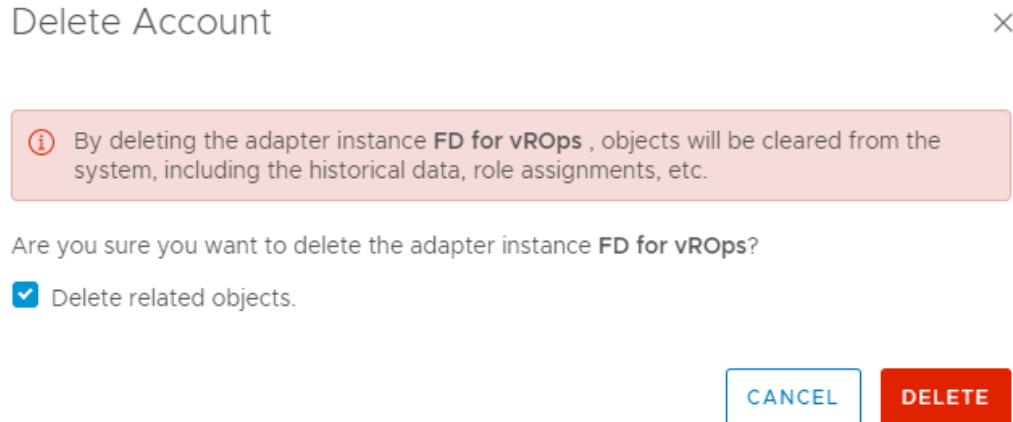
**Step 4** Click  next to the name of the FusionDirector instance to be deleted.

The operation selection list is displayed.

**Step 5 Click Delete.**

A confirmation dialog box is displayed, as shown in [Figure 3-43](#).

**Figure 3-43** Deletion confirmation dialog box



**Step 6 (Optional) Select **Delete related objects**. (which is selected by default) and click **DELETE**.**

The FusionDirector instance is deleted.

----End

# 4 Querying XFUSION Server Information

---

- [4.1 Querying Servers](#)
- [4.2 Querying Component Information](#)
- [4.3 Querying Component Group Information](#)
- [4.4 Querying Server Information](#)
- [4.5 Querying Server Type Information](#)
- [4.6 Querying the FusionDirector Information](#)

## 4.1 Querying Servers

### 4.1.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

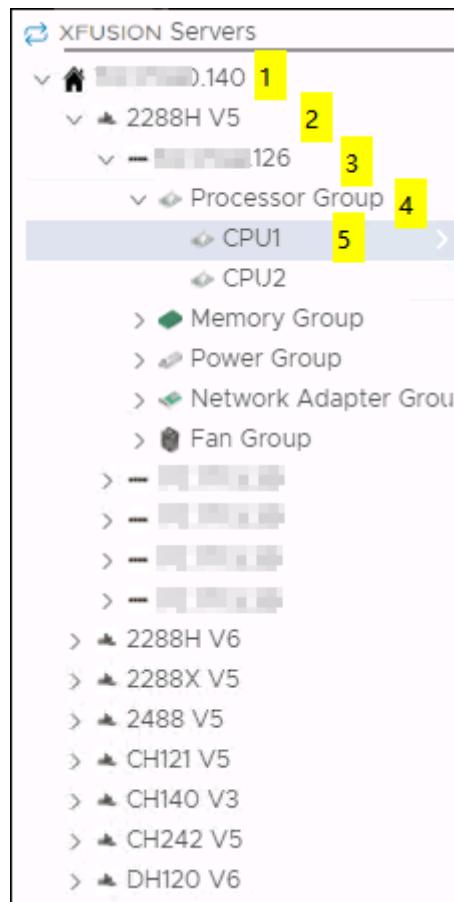
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

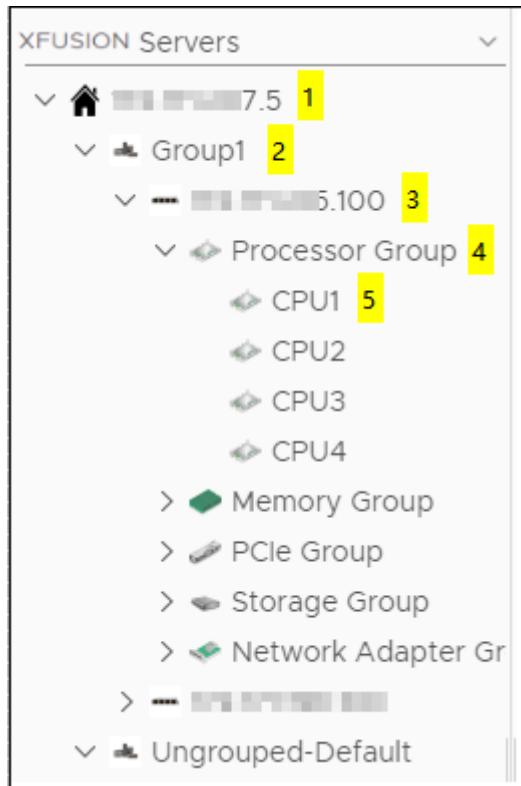
**Step 3** In the navigation pane, view the list of all servers, as shown in [Figure 4-1](#) and [Figure 4-2](#).

**Figure 4-1 XFUSION servers by Model Type**



- 1: FusionDirector IP address
- 2: Server model
- 3: Server label and iBMC IP address. If no label is set for the server, only the iBMC IP address is displayed. For details about how to set the server label, see the [FusionDirector Operation Guide](#).
- 4: Component group
- 5: A component

**Figure 4-2 XFUSION servers by Group Type**



- 1: FusionDirector IP address
- 2: Server group name, which can be set in the FusionDirector. For details, see the [FusionDirector Operation Guide](#).
- 3: Server label and iBMC IP address. If no label is set for the server, only the iBMC IP address is displayed. For details about how to set the server label, see the [FusionDirector Operation Guide](#).
- 4: Component type
- 5: A component

----End

## 4.1.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

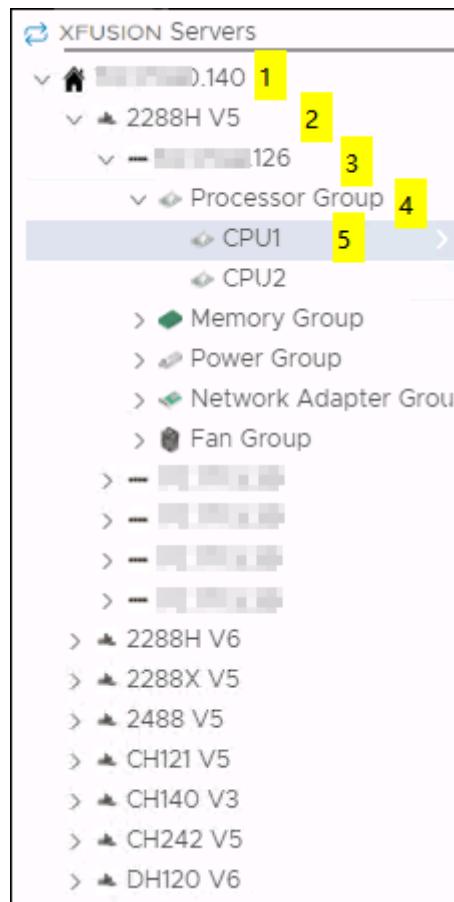
The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

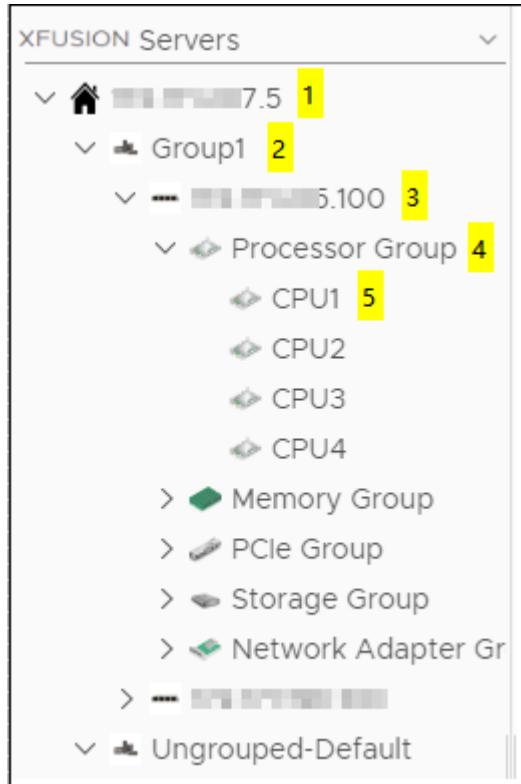
**Step 3** In the page, view the list of all servers, as shown in [Figure 4-3](#) and [Figure 4-4](#).

**Figure 4-3 XFUSION servers by Model Type**



- 1: FusionDirector IP address
- 2: Server model
- 3: Server label and iBMC IP address. If no label is set for the server, only the iBMC IP address is displayed. For details about how to set the server label, see the [FusionDirector Operation Guide](#).
- 4: Component group
- 5: A component

**Figure 4-4 XFUSION servers by Group Type**



- 1: FusionDirector IP address
- 2: Server group name, which can be set in the FusionDirector. For details, see the [FusionDirector Operation Guide](#).
- 3: Server label and iBMC IP address. If no label is set for the server, only the iBMC IP address is displayed. For details about how to set the server label, see the [FusionDirector Operation Guide](#).
- 4: Component type
- 5: A component

----End

## 4.2 Querying Component Information

### 4.2.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, select **Environment**.

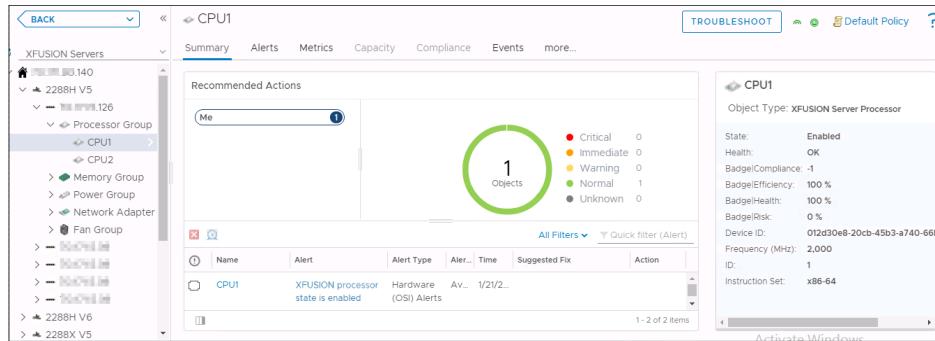
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, a server model (by Group Type), a server, a component group, and a component, as shown in [Figure 4-5](#).

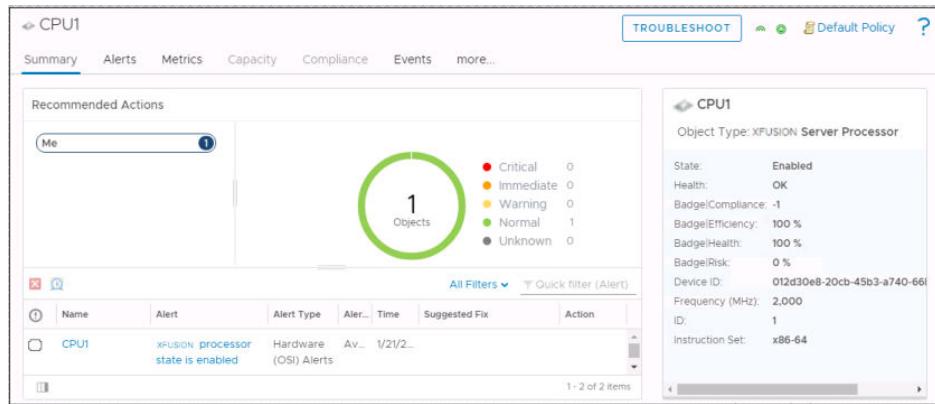
**Figure 4-5 Component information**



#### Step 4 View the summary of the component.

- Click **Summary**.
- The **Summary** page is displayed.
- In the **Recommended Actions** area, view the running status and alarm information about the component, as shown in [Figure 4-6](#).

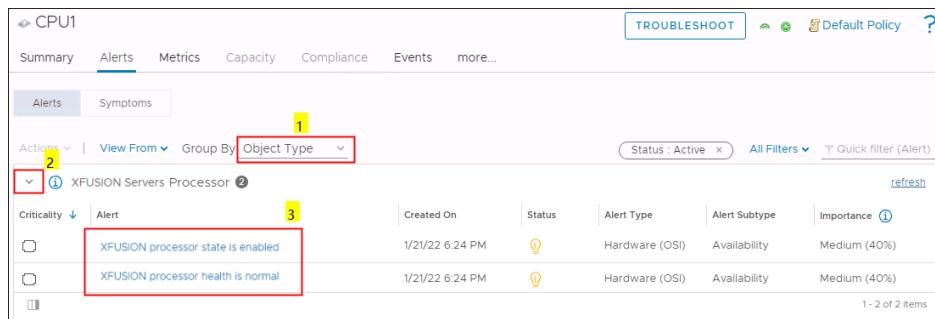
**Figure 4-6 Viewing the summary**



#### Step 5 View warning information of the component.

- Click **Alerts**.
- The **Alerts** page is displayed.
- Select a grouping mode, for example, **Object Type**.
  - Click **>** to expand the warning list.
  - Click a warning name to view details about the warning.

**Figure 4-7 Viewing warning information**



**Step 6** View the real-time status curve of the component.

1. Click **Metrics**.

The **Metrics** page is displayed.

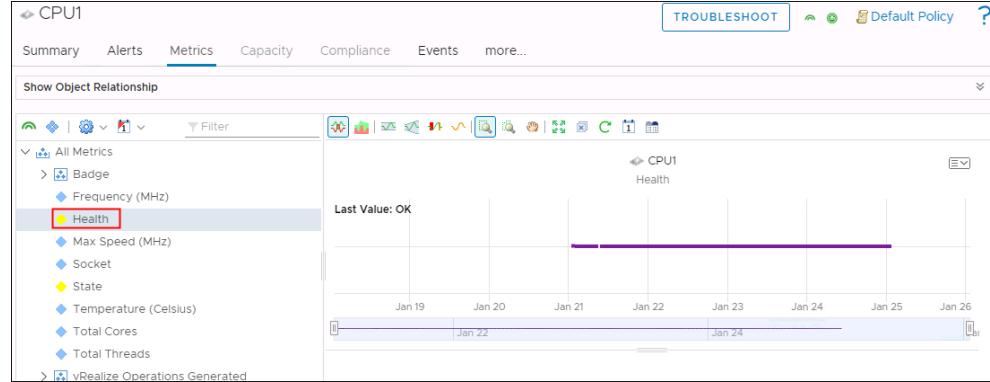
**Figure 4-8 Metrics**



2. Click **>** to expand the information list under **All Metrics** or **All Properties**.
3. Double-click the real-time status information to be viewed. For example, double-click **Health**, as shown in [Figure 4-9](#).

You can view the real-time status curve in the right pane.

**Figure 4-9 Viewing the real-time status curve**



**Step 7** View details about a component view.

1. Click **more > Details**.

The **Details** page is displayed.

2. Select a view.
3. View details about the view.

**Figure 4-10** Viewing details about the view

----End

## 4.2.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, a server model (by Group Type), a server, a component group, and a component, as shown in [Figure 4-11](#).

**Figure 4-11** Component information

**Step 4** View the summary of the component.

1. Click **Summary**.

The **Summary** page is displayed.

2. In the **Recommended Actions** area, view the running status and alarm information about the component, as shown in [Figure 4-13](#).

**Figure 4-12** Viewing the summary

Name	Alert Type	Alert ...	Time	Suggested Fix	Action
PSU1	Hardware (OSI) Alerts	XFUSION power health is normal	Ava...	9/21/2...	
PSU1	Hardware (OSI) Alerts	XFUSION power state is enabled	Ava...	9/21/2...	

**PSU1**  
Object Type: XFUSION Server Power  
State: Enabled  
Health: OK  
Active Standby: Active  
Badge/Compliance: -1  
Badge/Efficiency: 100 %  
Badge/Health: 100 %  
Badge/Risk: 0 %  
Device Locator: PSU1  
Firmware Version: DC.111 PFC.111  
Manufacturer: HUAWEI

**Step 5** View warning information of the component.

1. Click **Alerts**.  
The **Alerts** page is displayed.
2. Select a grouping mode, for example, **Object Type**.
3. Click **>** to expand the warning list.
4. Click a warning name to view details about the warning.

**Figure 4-13** Viewing warning information

Criticality	Alert	Created On	Status	Alert Type	Alert Subtype	Importance
Medium	XFUSION power health is normal	9/21/23 7:25 PM	OK	Hardware (OSI)	Availability	Medium (40%)
Medium	XFUSION power state is enabled	9/21/23 7:25 PM	OK	Hardware (OSI)	Availability	Medium (40%)

**Step 6** View the real-time status curve of the component.

1. Click **Metrics**.  
The **Metrics** page is displayed.

**Figure 4-14** Metrics

Show Object Relationship

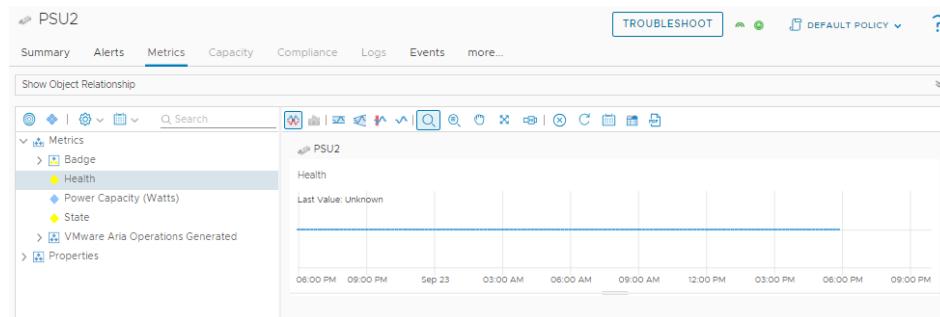
Metrics Properties

Double click on a metric or property from the left to view here.

2. Click to expand the information list under **All Metrics or All Properties**.
3. Double-click the real-time status information to be viewed. For example, double-click **Health**.

You can view the real-time status curve in the right pane.

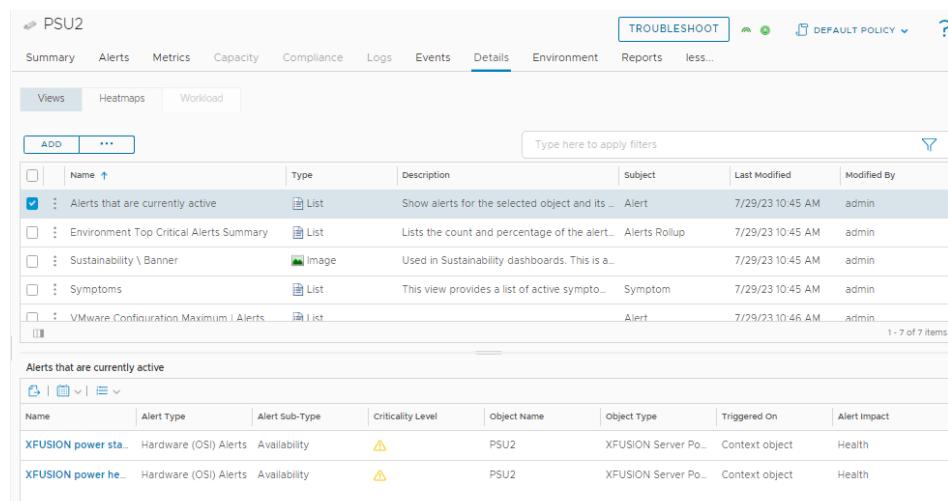
**Figure 4-15** Viewing the real-time status curve



#### Step 7 View details about a component view.

1. Click **more > Details**.  
The **Details** page is displayed.
2. Select a view.
3. View details about the view.

**Figure 4-16** Viewing details about the view



----End

## 4.3 Querying Component Group Information

### 4.3.1 For the vROps plug-in for versions 8.1 or earlier

#### Step 1 On the vROps WebUI, choose **Environment**.

The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, a server model (by **Group Type**), a server, and a component group, as shown in [Figure 4-17](#).

**Figure 4-17** Component group information

Name	Alert Type	Alert Sub-Type	Criticality Level	Object Name	Object Type	Triggered On	Alert Impact	Start Time
xfusion enclosure f...	Hardware (OS) Alerts	Availability	Info	Fan1	XFUSION Enclosure F...	Context object	Health	1/24/22 10:55 PM
xfusion enclosure f...	Hardware (OS) Alerts	Availability	Info	Fan1	XFUSION Enclosure F...	Context object	Health	1/24/22 10:55 PM

**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components in the component group.

----End

### 4.3.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, a server model (by Group Type), a server, a component group, as shown in [Figure 4-18](#).

**Figure 4-18 Component group information**

Name	Type	Description	Subject	Last Modified	Modified By
Alerts that are currently active	List	Show alerts for the selected object and its descendants.	Alert	7/29/23 10:45 AM	admin
Environment Top Critical Alerts Summary	List	Lists the count and percentage of the alerts in the environment.	Alerts Rollup	7/29/23 10:45 AM	admin
Sustainability \ Banner	Image	Used in Sustainability dashboards. This is a...		7/29/23 10:45 AM	admin
Symptoms	List	This view provides a list of active symptoms.	Symptom	7/29/23 10:45 AM	admin
VMware.Configuration.Maximum.J Alerts	List		Alert	7/29/23 10:46 AM	admin

- Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components in the component group.

---End

## 4.4 Querying Server Information

### 4.4.1 For the vROps plug-in for versions 8.1 or earlier

- Step 1** On the vROps WebUI, choose **Environment**.

The **Environment** page is displayed.

- Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

- Step 3** Select a FusionDirector IP address, a server model (by **Group Type**), and a server, as shown in [Figure 4-19](#).

**Figure 4-19** Server information

Name	Alert	Alert Type	Alert S...	Time	Suggested Fix	Action
XFUSION processor group health	Hardware (OS)	Availability	1/21/22...			
XFUSION server state is ready	Hardware (OS)	Availability	1/21/22...			

**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the server.

----End

## 4.4.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

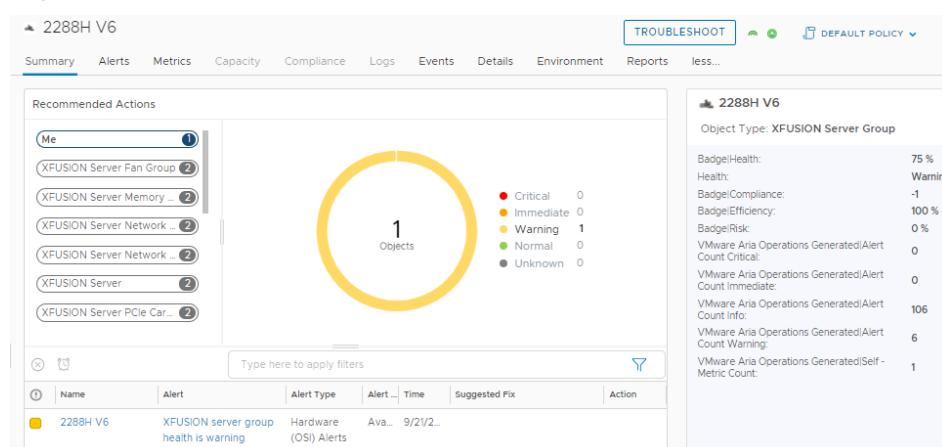
The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, a server model (by **Group Type**), and a server, as shown in [Figure 4-20](#).

**Figure 4-20** Server information



**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the server.

----End

## 4.5 Querying Server Type Information

### 4.5.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

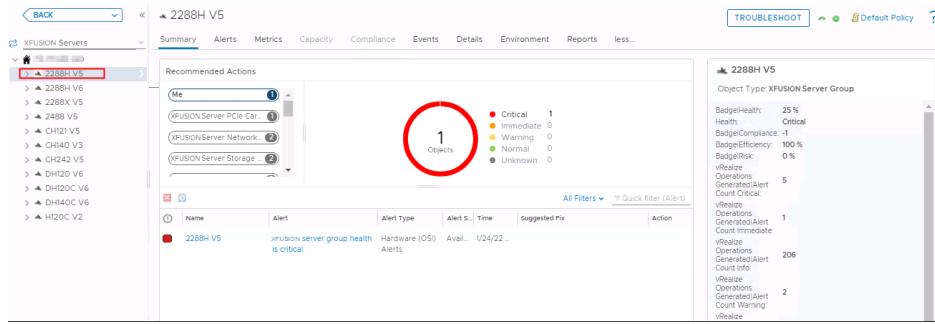
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address and a server model (by Group Type), as shown in [Figure 4-21](#).

**Figure 4-21 Server type**



**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the server type.

----End

## 4.5.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

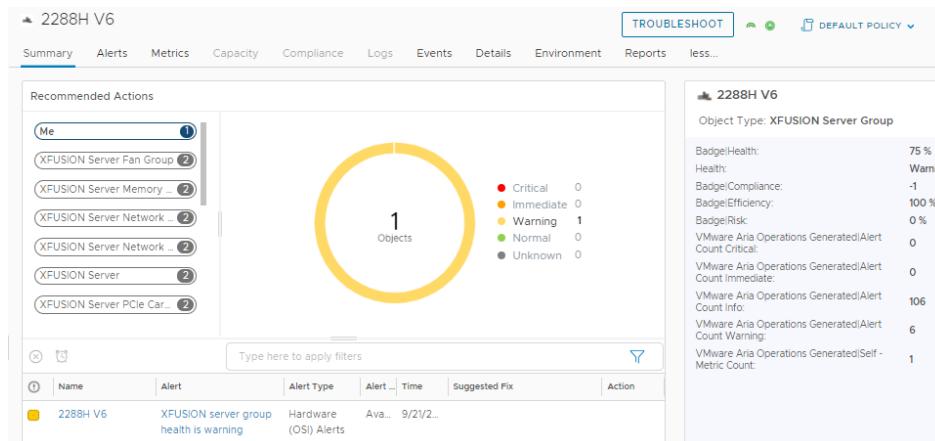
The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address and a server model (by Group Type), as shown in [Figure 4-22](#).

**Figure 4-22 Server type**



**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the server type.

----End

## 4.6 Querying the FusionDirector Information

## 4.6.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

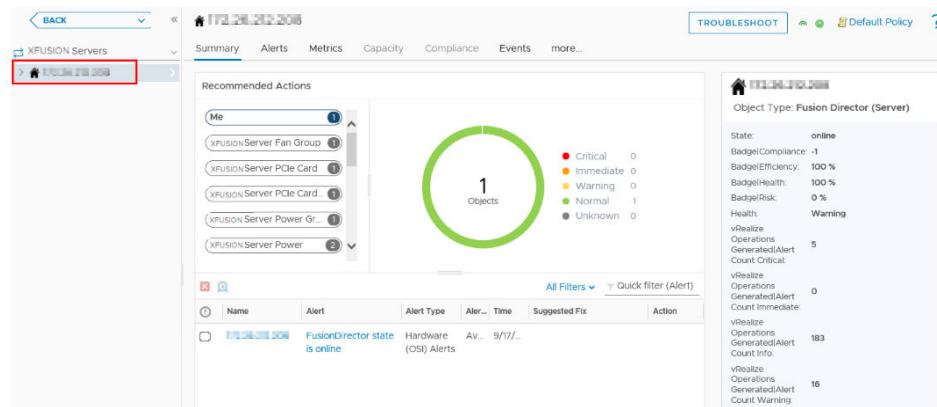
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, as shown in [Figure 4-23](#).

**Figure 4-23** FusionDirector information



**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the FusionDirector instance.

----End

## 4.6.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

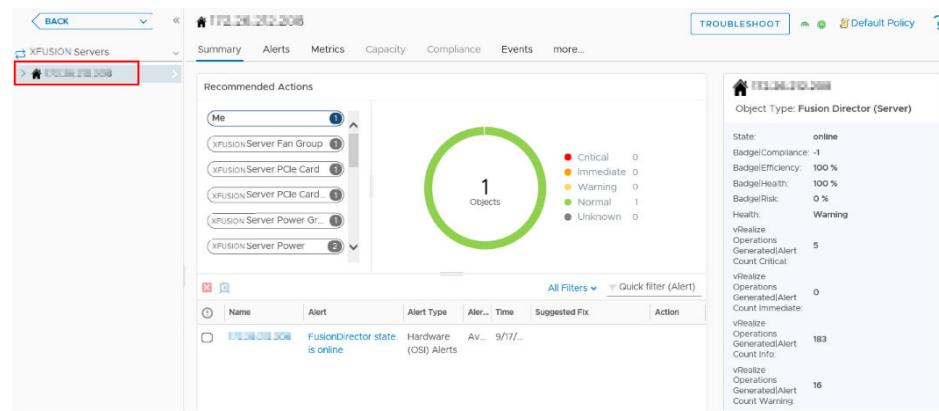
The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Servers**.

The **XFUSION Servers** page is displayed.

**Step 3** Select a FusionDirector IP address, as shown in [Figure 4-24](#).

Figure 4-24 FusionDirector information



**Step 4** See [4.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the FusionDirector instance.

----End

# 5 Querying XFUSION Enclosure Information

- [5.1 Querying Enclosures](#)
- [5.2 Querying Component Information](#)
- [5.3 Querying Component Group Information](#)
- [5.4 Querying Enclosure Information](#)
- [5.5 Querying the FusionDirector Information](#)

## 5.1 Querying Enclosures

### 5.1.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

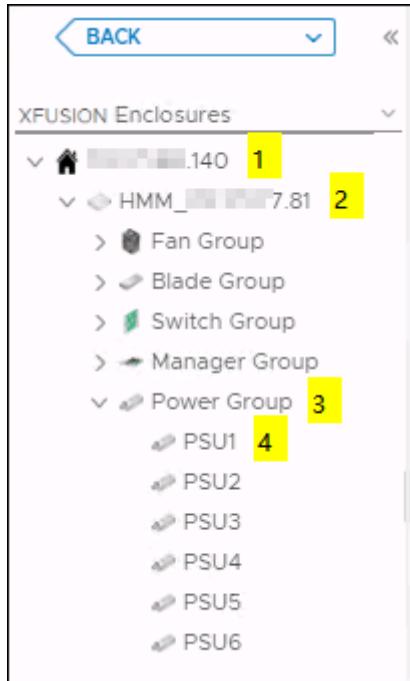
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** In the navigation pane, view the list of all enclosures, as shown in [Figure 5-1](#).

**Figure 5-1** XFUSION enclosures



- 1: FusionDirector IP address
- 2: Enclosure name and iBMC IP address
- 3: Component group
- 4: A component

----End

## 5.1.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

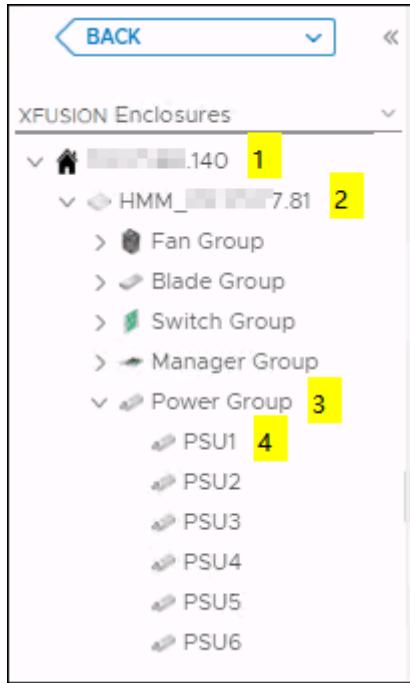
The **Object Browser** page is displayed.

**Step 2** In the page, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** In the page, view the list of all enclosures, as shown in [Figure 5-2](#).

**Figure 5-2** XFUSION enclosures



- 1: FusionDirector IP address
- 2: Enclosure name and iBMC IP address
- 3: Component group
- 4: A component

----End

## 5.2 Querying Component Information

### 5.2.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

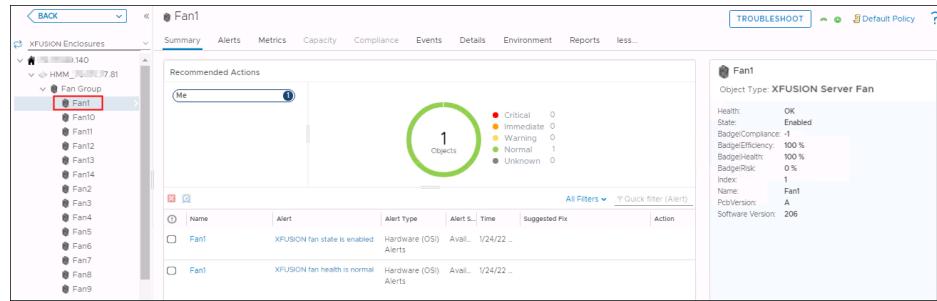
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** Select a FusionDirector IP address, an enclosure, a component group, and a component, as shown in [Figure 5-3](#).

**Figure 5-3 Component information**



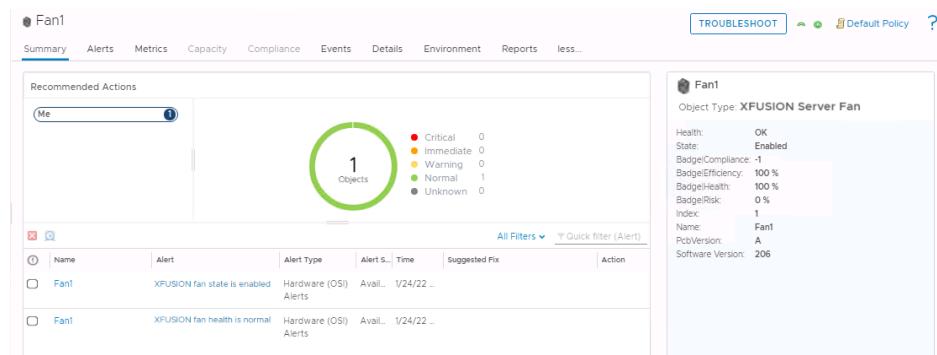
#### Step 4 View the summary of the component.

- Click **Summary**.

The **Summary** page is displayed.

- In the **Recommended Actions** area, view the running status and alarm information about the component, as shown in **Figure 5-4**.

**Figure 5-4 Viewing the summary**



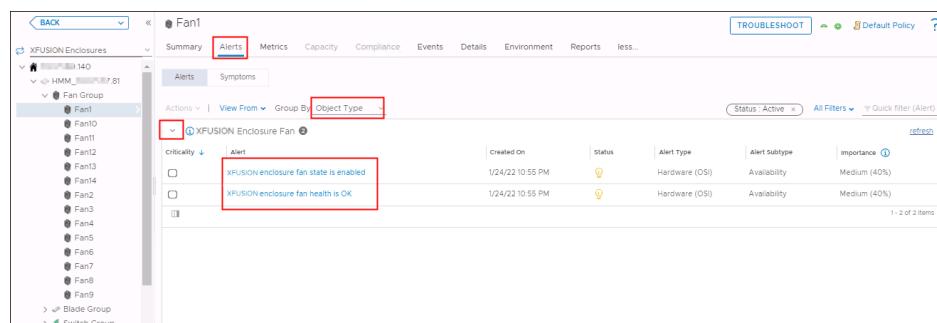
#### Step 5 View warning information of the component.

- Click **Alerts**.

The **Alerts** page is displayed.

- Select a grouping mode, for example, **Object Type**.
- Click **>** to expand the warning list.
- Click a warning name to view details about the warning.

**Figure 5-5 Viewing warning information**

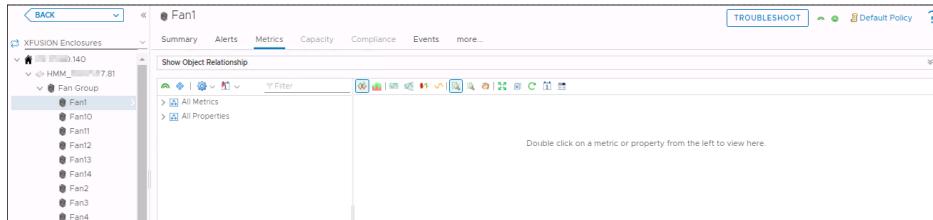


#### Step 6 View the real-time status curve of the component.

1. Click **Metrics**.

The **Metrics** page is displayed.

**Figure 5-6 Metrics**

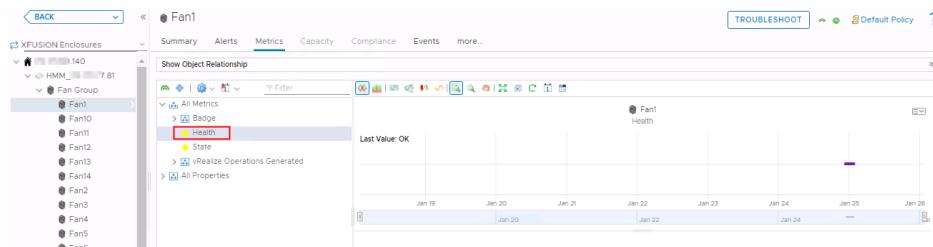


2. Click **>** to expand the information list under **All Metrics** or **All Properties**.

3. Double-click the real-time status information to be viewed. For example, double-click **Health**, as shown in [Figure 5-7](#).

You can view the real-time status curve in the right pane.

**Figure 5-7 Viewing the real-time status curve**



**Step 7** View details about a component view.

1. Click **more > Details**.

The **Details** page is displayed.

2. Select a view.

3. View details about the view.

**Figure 5-8 Viewing details about the view**

Name	Alert Type	Alert Sub-Type	Criticality Level	Object Name	Object Type	Triggered On	Alert Impact	Start Time
xfusion enclosure f...	Hardware (OS) Alerts	Availability	Info	Fan1	XFUSION Enclosure F...	Context object	Health	1/24/22 10:55 PM
xfusion enclosure f...	Hardware (OS) Alerts	Availability	Info	Fan1	XFUSION Enclosure F...	Context object	Health	1/24/22 10:55 PM

----End

## 5.2.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

The **Object Browser** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** Select a FusionDirector IP address, an enclosure, a component group, and a component, as shown in [Figure 5-9](#).

**Figure 5-9** Component information

The screenshot shows the 'Object Browser' on the left with a tree structure: Environments > XFUSION FusionDirector Management Pack > XFUSION Enclosures > Fan Group > Fan1. The main pane displays 'Recommended Actions' for 'Me' (Fan1) with a green circle icon indicating 1 object. A legend shows: Critical (red) 0, Immediate (orange) 0, Warning (yellow) 0, Normal (green) 1, Unknown (grey) 0. Below this is a table of alerts:

Name	Alert	Alert Type	Time	Action
Fan1	XFUSION enclosure fan health is OK	Hardware (OSI) Alerts	Ava... 9/18/2...	
Fan1	XFUSION enclosure fan state is enabled	Hardware (OSI) Alerts	Ava... 9/18/2...	XFUSION enclosure fan state is enabled

On the right, a detailed view for 'Fan1' is shown:

- Object Type:** XFUSION Enclosure Fan
- Health:** OK
- State:** Enabled
- Badge/Compliance:** -1
- Badge/Efficiency:** 100 %
- Badge/Health:** 100 %
- Badge/Risk:** 0 %
- Index:** 1
- Name:** Fan1
- PcbVersion:** A
- Software Version:** 206

**Step 4** View the summary of the component.

1. Click **Summary**.

The **Summary** page is displayed.

2. In the **Recommended Actions** area, view the running status and alarm information about the component, as shown in [Figure 5-10](#).

**Figure 5-10** Viewing the summary

The screenshot shows the 'Summary' tab selected for 'Fan1'. The 'Recommended Actions' section is identical to Figure 5-9. The right panel displays the same component details as Figure 5-9:

- Object Type:** XFUSION Enclosure Fan
- Health:** OK
- State:** Enabled
- Badge/Compliance:** -1
- Badge/Efficiency:** 100 %
- Badge/Health:** 100 %
- Badge/Risk:** 0 %
- Index:** 1
- Name:** Fan1
- PcbVersion:** A
- Software Version:** 206

**Step 5** View warning information of the component.

1. Click **Alerts**.  
The **Alerts** page is displayed.
2. Select a grouping mode, for example, **Object Type**.
3. Click **>** to expand the warning list.
4. Click a warning name to view details about the warning.

**Figure 5-11** Viewing warning information

The screenshot shows the 'Alerts' tab selected in the top navigation bar. The main pane displays a table of alerts for 'Fan1'. There are two entries:

Criticality	Alert	Created On	Status	Alert Type	Alert Subtype	Importance
□	XFUSION enclosure fan health is OK	9/18/23 5:13 PM	🟡	Hardware (OSI)	Availability	Medium (40%)
□	XFUSION enclosure fan state is enabled	9/18/23 5:13 PM	🟡	Hardware (OSI)	Availability	Medium (40%)

At the bottom right of the table, it says '1 - 2 of 2 items'.

#### Step 6 View the real-time status curve of the component.

1. Click **Metrics**.  
The **Metrics** page is displayed.

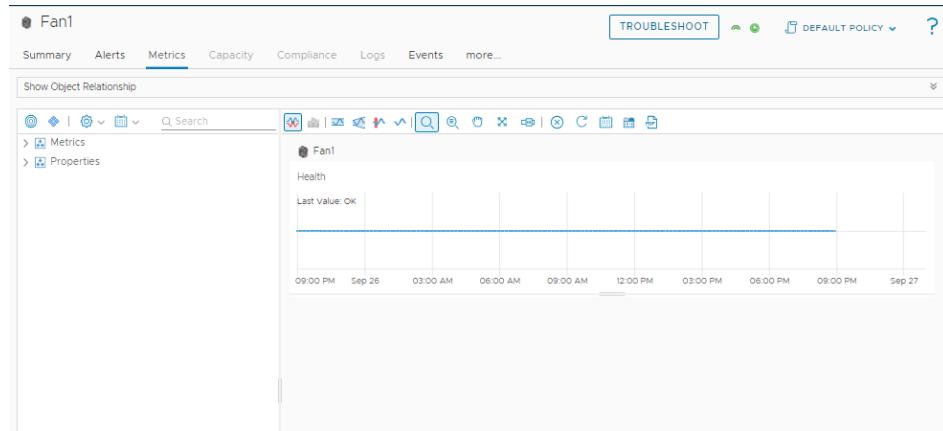
**Figure 5-12** Metrics

The screenshot shows the 'Metrics' tab selected in the top navigation bar. The left sidebar shows a tree structure under 'Metrics': Badge, Health (selected), State, VMware Aria Operations Generated, and Properties. The right pane displays a chart titled 'Fan1' under 'Health'. The chart shows a constant blue line at the 'OK' level, labeled 'Last Value: OK'. The x-axis represents time from 09:00 PM Sep 26 to 09:00 PM Sep 27.

2. Click **>** to expand the information list under **All Metrics** or **All Properties**.
3. Double-click the real-time status information to be viewed. For example, double-click **Health**, as shown in [Figure 5-13](#).

You can view the real-time status curve in the right pane.

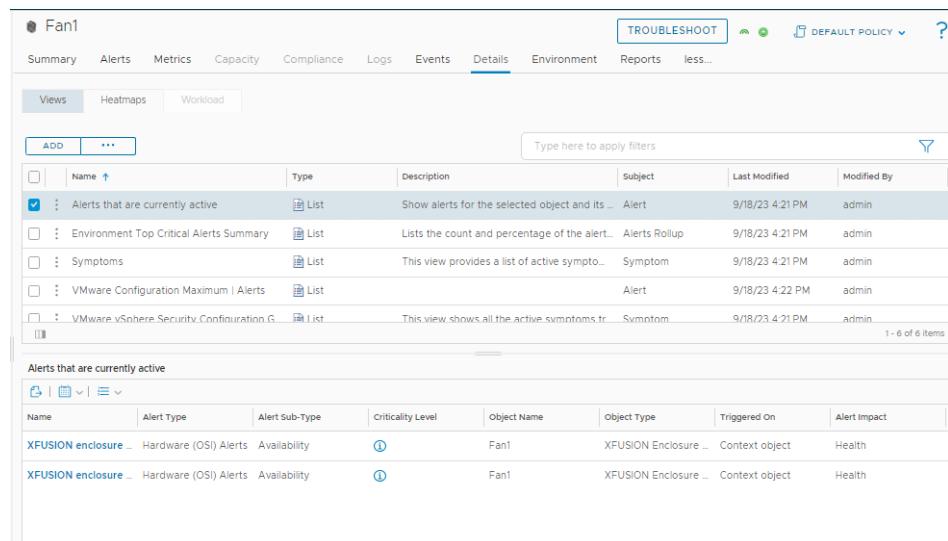
**Figure 5-13** Viewing the real-time status curve



**Step 7** View details about a component view.

1. Click **more > Details**.  
The **Details** page is displayed.
2. Select a view.
3. View details about the view.

**Figure 5-14** Viewing details about the view



----End

## 5.3 Querying Component Group Information

### 5.3.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

- Step 3** Select a FusionDirector IP address, an enclosure, and a component group, as shown in [Figure 5-15](#).

**Figure 5-15** Component group information

The screenshot shows the XFUSION Enclosures page with a navigation pane on the left. In the center, a 'Switch Group' is selected under 'Component Groups'. A summary card displays '1 Objects' with a yellow circle icon. Below it, a table lists a single entry: 'Switch Group' with 'xfusion switch group health' as the alert type and 'Hardware (OS)' as the alert source. On the right, a detailed panel for 'Switch Group' shows various metrics and status counts, including 'BadgeHealth: 75 %' and 'BadgeRisk: 0 %'.

- Step 4** See [5.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components in the component group.

---End

### 5.3.2 For the vROps plug-in for version 8.12 and SaaS

- Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

The **Object Browser** page is displayed.

- Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

- Step 3** Select a FusionDirector IP address, an enclosure, and a component group, as shown in [Figure 5-16](#).

**Figure 5-16** Component group information

The screenshot shows the vROps Object Browser with a navigation pane on the left. In the center, a 'Fan Group' is selected under 'Component Groups'. A summary card displays '1 Objects' with a green circle icon. Below it, a table shows 'No Results Found'. On the right, a detailed panel for 'Fan Group' shows various metrics and status counts, including 'BadgeHealth: 100 %' and 'BadgeRisk: 0 %'.

- Step 4** See [5.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components in the component group.

---End

## 5.4 Querying Enclosure Information

### 5.4.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

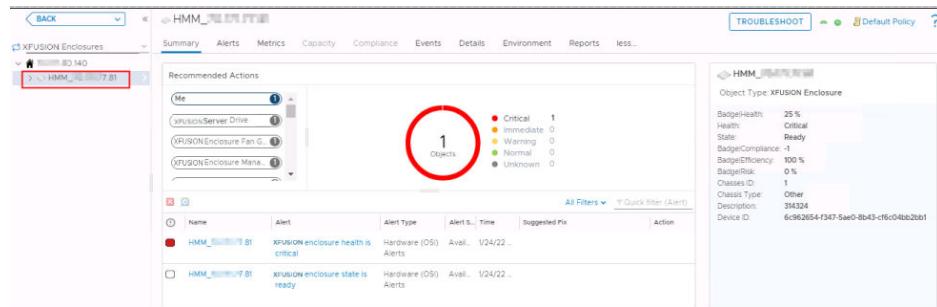
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** Select a FusionDirector IP address and an enclosure, as shown in [Figure 5-17](#).

**Figure 5-17** Enclosure information



**Step 4** See [5.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the enclosure.

----End

### 5.4.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

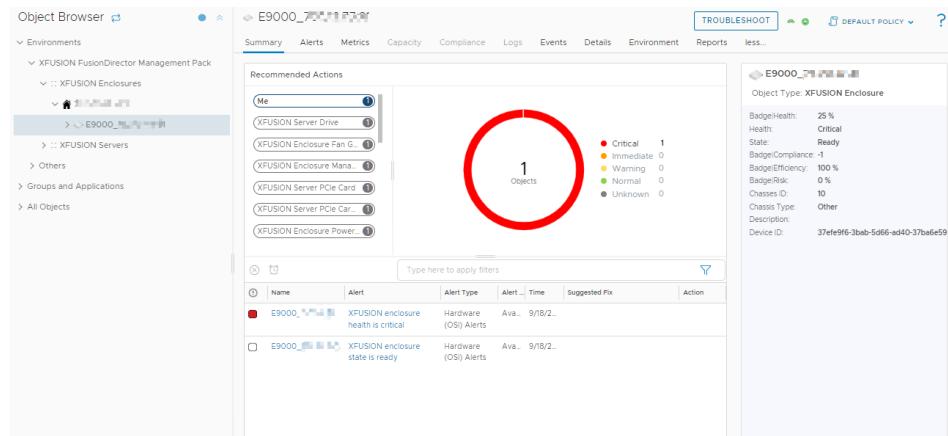
The **Object Browser** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** Select a FusionDirector IP address and an enclosure, as shown in [Figure 5-18](#).

**Figure 5-18** Enclosure information



**Step 4** See [5.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the enclosure.

----End

## 5.5 Querying the FusionDirector Information

### 5.5.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Environment**.

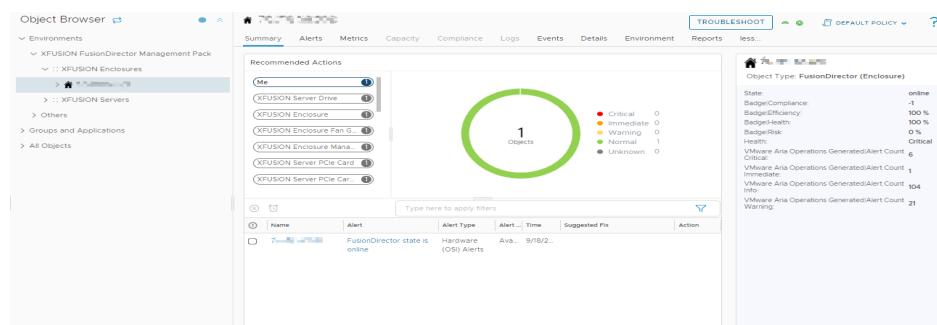
The **Environment** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** Select a FusionDirector IP address, as shown in [Figure 5-19](#).

**Figure 5-19** FusionDirector information



**Step 4** See [5.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the FusionDirector instance.

----End

## 5.5.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Environment > Object Browser**.

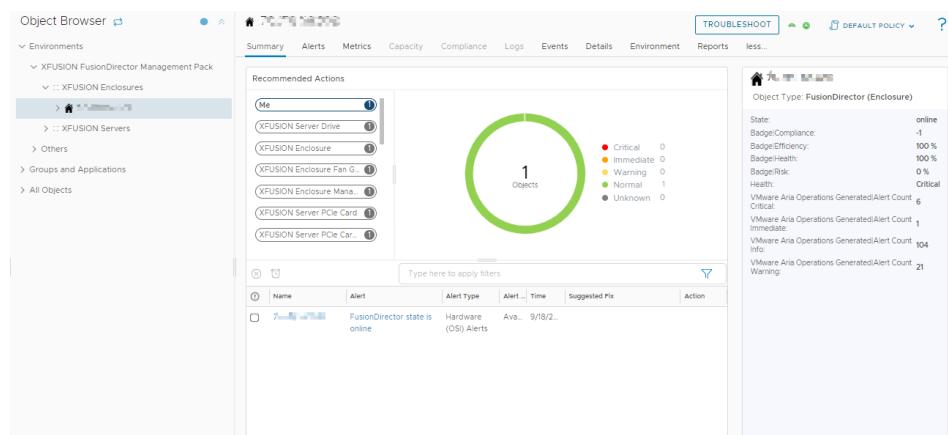
The **Object Browser** page is displayed.

**Step 2** In the navigation pane, choose **XFUSION FusionDirector Management Pack > XFUSION Enclosures**.

The **XFUSION Enclosures** page is displayed.

**Step 3** Select a FusionDirector IP address, as shown in [Figure 5-20](#).

**Figure 5-20** FusionDirector information



**Step 4** See [5.2 Querying Component Information](#) to view the summary, warnings, details, and real-time status curves of all components of the FusionDirector instance.

----End

# 6 Querying Dashboard Information

- [6.1 Querying the FusionDirector Overview Dashboard](#)
- [6.2 Querying XFUSION Servers Overview Dsahborad](#)
- [6.3 Querying XFUSION Servers Detailed Dashboard](#)
- [6.4 Querying XFUSION Enclosure Overview Dashboard](#)
- [6.5 Querying XFUSION Enclosure Detailed Dashboard](#)

## 6.1 Querying the FusionDirector Overview Dashboard

### 6.1.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Dashboards**.

The **Dashboards** page is displayed.

**Step 2** In the navigation pane, choose **Dashboards > Fusion Director Overview Dashboard**.

The **Fusion Director Overview Dashboard** page is displayed.

You can view the FusionDirector name, adapter type, object type, policy, collection state, collection status, server IP address, port, state, FusionDirector version, and classification method, as shown in [Figure 6-1](#).

**Figure 6-1** FusionDirector Overview Dashboard



----End

## 6.1.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Visualize >Dashboards > Manage**.

The **Manage** page is displayed.

**Step 2** In the **Manage** page, choose **Dashboards > Fusion Director Overview Dashboard**.

The **Fusion Director Overview Dashboard** page is displayed.

You can view the FusionDirector name, adapter type, object type, policy, collection state, collection status, server IP address, port, state, FusionDirector version, and classification method, as shown in [Figure 6-2](#).

**Figure 6-2** FusionDirector Overview Dashboard

Name	Adapter Type	Object Type	Policy	Collection State	Collection Status	Server IP	Port	State	Fu
FD208	FusionDirect...	FusionDirect...	Default Policy				443	online	

----End

## 6.2 Querying XFUSION Servers Overview Dsahborad

### 6.2.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Dashboards**.

The **Dashboards** page is displayed.

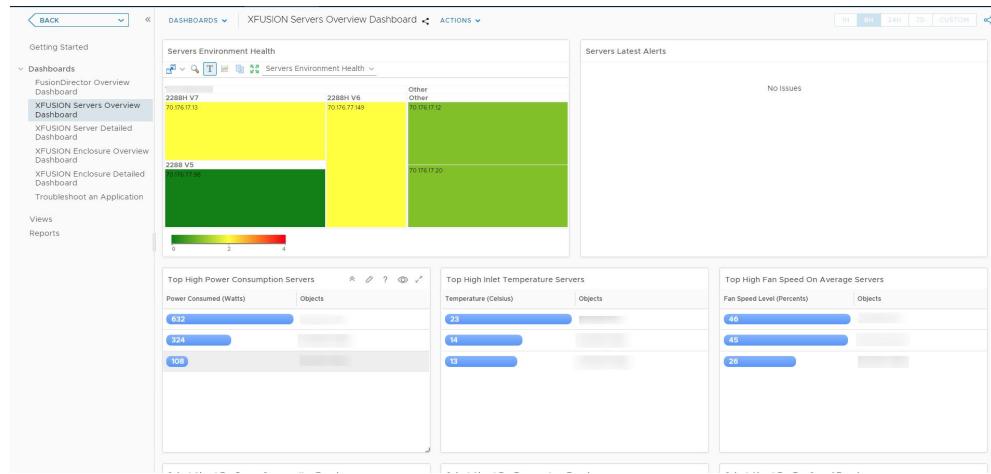
**Step 2** In the navigation pane, choose **Dashboards > XFUSION Servers Overview Dashboard**.

The **XFUSION Servers Overview Dashboard** page is displayed.

You can view the following information, as shown in [Figure 6-3](#).

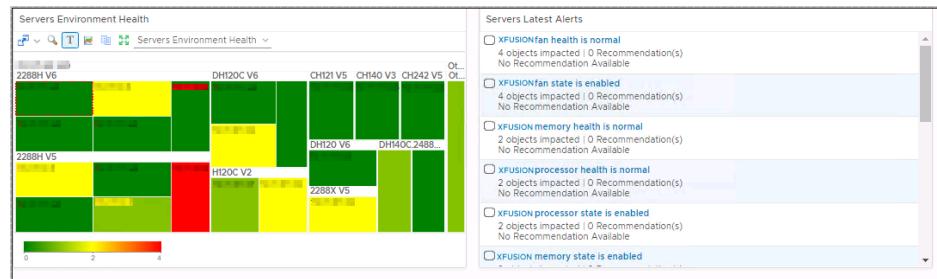
- Servers Environment Health
- Servers Latest Alerts
- Top High Power Consumption Servers
- Top High Inlet Temperature Servers
- Top High Fan Speed On Average Servers
- Select About for Power Consumption Trend
- Select About for Temperature Trend
- Select About for Fan Speed Trend

**Figure 6-3 XFUSION Servers Overview Dashboard**



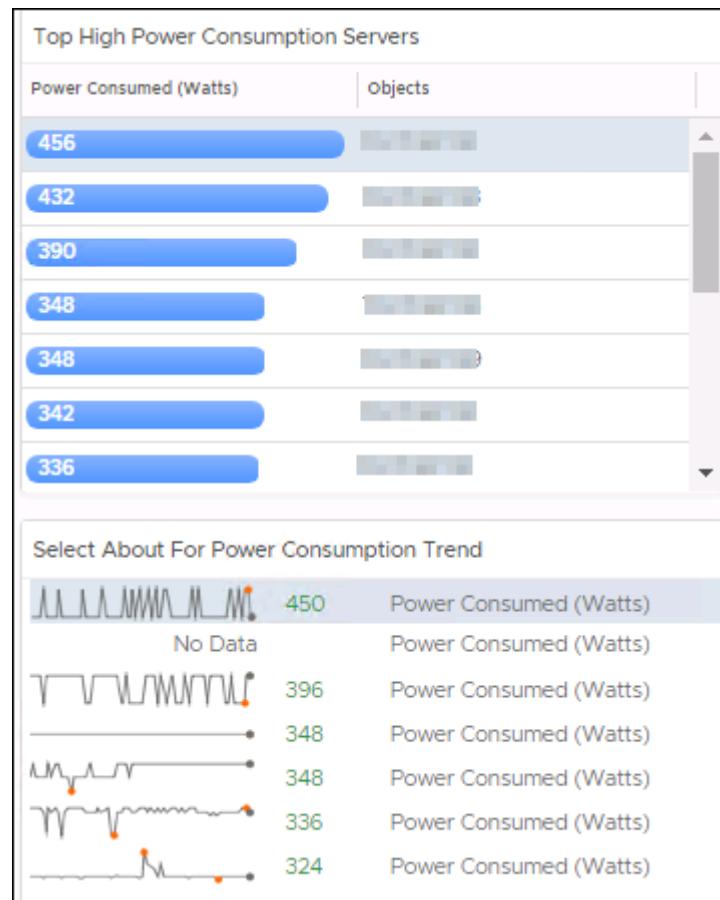
**Step 3** In the **Servers Environment Health** area, select a server. You can view the latest alarms of the server in the **Servers Latest Alerts** area, as shown in [Figure 6-4](#).

**Figure 6-4 XFUSION Servers Latest Alerts**



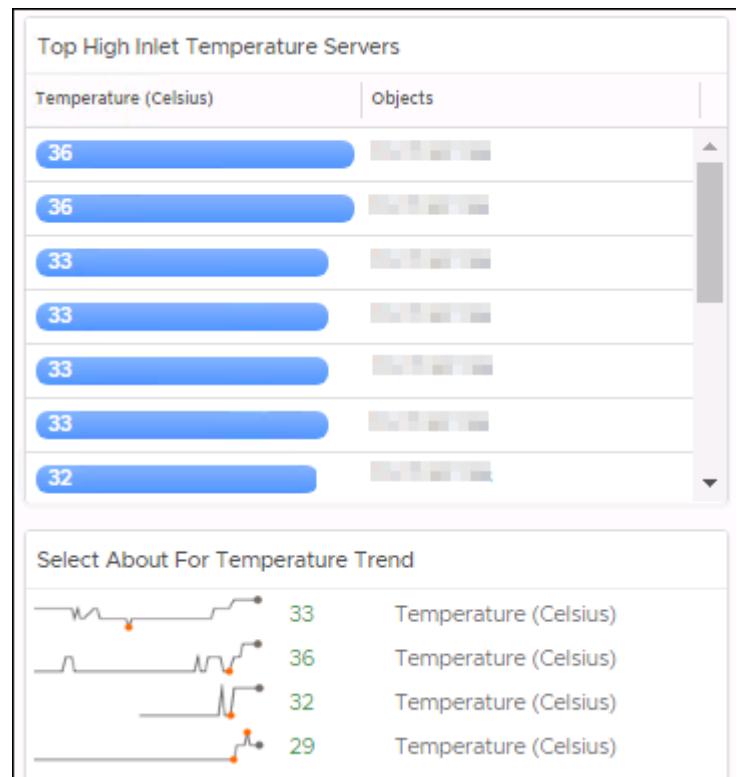
**Step 4** In the **Top High Power Consumption Servers** area, select different servers. You can view power consumption trends of these servers in the **Select About For Power Consumption Trend** area, as shown in [Figure 6-5](#).

**Figure 6-5** Power consumption trend



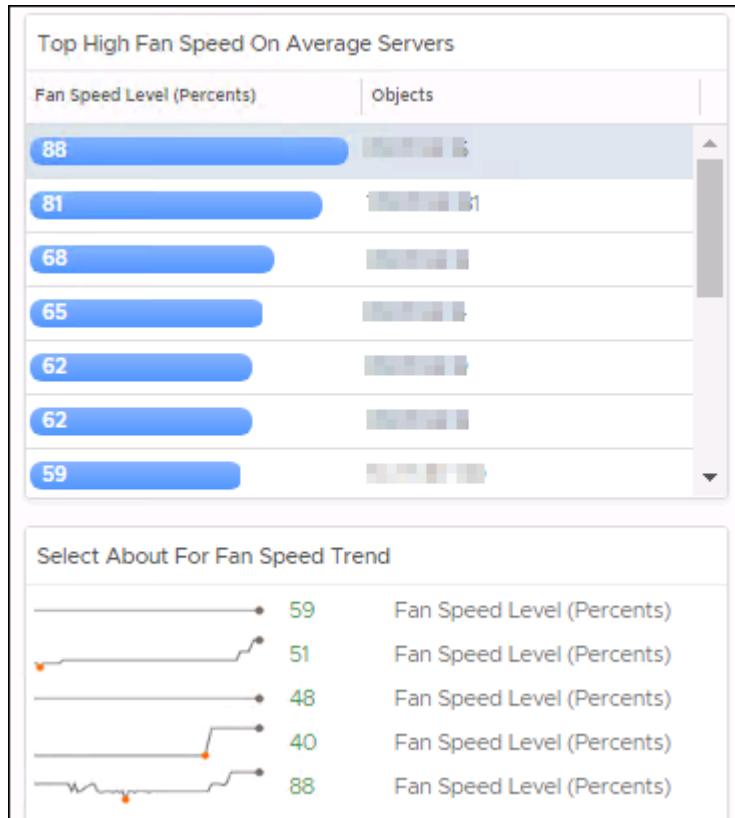
**Step 5** In the **Top High Inlet Temperature Servers** area, select different servers. You can view temperature trends of these servers in the **Select About For Temperature Trend** area, as shown in [Figure 6-6](#).

**Figure 6-6** Temperature trend



**Step 6** In the **Top High Fan Speed On Average Servers** area, select different servers. You can view fan speed trends of these servers in the **Select About For Fan Speed Trend** area, as shown in [Figure 6-7](#).

**Figure 6-7** Fan speed trend



----End

## 6.2.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Visualize >Dashboards > Manage**.

The **Dashboards** page is displayed.

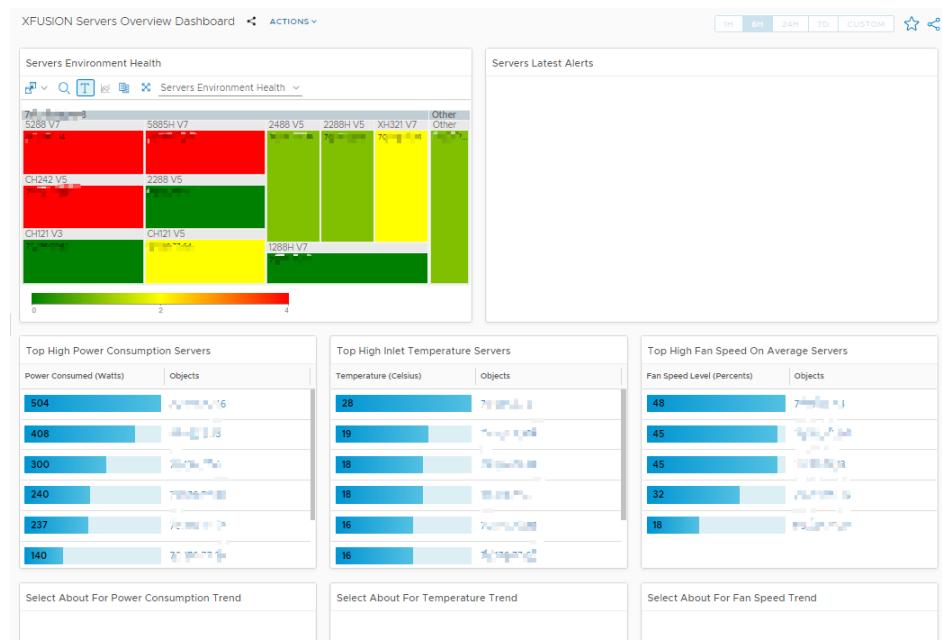
**Step 2** In the **Manage** page, choose **Dashboards > XFUSION Servers Overview Dashboard**.

The **XFUSION Servers Overview Dashboard** page is displayed.

You can view the following information, as shown in **Figure 6-8**.

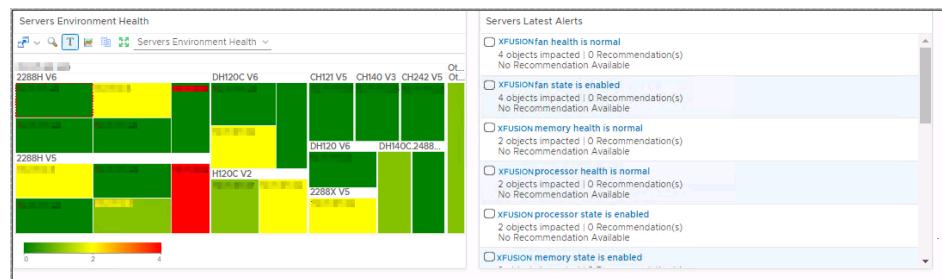
- Servers Environment Health
- Servers Latest Alerts
- Top High Power Consumption Servers
- Top High Inlet Temperature Servers
- Top High Fan Speed On Average Servers
- Select About for Power Consumption Trend
- Select About for Temperature Trend
- Select About for Fan Speed Trend

**Figure 6-8 XFUSION Servers Overview Dashboard**



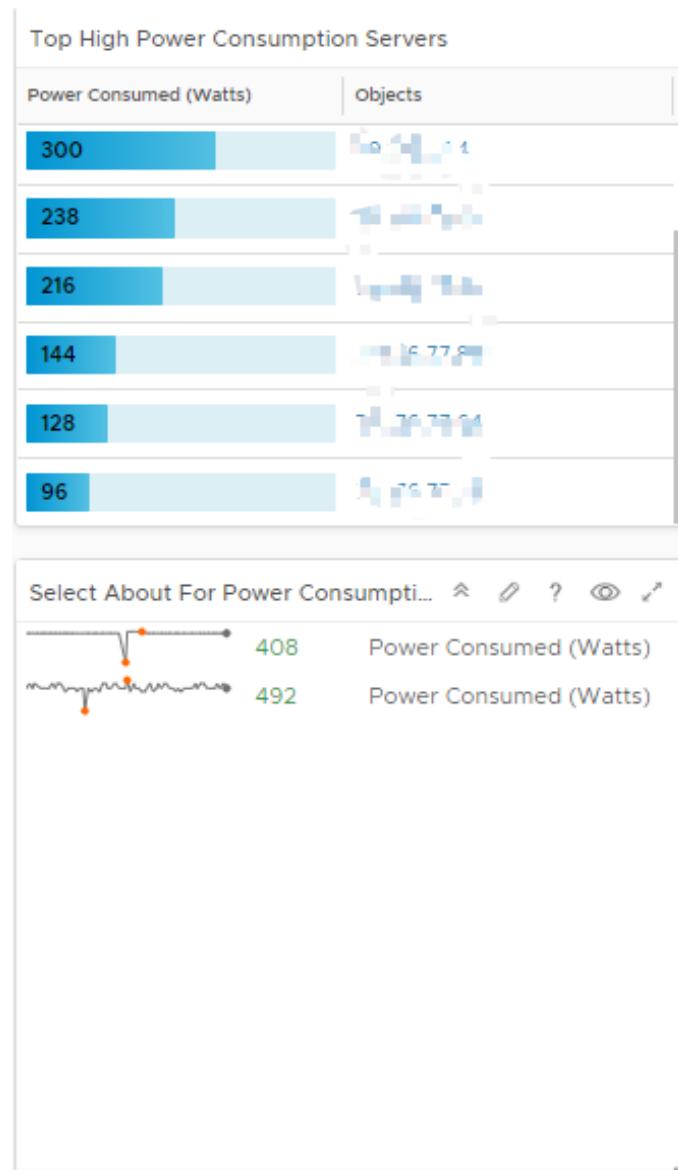
**Step 3** In the **Servers Environment Health** area, select a server. You can view the latest alarms of the server in the **Servers Latest Alerts** area, as shown in [Figure 6-9](#).

**Figure 6-9 XFUSION Servers Latest Alerts**



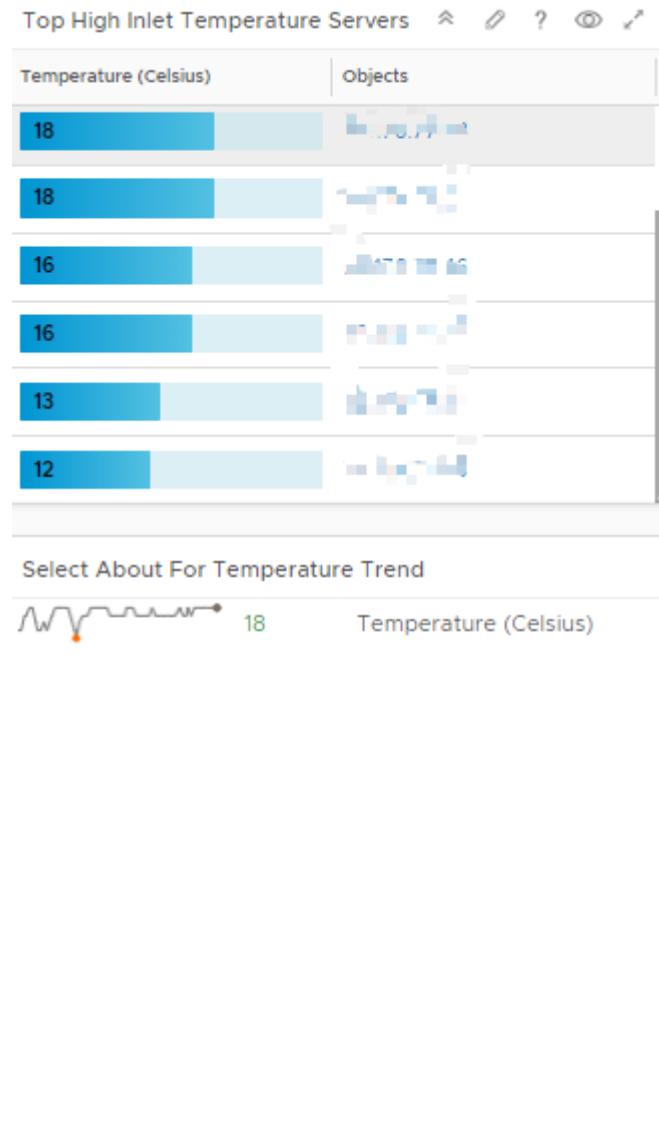
**Step 4** In the **Top High Power Consumption Servers** area, select different servers. You can view power consumption trends of these servers in the **Select About For Power Consumption Trend** area, as shown in [Figure 6-10](#).

**Figure 6-10** Power consumption trend



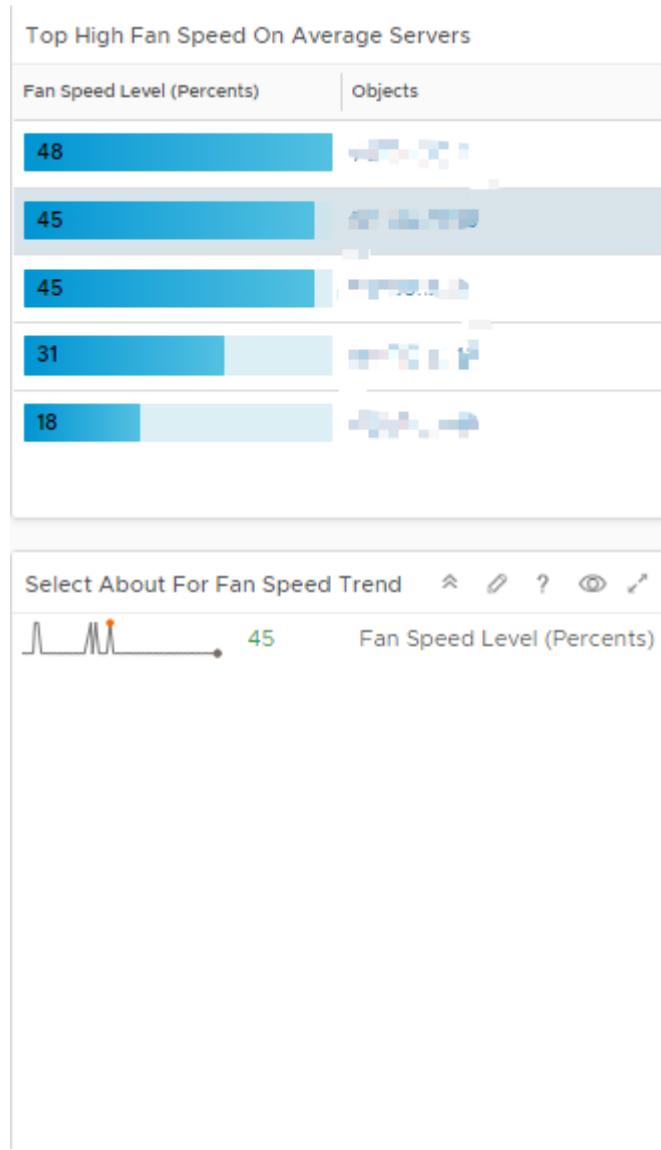
**Step 5** In the **Top High Inlet Temperature Servers** area, select different servers. You can view temperature trends of these servers in the **Select About For Temperature Trend** area, as shown in [Figure 6-11](#).

**Figure 6-11** Temperature trend



**Step 6** In the **Top High Fan Speed On Average Servers** area, select different servers. You can view fan speed trends of these servers in the **Select About For Fan Speed Trend** area, as shown in [Figure 6-12](#).

**Figure 6-12 Fan speed trend**



----End

## 6.3 Querying XFUSION Servers Detailed Dashboard

### 6.3.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Dashboards**.

The **Dashboards** page is displayed.

**Step 2** In the navigation pane, choose **Dashboards > XFUSION Server Detailed Dashboard**.

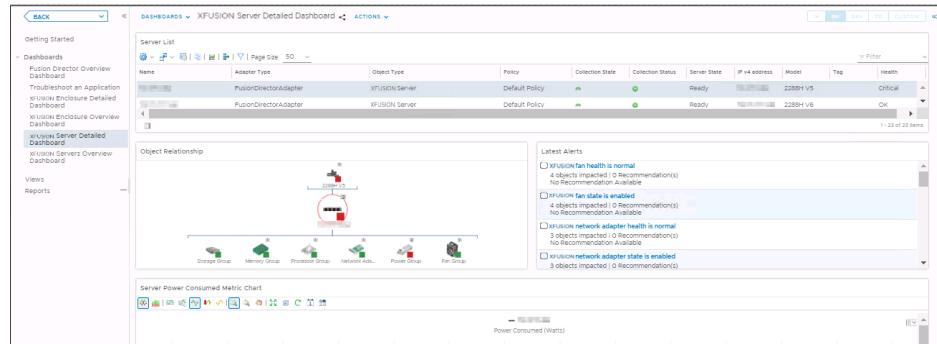
The **XFUSION Server Detailed Dashboard** page is displayed.

**Step 3** In the **XFUSION Server List** area, select the server to be viewed.

You can view the following information, as shown in **Figure 6-13**.

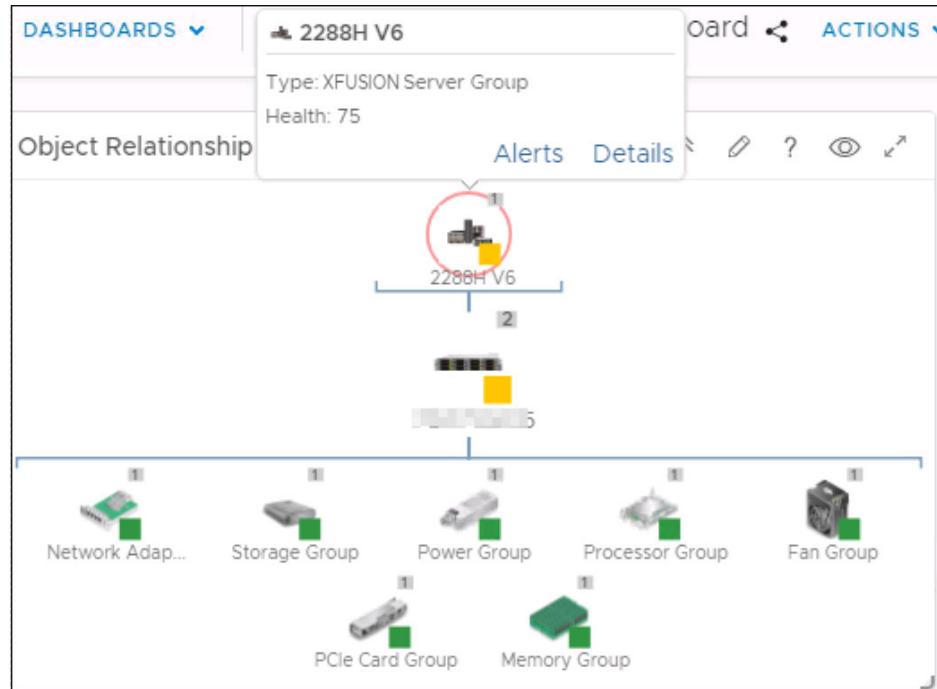
- Object Relationship
- Latest Alerts
- Server Power Consumed Metric Chart

**Figure 6-13 XFUSION Server Detailed Dashboard**



**Step 4** The server topology is displayed in the **Object Relationship** area. You can click any server or component to view the alerts and detailed information about the server or component, as shown in **Figure 6-14**.

**Figure 6-14 Object Relationship**



----End

### 6.3.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Visualize >Dashboards > Manage**.

The **Dashboards** page is displayed.

**Step 2** In the Manage page, choose **Dashboards > XFUSION Servers Detailed Dashboard**.

The **XFUSION Servers Detailed Dashboard** page is displayed.

**Step 3** In the **XFUSION Server List** area, select the server to be viewed.

You can view the following information, as shown in **Figure 6-15**.

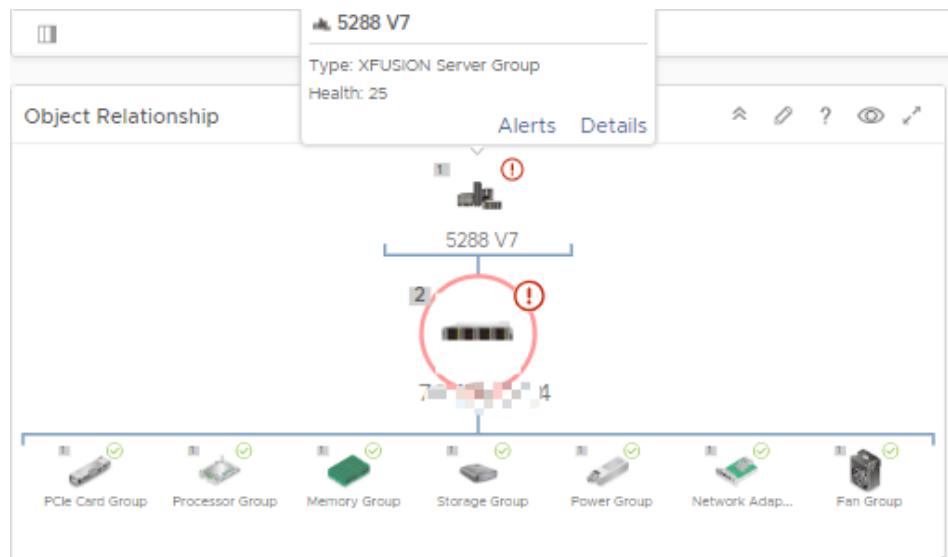
- Object Relationship
- Latest Alerts
- Server Power Consumed Metric Chart

**Figure 6-15** XFUSION Server Detailed Dashboard

The screenshot shows the XFUSION Server Detailed Dashboard. At the top, there's a navigation bar with 'ACTIONS' and time filters (1H, 8H, 24H, 7D, CUSTOM). Below it is a 'Server List' table with columns: Name, Adapter Type, Object Type, Policy, Collection State, Collection Status, Server State, and IP. Three entries for 'FusionDirector/Adapter' are listed, all marked as 'Ready'. To the right of the table is a search bar. Below the table is the 'Object Relationship' section, which displays a hierarchical tree of server components (PCIe Card Group, Processor Group, Memory Group, Storage Group, Power Group, Network Adapter, Fan Group) under the '5288 V7' server. A red circle highlights a specific component node. To the right of the tree is the 'Latest Alerts' section, which lists several alerts related to fan health and drive health, each with a status icon and a link to details.

**Step 4** The server topology is displayed in the **Object Relationship** area. You can click any server or component to view the alerts and detailed information about the server or component, as shown in **Figure 6-16**.

**Figure 6-16** Object Relationship



----End

## 6.4 Querying XFUSION Enclosure Overview Dashboard

### 6.4.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Dashboards**.

The **Dashboards** page is displayed.

**Step 2** In the navigation pane, choose **Dashboards > XFUSION Enclosure Overview Dashboard**.

The **XFUSION Enclosure Overview Dashboard** page is displayed.

You can view the following information, as shown in [Figure 6-17](#).

- Enclosure Environment Health
- Enclosure Latest Alerts

**Figure 6-17** XFUSION Enclosure Overview Dashboard



----End

### 6.4.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Visualize >Dashboards > Manage**.

The **Dashboards** page is displayed.

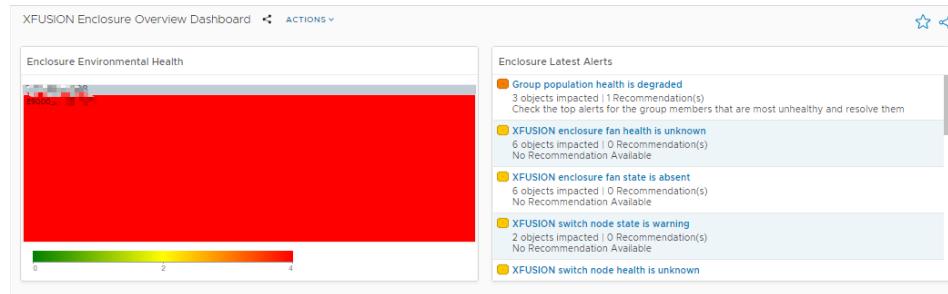
**Step 2** In the **Manage** page, choose **Dashboards > XFUSION Enclosure Overview Dashboard**.

The **XFUSION Enclosure Overview Dashboard** page is displayed.

**Step 3** You can view the following information, as shown in [Figure 6-18](#).

- Enclosure Environment Health
- Enclosure Latest Alerts

**Figure 6-18 XFUSION Enclosure Overview Dashboard**



----End

## 6.5 Querying XFUSION Enclosure Detailed Dashboard

### 6.5.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Dashboards**.

The **Dashboards** page is displayed.

**Step 2** In the navigation pane, choose **Dashboards > XFUSION Enclosure Detailed Dashboard**.

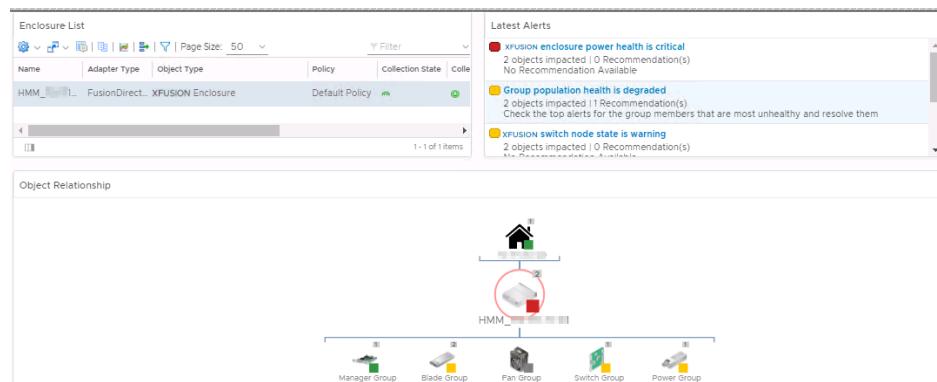
The **XFUSION Enclosure Detailed Dashboard** page is displayed.

**Step 3** In the **Enclosure List** area, select the enclosure to be viewed.

You can view the following information, as shown in [Figure 6-19](#).

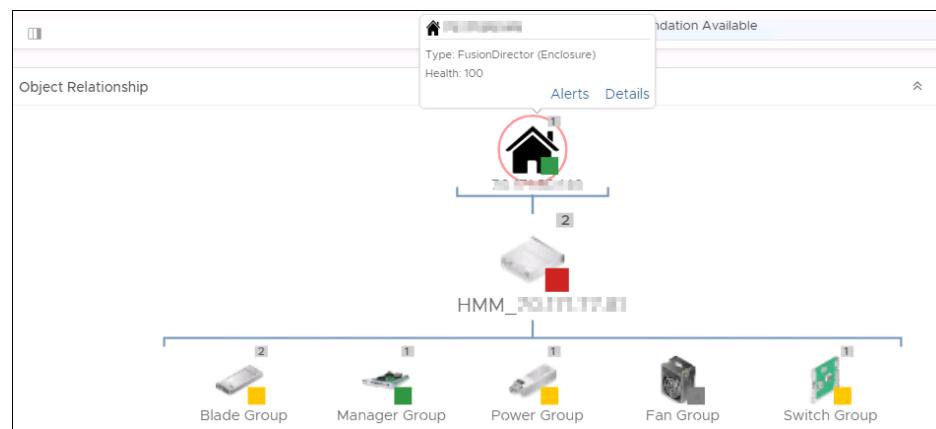
- Latest Alerts
- Object Relationship

**Figure 6-19 XFUSION Enclosure Detailed Dashboard**



**Step 4** The enclosure topology is displayed in the **Object Relationship** area. You can click any enclosure or component to view the alerts and detailed information about the enclosure or component, as shown in [Figure 6-20](#).

**Figure 6-20** Object Relationship



----End

## **6.5.2 For the vROps plug-in for version 8.12 and SaaS**

**Step 1** On the vROps WebUI, choose **Visualize >Dashboards > Manage**.

The **Manage** page is displayed.

**Step 2** In the **Manage** page, choose **Dashboards > XFUSION Enclosure Detailed Dashboard**.

The **XFUSION Enclosure Detailed Dashboard** page is displayed.

**Step 3** In the **Enclosure List** area, select the enclosure to be viewed.

You can view the following information, as shown in **Figure 6-21**.

- Latest Alerts
  - Object Relationship

**Figure 6-21** XFUSION Enclosure Detailed Dashboard

XFUSION Enclosure Detailed Dashboard ACTIONS

Enclosure List Type here to apply filters

Name	Adapter Type	Object Type	Policy	Collection State
E9000_1...	FusionDirect...	XFUSION Enclosure	Default Policy	<span>Green</span>

Latest Alerts

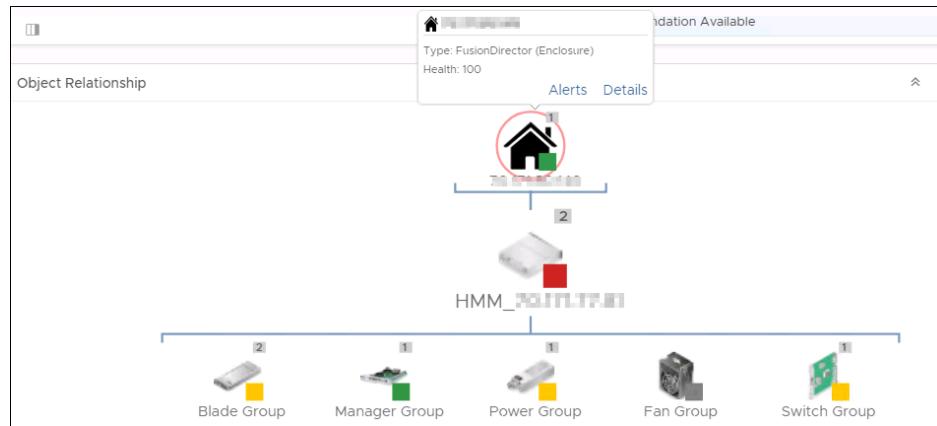
- Orange **Group population health is degraded**  
3 objects impacted | 1 Recommendation(s)  
Check the top alerts for the group members that are most unhealthy and resolve them
- Yellow **XFUSION enclosure fan health is unknown**  
6 objects impacted | 0 Recommendation(s)  
No Recommendation Available
- Yellow **XFUSION enclosure fan state is absent**  
6 objects impacted | 0 Recommendation(s)  
No Recommendation Available
- Yellow **XFUSION switch node state is warning**  
2 objects impacted | 0 Recommendation(s)  
No Recommendation Available
- Yellow **XFUSION switch node health is unknown**

Object Relationship

The diagram illustrates the object relationship hierarchy. At the top is a building icon representing the main system. Below it is a server rack icon labeled "E9000\_1...". A red circle highlights the server rack icon, indicating a specific point of interest. Below the server rack are five categories: Manager Group, Power Group, Fan Group, Blade Group, and Switch Group, each represented by a small icon and labeled with its name.

**Step 4** The enclosure topology is displayed in the **Object Relationship** area. You can click any enclosure or component to view the alerts and detailed information about the enclosure or component, as shown in [Figure 6-22](#).

**Figure 6-22** Object Relationship



----End

# 7 Viewing Alerts

7.1 For the vROps plug-in for versions 8.1 or earlier

7.2 For the vROps plug-in for version 8.12 and SaaS

## 7.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Alerts**.

The **Alerts** page is displayed.

**Step 2** In the navigation pane, choose **Triggered Alerts**.

The **Triggered Alerts** page is displayed.

**Step 3** Select **Object Type** from the **Group By** drop-down list box.

**Step 4** In the alarm column of the component for which the alarm is generated, click **>** to expand the list and click **Triggered On**, as shown in [Figure 7-1](#).

### NOTICE

You can only select a component, not a component group. Otherwise, the alerted server cannot be located.

**Figure 7-1** All alerts

Triggered Alerts							
Actions		Group By	Object Type	Triggered On			
Criticality	Alert			Created On	Status	Alert Type	Alert Subtype
!	Group population health is degraded		Memory Group	2:25 AM	!	Application	Performance
!	Group population health is degraded		Processor Group	2:25 AM	!	Application	Performance
!	XFUSION processor health is normal		CPU2	2:25 AM	!	Hardware (OS)	Availability
!	XFUSION memory health is normal		mainboardDIMM100	2:25 AM	!	Hardware (OS)	Availability
!	XFUSION processor health is normal		CPU1	2:25 AM	!	Hardware (OS)	Availability
!	XFUSION memory health is normal		mainboardDIMM000	2:25 AM	!	Hardware (OS)	Availability
!	XFUSION storage group health is normal		Storage Group	2:25 AM	!	Hardware (OS)	Availability

The page about the triggered object is displayed, as shown in [Figure 7-2](#).

**Figure 7-2 Triggered object**

- Step 5** In the navigation tree on the left, click an object (such as XFUSION Server Group or XFUSION Server) to view the server to which the trigger object belongs.

----End

## 7.2 For the vROps plug-in for version 8.12 and SaaS

- Step 1** On the vROps WebUI, choose **Troubleshoot>Alerts**.

The **Alerts** page is displayed.

- Step 2** Select **Object Type** from the **Group By** drop-down list box.

- Step 3** In the alarm column of the component for which the alarm is generated, click **>** to expand the list and click **Triggered On**, as shown in [Figure 7-3](#).

### NOTICE

You can only select a component, not a component group. Otherwise, the alerted server cannot be located.

**Figure 7-3 All alerts**

Criticality	Alert	Triggered On	Created On	Status	Alert Type	Alert Subtype	Importance
Critical	XFUSION fan health is unknown	FanA Rear	9/25/23 3:35 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan health is unknown	FanA Front	9/25/23 3:30 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan health is unknown	FanA Front	9/21/23 10:34 AM	!	Hardware (OS)	Availability	Medium (33%)
Critical	XFUSION fan state is unknown	FanA Rear	9/25/23 3:35 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan state is absent	FanA Front	9/21/23 10:34 AM	!	Hardware (OS)	Availability	Medium (33%)
Critical	XFUSION fan state is absent	FanA Rear	9/25/23 3:35 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan state is absent	FanA Rear	9/25/23 3:30 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan state is absent	FanA Front	9/25/23 3:35 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan state is absent	FanA Rear	9/25/23 3:30 PM	!	Hardware (OS)	Availability	Medium (34%)
Critical	XFUSION fan health is unknown	FanA Front	9/25/23 3:35 PM	!	Hardware (OS)	Availability	Medium (34%)

The page about the triggered object is displayed, as shown in [Figure 7-4](#).

**Figure 7-4 Triggered object**

The screenshot shows the XFUSION FusionDirector for vROps interface. On the left, the Object Browser displays a navigation tree with categories like Environment (All Objects), XFUSION Server Group, XFUSION Server Fan Group, FusionDirector (Server), and XFUSION Server. Under 'XFUSION Server Fan', 'Fan4A Rear' is selected. The main pane is titled 'Fan4A Rear' and shows a summary of the object's status. A large yellow circle indicates there is 1 object. To the right of the circle, a legend shows alert counts: Critical (0), Immediate (0), Warning (1), Normal (0), and Unknown (0). Below this, a table lists two alerts:

Name	Alert	Alert Type	Alert ...	Time	Suggested Fix	Action
Fan4A Rear	XFUSION fan health is unknown	Hardware (OS) Alerts	Ava...	9/25/2...		
Fan4A Rear	XFUSION fan state is absent	Hardware (OS) Alerts	Ava...	9/25/2...		

On the far right, a detailed view of the 'Fan4A Rear' object is shown, including its badge health (75%), state (Absent), health (Unknown), badge compliance (100%), badge efficiency (0%), member ID (15), name (Fan4A Rear), part number (3203Y001), and reading (RPM) (0).

- Step 4** In the navigation tree on the left, click an object (such as XFUSION Server Group or XFUSION Server) to view the server to which the trigger object belongs.

----End

# 8 Querying the XFUSION vROps Plug-in Version

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[8.1 For the vROps plug-in for versions 8.1 or earlier](#)

[8.2 For the vROps plug-in for version 8.12 and SaaS](#)

## 8.1 For the vROps plug-in for versions 8.1 or earlier

**Step 1** On the vROps WebUI, choose **Administration**.

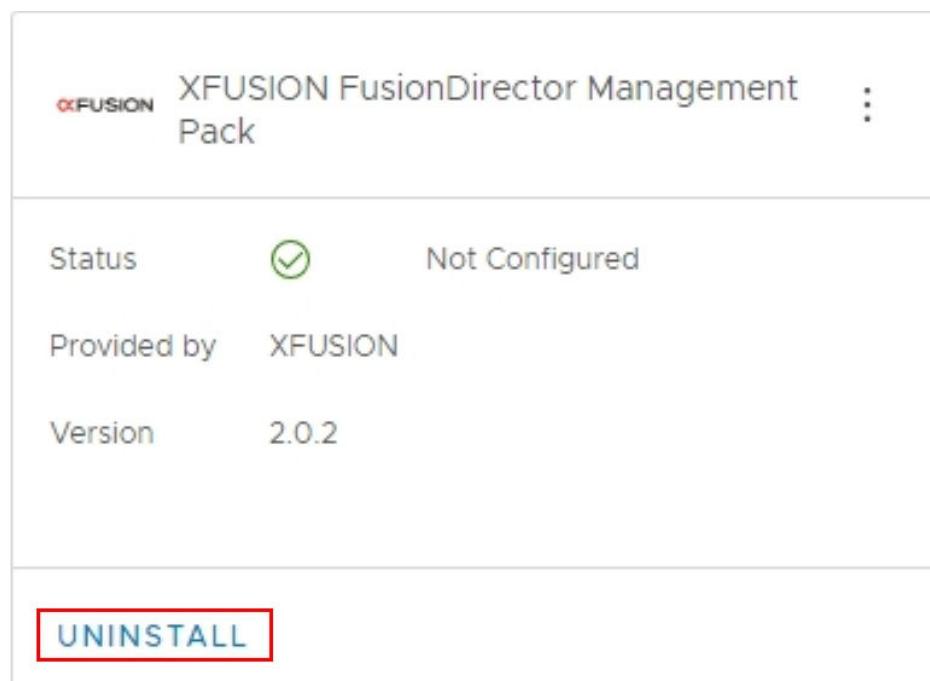
The **Administration** page is displayed.

**Step 2** In the navigation pane on the left, choose **Repository**.

The **Repository** page is displayed.

**Step 3** Check the current version of the vROps plug-in, as shown in [Figure 8-1](#).

**Figure 8-1** Viewing the plug-in version



----End

## 8.2 For the vROps plug-in for version 8.12 and SaaS

**Step 1** On the vROps WebUI, choose **Data Sources > Integrations**.

The **Integrations** page is displayed.

**Step 2** In the **Integrations** page, choose **Repository**.

The **Repository** page is displayed.

**Step 3** Check the current version of the vROps plug-in, as shown in [Figure 8-2](#).

**Figure 8-2** Viewing the plug-in version



# A Obtaining Technical Support

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To obtain assistance, contact technical support as follows:

- Contact customer service center at [support@xfusion.com](mailto:support@xfusion.com).
- Contact technical support personnel.

# B Communication Matrix

Source Device	Source IP Address	Source Port Number	Destination Device	Destination IP Address	Destination Port Number	Protocol	Port Description	Destination Port Configurable	Authentication Mode	Encryption Mode
Device to which vRops belongs	IP address of the device to which vRops belongs	Random	Device to which FusionDirector belongs	IP address of the device to which FusionDirector belongs	443	TCP	HTTPS(Web) HTTPS standard protocol port is enabled by default. Plug-in, as a client, accesses FusionDirector service.	No	Token	TLS
Client	Client IP address	Random	Device to which vRops belongs	IP address of the device to which vRops belongs	44300-44399 Note: The port number ranges from 44300 to 44399.	TCP	The port that receives the report events of FusionDirector is enabled by default.	Yes	User name/ password	TLS