

Lenovo

Lenovo XClarity Integrator Management Pack for VMware vRealize Operations Manager Installation and User Guide



Second Edition (March 2022)

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About this publication

The document provides a brief walkthrough of the installation and configuration of the Lenovo XClarity Management Pack (MP) (Lenovo XClarity Adapter or plugin) developed for VMware vRealize Operations Manager (vROps). In a nutshell, this document describes how to install, configure, and use the plugin.

Conventions and terminology

Table 1. Conventions

Convention	Description
Bold	Indicates text on a window, besides the window title, it includes menus, menu options, buttons, fields, and labels. Example: Click OK .
<i>Italic</i>	Indicates a variable, which is a placeholder for the actual text provided by the user or system. Example: copy <source-file> <target-file> Note: Angled brackets (< >) are also used to indicate variables.
DIALOG BOX / CODE	Indicates text displayed in the dialog box or if you have entered. For example: # PAIRDISPLAY -G ORADB
Note	These notices provide important tips, guidance, and advice.

Table 2. Terminology

Term/acronym	Full Name
LXCA	Lenovo XClarity Administrator
MP	Management Pack
PFA	Predicted failure alerts
vROps	VMware vRealize Operations Manager
vSAN	Virtual storage area network
vRLI	VMware vRealize Log Insight
XCC	Lenovo XClarity Controller

Chapter 1. Lenovo XClarity Adapter introduction

The Lenovo XClarity Management Pack (MP) developed for VMware vRealize Operations Manager (vROps) monitor the health, capacity, and performance of Lenovo XClarity Administrator (LXCA) resources. It provides visibility to the Lenovo XClarity resources in the Lenovo XClarity Administrator (LXCA).

The MP collects data from the LXCA resources, identifies any issues, facilitates the monitoring of workload issues, and suggests corrective actions.

It also helps you drill down to assess the health of a single resource so that you can use the resource as optimal.

Overview

The management pack for Lenovo vRealize & Analytics Integration for Lenovo vSAN Ready Nodes utilizes the vROps analytics and UI engine to collect data from Lenovo VX series vSAN Ready Nodes and monitor it. The MP for Lenovo XClarity Adapter includes the following features with the vROps UI:

- A predefined dashboard lists the LXCA resources. It provides a global view of the relationship between resources, such as connected chassis, servers, power supplies, and ESXi connectivity.
- LXCA resources monitoring
- Inventory tree
- Alert notifications and badges enable the administrator to optimize the monitoring and management of the LXCA resources.
- Logs

Chapter 2. Installing the management pack

Administrators install the Lenovo XClarity Administrator's vROps Management Pack to monitor the health, capacity, and performance of the Lenovo XClarity Administrator resources. After installing the management pack, configure the cloud account and then configure an adapter instance. This topic details the following:

- [“Prerequisites” on page 3](#)
- [“Configuring the cloud account” on page 3](#)
- [“Installing the Lenovo XClarity Adapter” on page 7](#)
- [“Adding an adapter instance” on page 11](#)
- [“Removing the Lenovo XClarity adapter” on page 14](#)

Prerequisites

Before installing Lenovo XClarity vROps Management Pack, verify that you have configured your environment according to the requirements in this section.

Component	Supported version
VMware vCenter Server	6.7 and 7.0
VMware vRealize Operations Manager	8.0, 8.1, 8.2, 8.3, 8.4, 8.5, and 8.6
Lenovo Servers	ThinkSystem servers and ThinkAgile VX servers
Lenovo XClarity Administrator	3.1.0, 3.2.0, and 3.5.0
Supported web browsers	Chrome (89.0 and above), Firefox (83.0 and above)

Configuring the cloud account

Configure the cloud account as mentioned in this topic to display the vSAN Hardware Topology.

Before you begin

- Ensure that you have installed the Lenovo XClarity adapter using the PAK file.
- Ensure that the prerequisites are met. For more details, see [“Prerequisites” on page 3](#).

Procedure

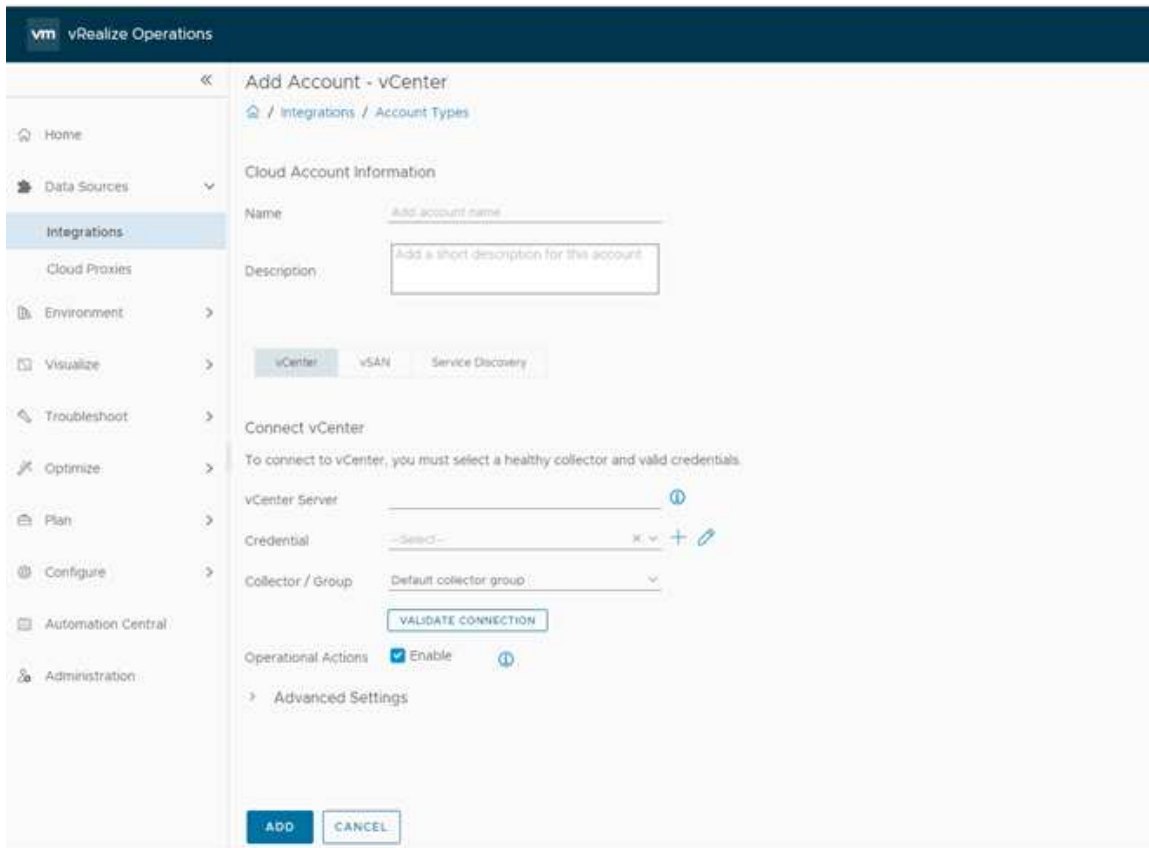
To configure the cloud account, complete the following steps:

1. Start the vRealize Operations Manager administrative user interface in your web browser and log in as an administrator.

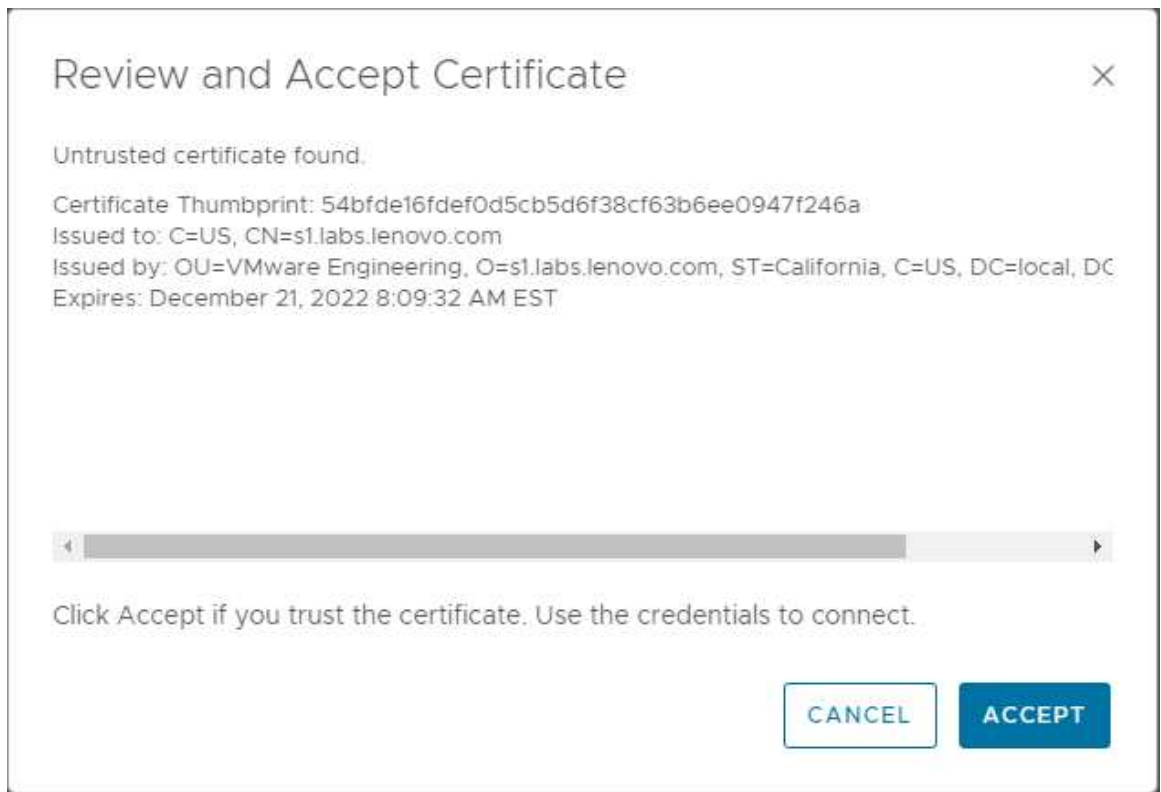
For example, use the URL https://<vROps_IP_address> where the vROps IP address is the IP of the vROps node.

2. Navigate to **Data Sources** → **Integrations** → **Accounts**.
3. Select **ADD ACCOUNT**, select **vCenter** as **Account Types**.

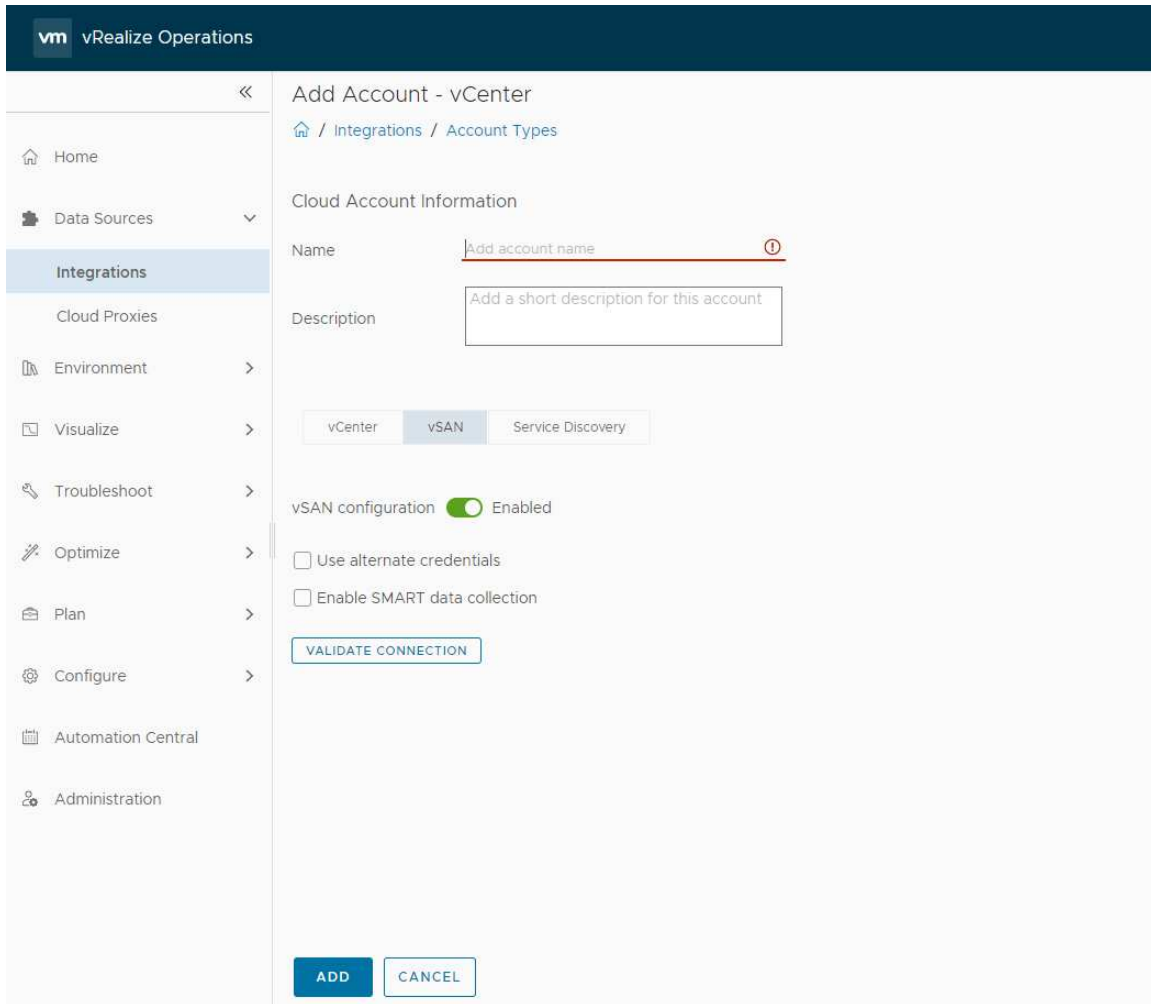
Note: For V8.5 and earlier versions of vROps, click the **Administration** tab. On the **Solutions** page, select **Solutions** → **Cloud Accounts** → **vCenter** → **ADD ACCOUNT**.



4. In the **Cloud Account Information** section: Enter an appropriate name (like FQDN) which represents the cloud account you want to connect to in the **Name** field. Optionally, enter the description in the **Description** field.
5. In the **vCenter** tab, enter the following details:
 - **Connect vCenter:** Enter the vCenter Server IP and vCenter credentials.
Credentials: Click the add credentials icon (+), enter the password of the vCenter that you are adding, and click **OK**.

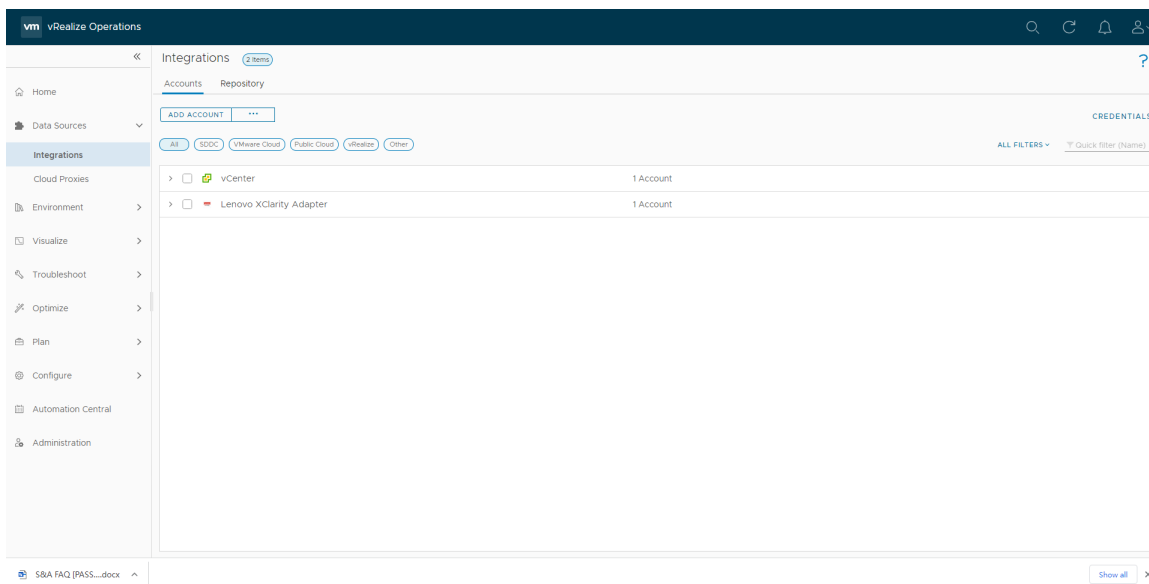


- Validate the connection by reviewing and accepting the certificate by clicking **ACCEPT**.
6. Click the **vSAN** tab and perform the following details:
- Enable the vSAN configuration.
 - Select the **Enable SMART data collection** check box.



- Validate the connection by reviewing and accepting the certificate by clicking **ACCEPT**.
7. Click **ADD**.

The cloud account is configured and listed as follows.



Installing the Lenovo XClarity Adapter

Download the PAK file for VMware vRealize Operations Manager Management Pack for Lenovo XClarity from the VMWare marketplace. Save the PAK file to a folder on your local system.

Before you begin

- Ensure that the vROps (supported version: v8.0 to v8.6) is installed and configured. For more details, see [VMware documentations](#).
- Ensure that you have the PAK file.
- Ensure that the prerequisites are met. For details, see “Prerequisites” on page 3.

Procedure

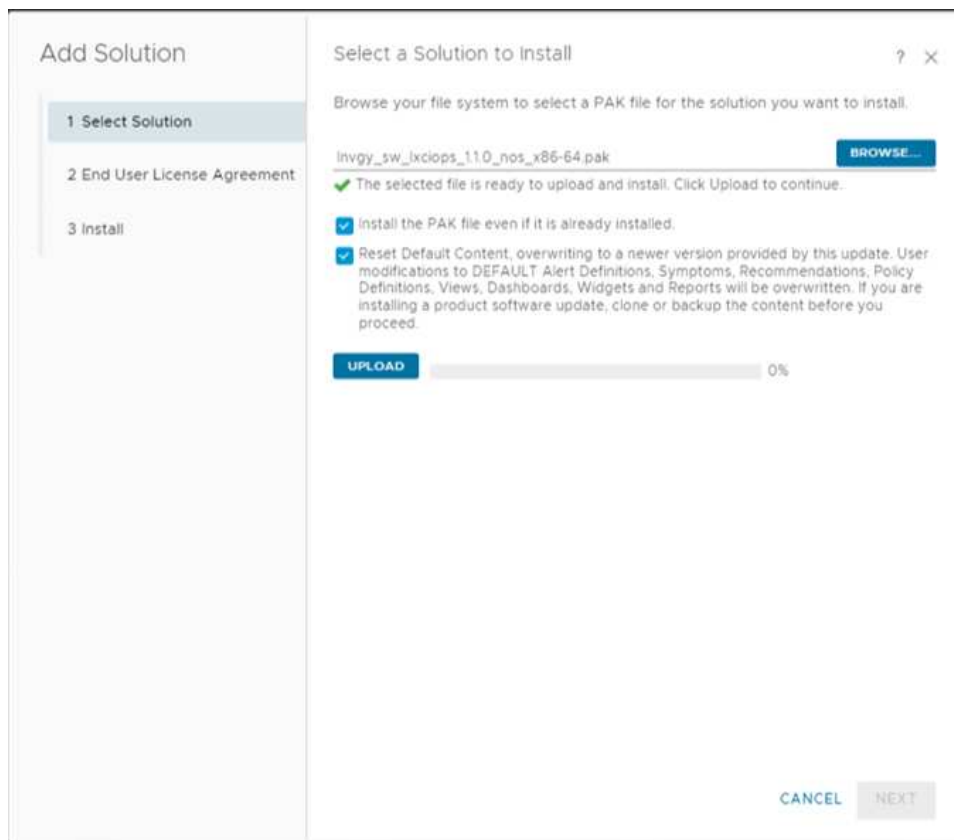
To install the Lenovo XClarity Adapter, complete the following steps.

1. Start the vRealize Operations Manager user interface in your web browser and log in as an administrator.

For example, use the URL https://<vROps_IP_address> where the vROps IP address is the IP of the vROps node.

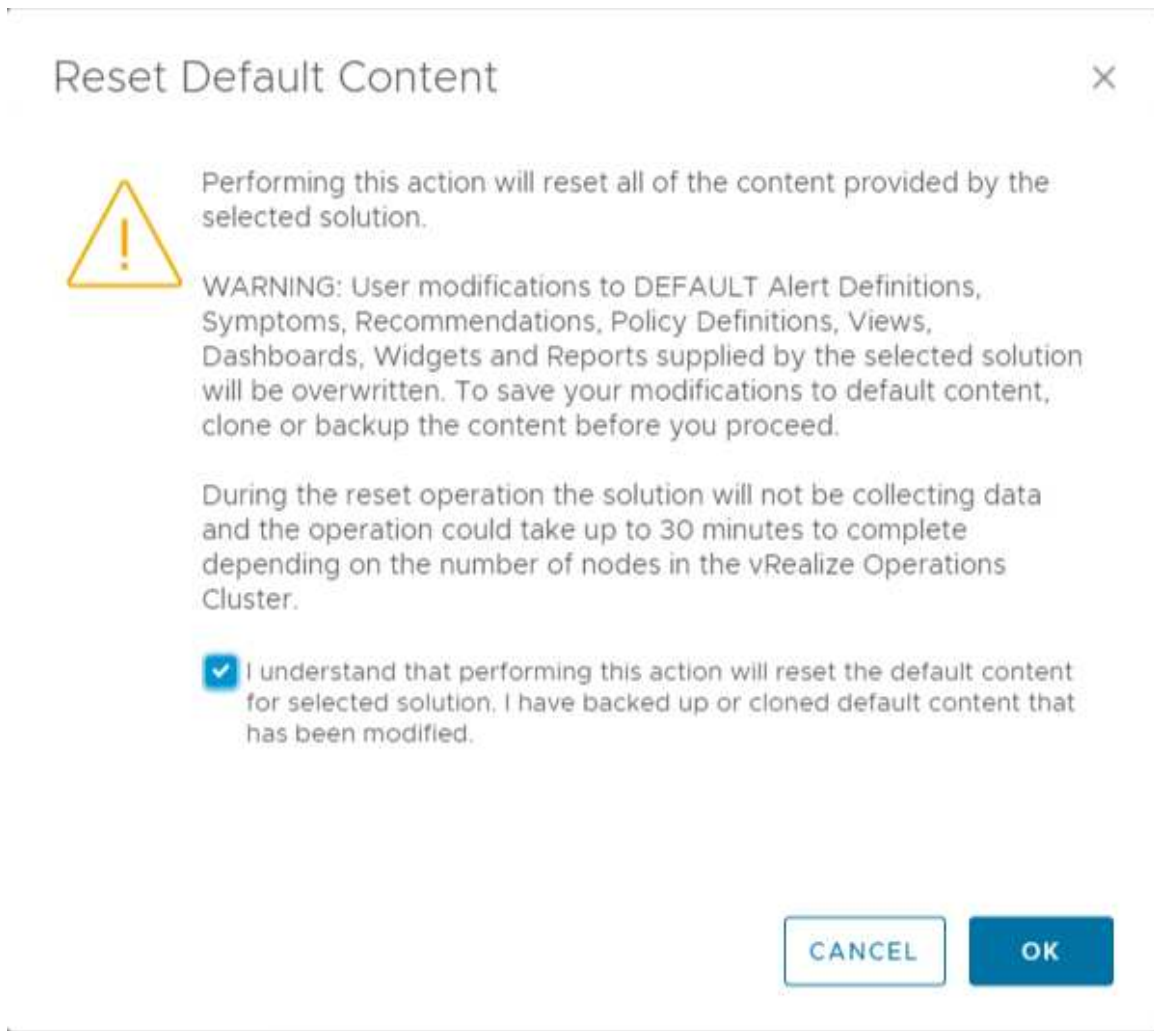
2. Navigate to **Data Sources** → **Integrations** → **Repository**.
3. Click **ADD**.

Note: For V8.5 and earlier versions of vROps, click the **Administration** tab. On the **Solutions** page, navigate to **Solutions** → **Repository**, and then click **ADD/UPGRADE** to upload the PAK file.



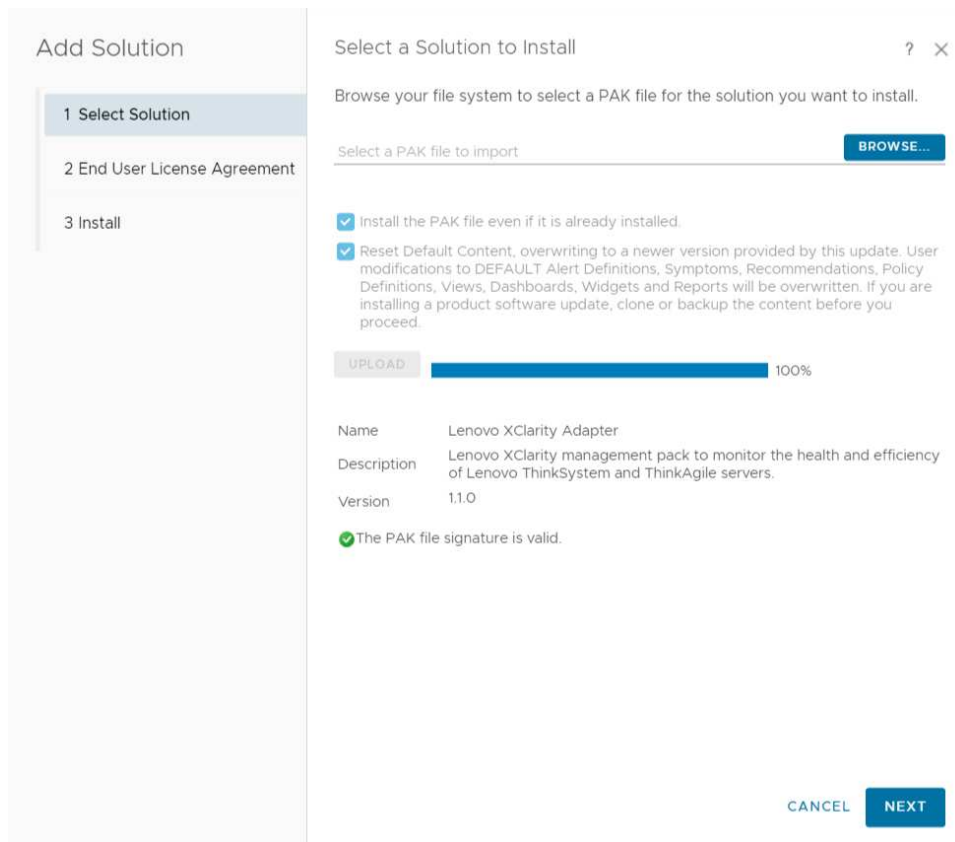
4. On the **Add Solution** page, click **BROWSE** to go to the location of the management pack files that you are installing. Select the PAK file.
5. Select **Install the PAK file...** to override earlier PAK installation if it was previously installed.
6. Select **Reset Default...** to override the existing settings. On selecting this option, the alert definitions, symptoms, recommendations, policy definitions, views, dashboards, and reports are overwritten.

The **Reset Default Content** dialog box is displayed.



7. Read the warning message and select the **I understand that ..** checkbox and click **OK** to reset default content.
8. Click **UPLOAD** and wait until the .pak file is uploaded.

After the file is uploaded, the summary of the MP is displayed.

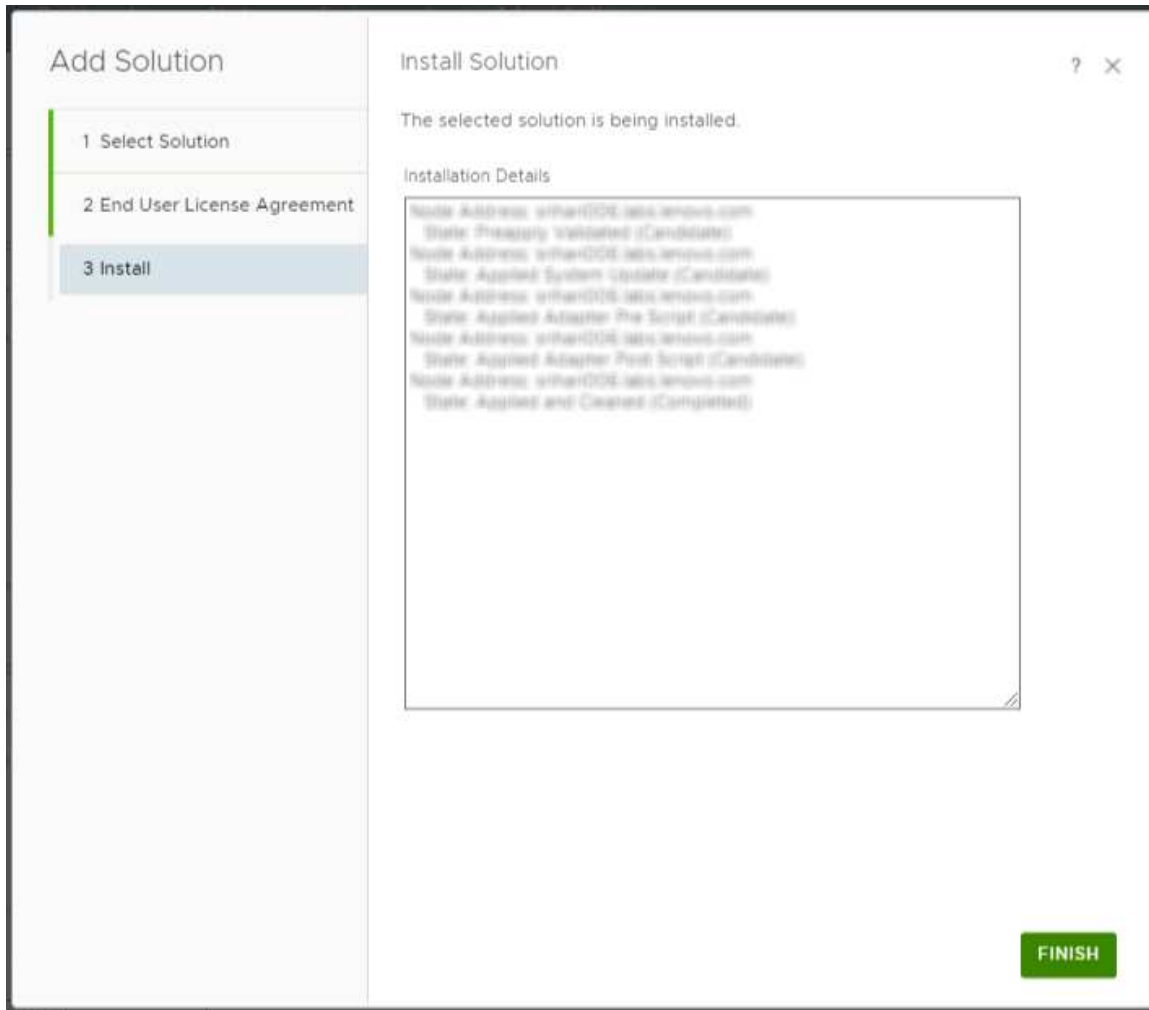


9. Click **NEXT** to continue the installation.

Note: If you want to quit the installation, click **CANCEL**.

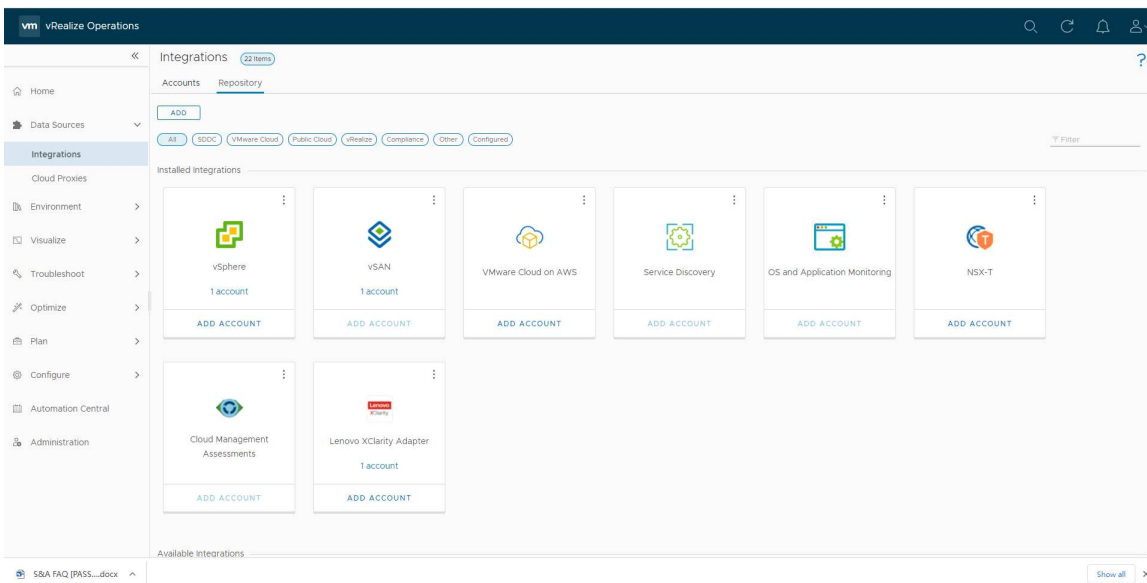
10. In the **End User License Agreement** page, read the End User License Agreement, select **<I accept the ..>**. Click **NEXT**.

The management pack installation will be displayed on the **Install Solution** page. The process may take up a few minutes.



11. Click **FINISH**.

On completing the installation, the Lenovo XClarity Adapter is displayed in the list of installed solutions as follows:



Adding an adapter instance

Adapter instances specify the adapter type and the information needed for the vRealize Operations Manager to identify and access resources. The Lenovo XClarity Adapter instances provide access to the resources of the Lenovo XClarity Administrator. Add one adapter instance per LXCA.

Before you begin

- Ensure that you have installed the Lenovo XClarity adapter using the PAK file.
- Ensure that the prerequisites are met. For more details, see “Prerequisites” on page 3.

Procedure

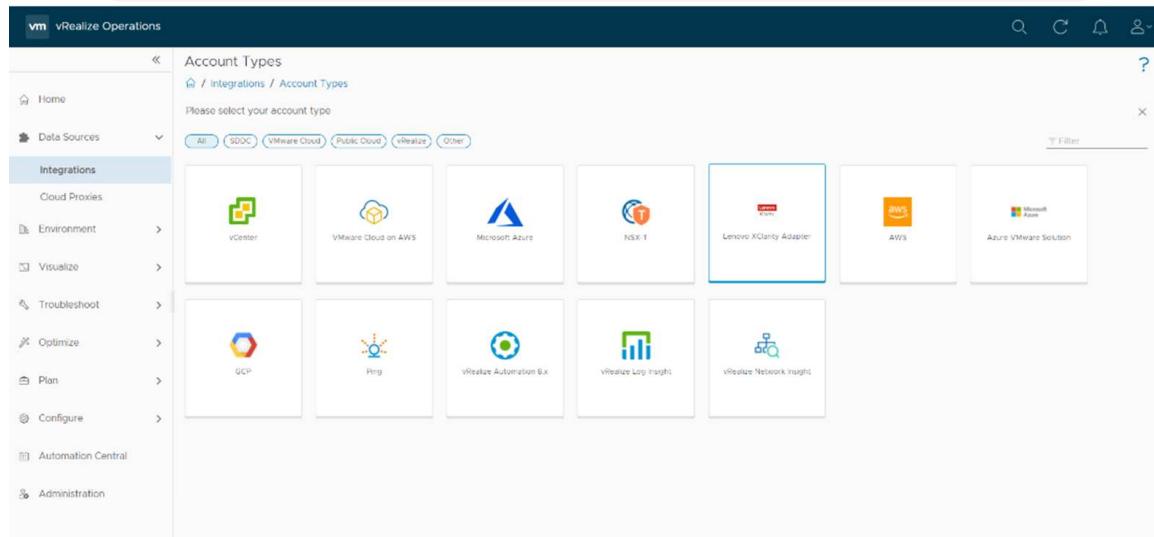
To add an adapter instance, complete the following steps.

1. Start the vRealize Operations Manager administrative user interface in your web browser and log in as an administrator.

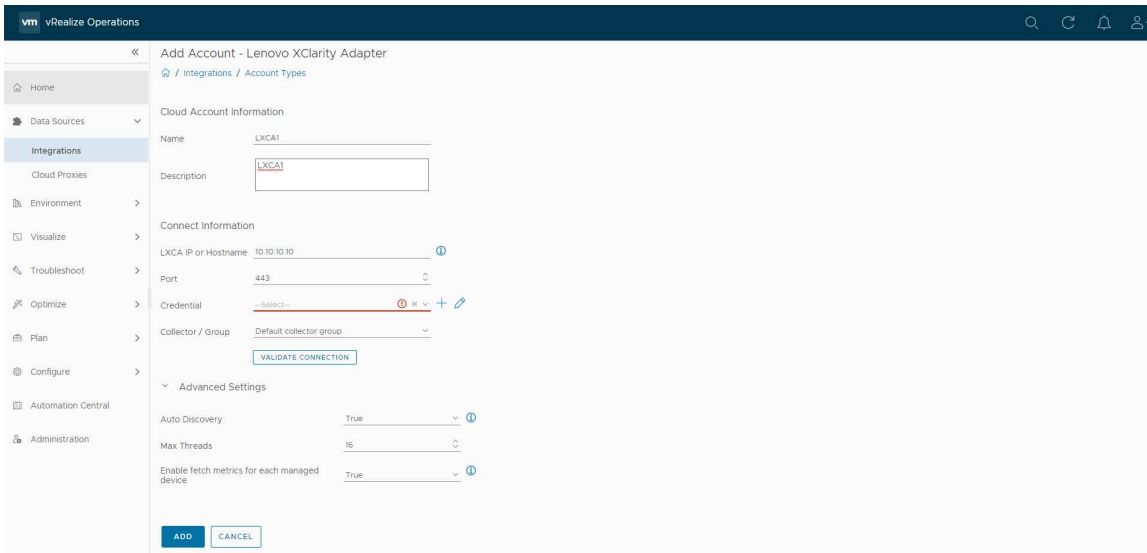
For example, use the URL https://<vROps_IP_address> where the vROps IP address is the IP of the vROps node.

2. Navigate to **Data Sources** → **Integrations** → **Accounts** → **ADD ACCOUNT**.
3. Select the LXCA adaptor from the existing list for adding the account **Lenovo XClarity Adapter**. The **New Account** page is displayed.

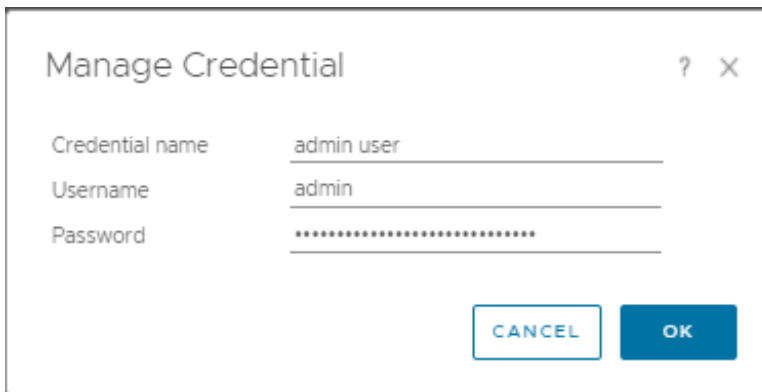
Note: For V8.5 and earlier versions of vROps, click the **Administration** tab. On the **Solutions** page, select **Solutions** → **Other Accounts** → **ADD ACCOUNT**, select the LXCA adaptor from the existing list for adding the account **Lenovo XClarity Adapter** → **New Account**.



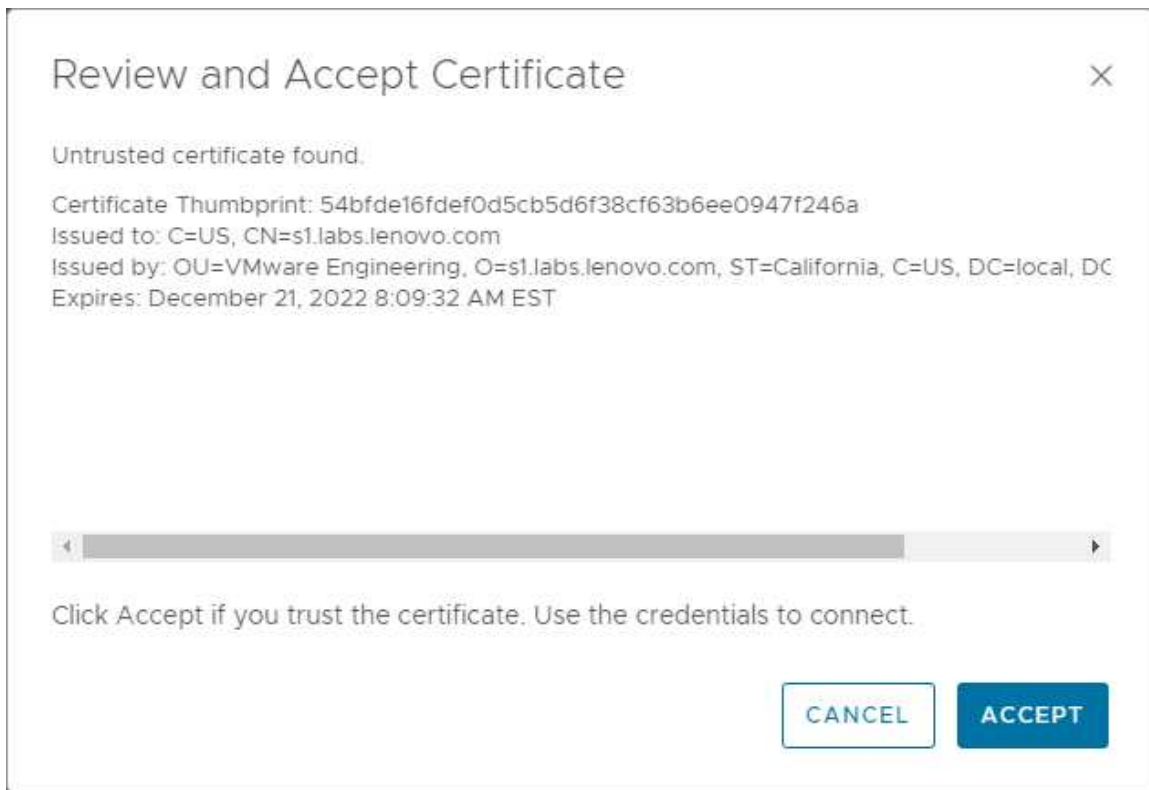
4. On the **New Account** page, configure **Cloud Account Information** and **Connection Information**:
 - a. Name: Enter a descriptive name of the instance.
 - b. Description: Enter a description with more details.



5. Configure these settings based on the adapter instance type:
 - a. LXCA IP or Hostname: Enter the LXCA IP or a descriptive hostname of the instance.
 - b. Port: Enter the port number if you want to change it, the default value is 443 as shown in the preceding screenshot.
 - c. Credentials: Click the add credentials (+) icon, enter an appropriate credential name that includes username and password of the adapter instance you are adding, and click **OK**.



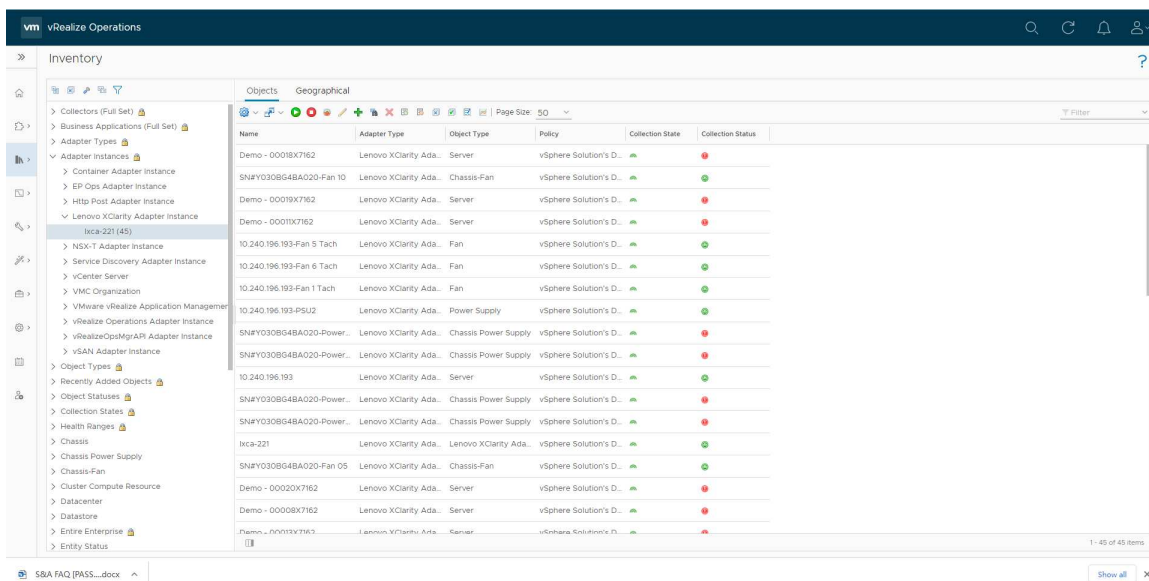
- d. Collector/Group: Select the required collector group from the drop-down list.
6. Click **VALIDATE CONNECTION** to validate the values you entered. If the adapter instance configures correctly, an informative message is displayed. Click **ACCEPT** to continue.



7. In the **Advanced Settings**, select the **Auto Discovery** as **True**.

Important: After the adapter instances are created, the vRealize Operations Manager Collector requires several minutes to collect statistics, depending on the size of the system. The default collection cycle is 15 minutes. Once the initial data is collected, subsequent statistical collections run quickly.

Large system configurations require a longer duration to collect metrics, resources, and update dashboards. To configure the duration, click **Environment** → **Inventory** → **Adapter Instances** → **Lenovo XClarity Adapter Instance** → **Edit Object** → **Advanced Settings** → **Collection Interval**, select the required time (unit: second), and click **OK**.



Edit Object ? X

Display Name: lxca_215

Description: lxca_215

Adapter Type: Lenovo XClarity Adapter

Adapter Instance: lxca_215

Object Type: Lenovo XClarity Adapter Instance

Basic Settings

LXCA IP or Hostname: 10.240.196.215 ⓘ

Port: 443

Credential: lxca_215 x + ✎

Advanced Settings

Auto Discovery: True ⓘ

Max Threads: 16

Enable fetch metrics for each managed device: True ⓘ

Collection Interval (Minutes): 15

Dynamic Thresholding: Yes No

CANCEL OK

- To finish adding the adapter instance, click **ADD**. If you do not want to continue adding the adapter instance operation, click **CANCEL**.

Removing the Lenovo XClarity adapter

Follow the task if you need to uninstall the management pack using the vROps user interface.

Procedure

- Log in to vROps as an admin user.
- Navigate to **Data Sources → Integrations → Repository**. The **Lenovo XClarity Adapter** is displayed.

Note: For V8.5 and earlier versions of vROps, navigate to the **Administration** tab. In the left pane, click **→ Repository**. The **Lenovo XClarity Adapter** displays in the right pane.

- Click **Uninstall** to remove the selected management pack.

A warning dialog box is displayed.

Note: After removing the adapter instance, you cannot revert the operation. The associated data, metadata, and related files are deleted permanently.

Warning



The action will remove **Lenovo xClarity Adapter**. It will not be possible to recover this solution. All associated data, metadata and associated out of the box content will be deleted. Press OK to continue, Cancel to go back and change selected instances.

I understand the risk and agree.

CANCEL

OK

4. Select **I understand the risk and agree** and click **OK** to complete the uninstallation.

Chapter 3. Monitoring Lenovo XClarity Adapter

After installing and configuring the MP, you must add an adapter instance to use the Lenovo XClarity Adapter to view the following:

- “Viewing data collection status for an instance” on page 17
- “Dashboards” on page 18
- “Viewing the inventory tree” on page 25
- “Monitoring the discovered resources” on page 27
- “Using the badges to monitor resources” on page 29
- “Viewing alerts” on page 30

Viewing data collection status for an instance

After you set up an adapter instance, verify whether the instance is collecting data.

Before you begin

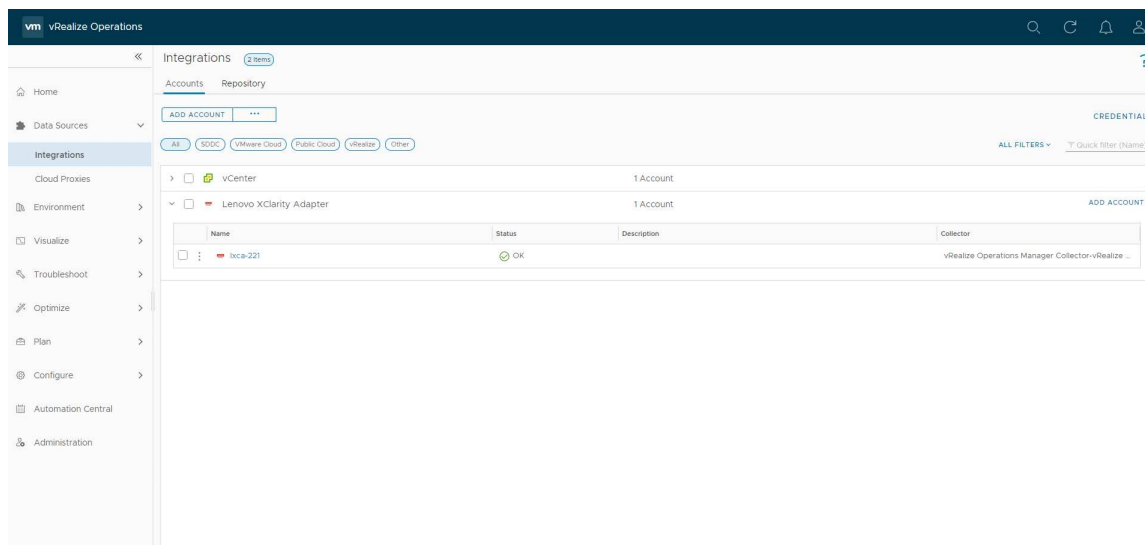
Ensure that you have added an adapter instance. After adding the instance, the vRealize Operations Manager Collector requires some time to collect the initial data.

Procedure

To view collected data, complete the following steps.

1. Log in to vROps as an admin user.
2. Navigate to **Data Sources** → **Integrations** → **Accounts** → **Lenovo XClarity Adapter**, check whether the instance status is **OK**.

Note: For V8.5 and earlier versions of vROps, navigate to **Administration** → **Solutions** → **Other Accounts** → **Instance** to check the instance status.



Dashboards

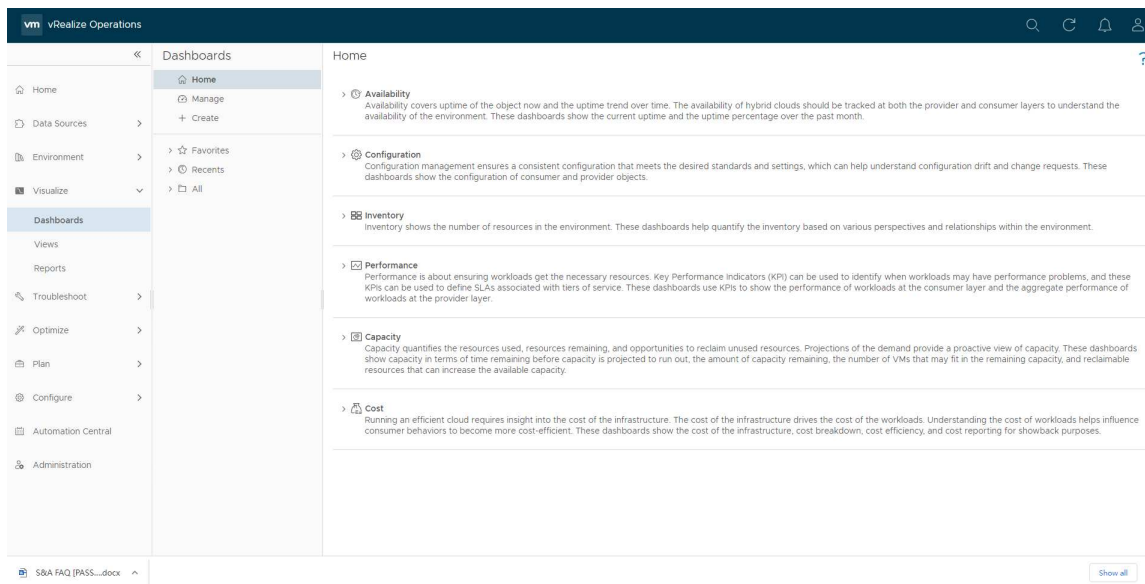
The Lenovo XClarity Adapter management pack dashboards provide an overview of the performance and health of XClarity Administrator resources. The dashboards enable you to view, monitor, and troubleshoot resources

Dashboards provide a graphic representation of the status and relationships of selected objects. The standard dashboards are delivered as templates.

Before you begin

- Log in to the vRealize Operations Manager UI using admin credentials.
- From the vRealize Operations Manager main menu, select **Visualize → Dashboards**.

Note: For V8.5 and earlier versions of vROps, from the vRealize Operations Manager main menu, select **Dashboards → All Dashboards**. The available dashboards are listed in the Lenovo XClarity folder.



Procedure

1. To view the dashboards, click **Dashboards**.
2. To add **Recents** folder, in the right pane, select **All → Lenovo XClarity**, and select the required dashboard. The required dashboard will be displayed in the **Recents** list.
3. From the **Recents** list, select the required dashboard.

vm vRealize Operations

Lenovo XClarity Details ACTIONS

IN ALL 24H TD CUSTOM

Rack Details

Name	Name	Location	Room	Height (units)	UUID
New-rack	New-rack	Location	Room1	52	2FD82D56-2E
New-rack	New-rack	Location	Room1	52	223462B0-E6
virtual	virtual	location1	room1	52	89C0C8AE-58

1 - 3 of 3 items

Server Info

Name	Status	XCC IP	UUID	Serial Number	Model
10.240.196.123	Critical	10.240.196.123	591B7B0861F611EB8...	J302R956	CTO1WW

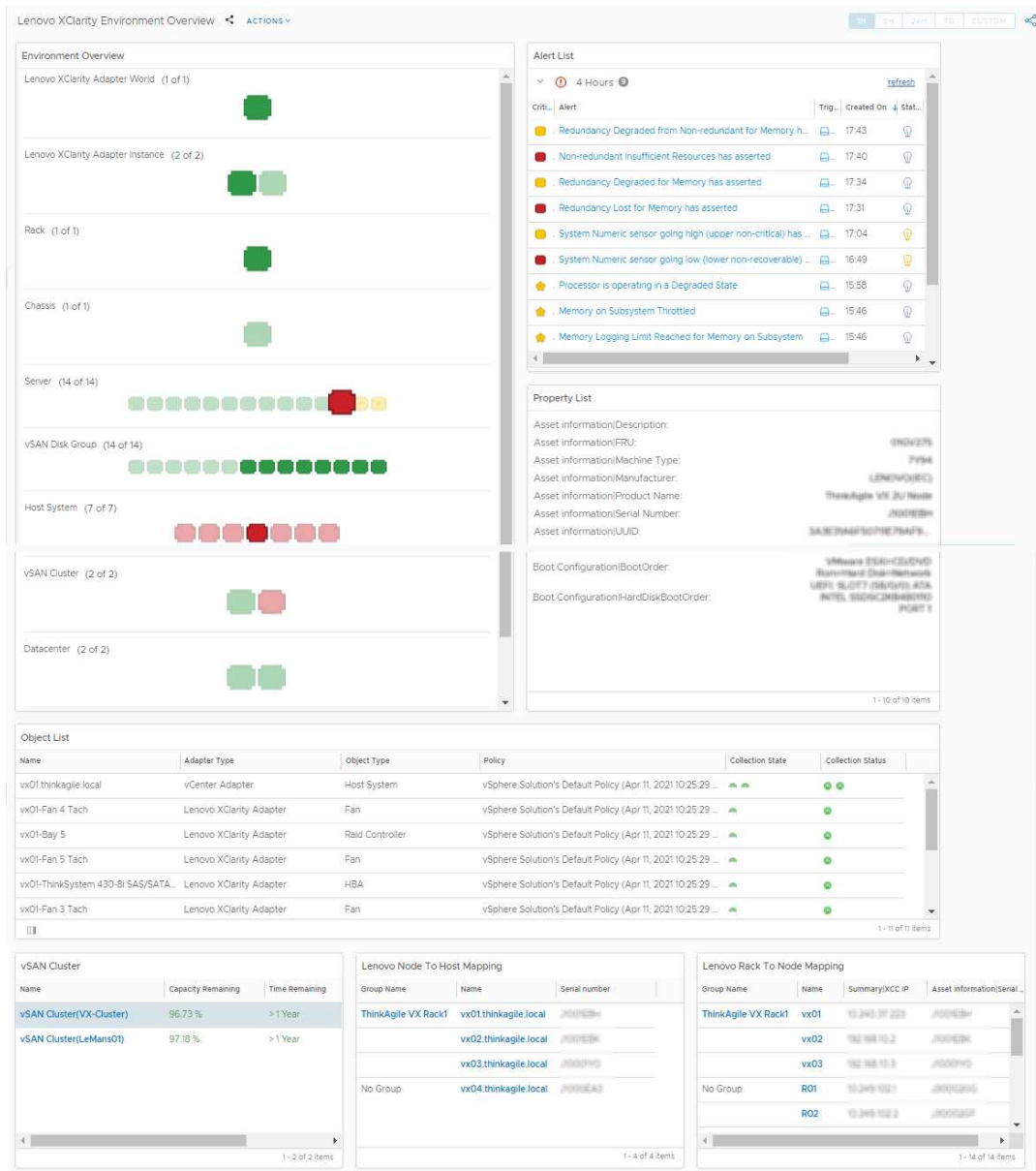
1 - 1 of 1 items

Dashboards

- Home
- Manage
- Create
- Favorites
- Recents
 - Lenovo XClarity Details
 - All
 - lenovo xclarity
 - Lenovo XClarity
 - Lenovo XClarity Details
 - Lenovo XClarity Environment Overview
 - Lenovo XClarity Power & Thermal Information
 - Lenovo XClarity Topology

The following dashboards are listed:

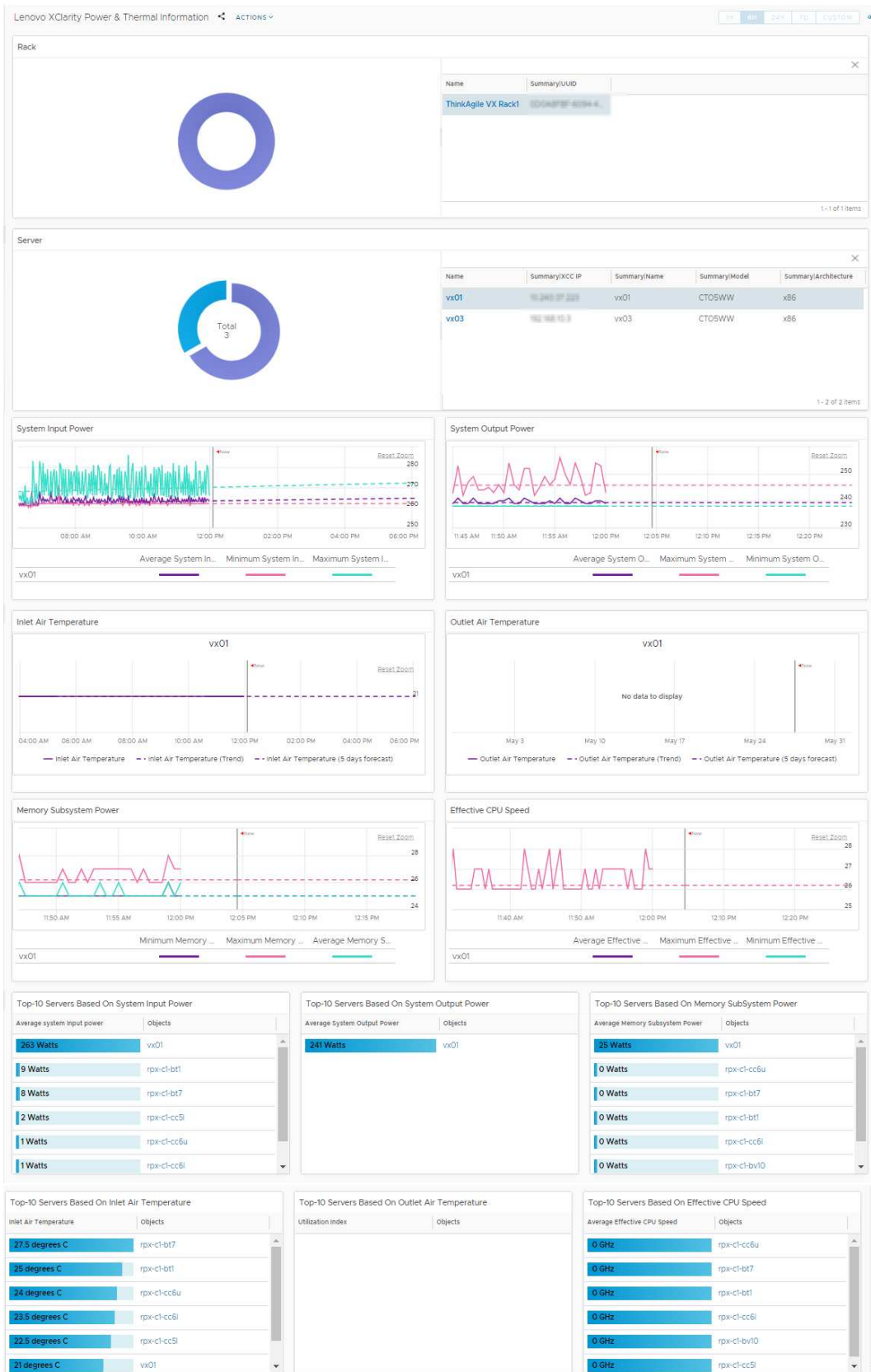
- **Lenovo XClarity Environment Overview**



Widget	Description
Environment Overview	Lists the resources and their health. Select the required resource to populate the related widgets.
Alert List	Lists the alerts of the resource selected in the Environment Overview widget.
Property List	Lists the details of the resource selected in the Environment Overview widget.

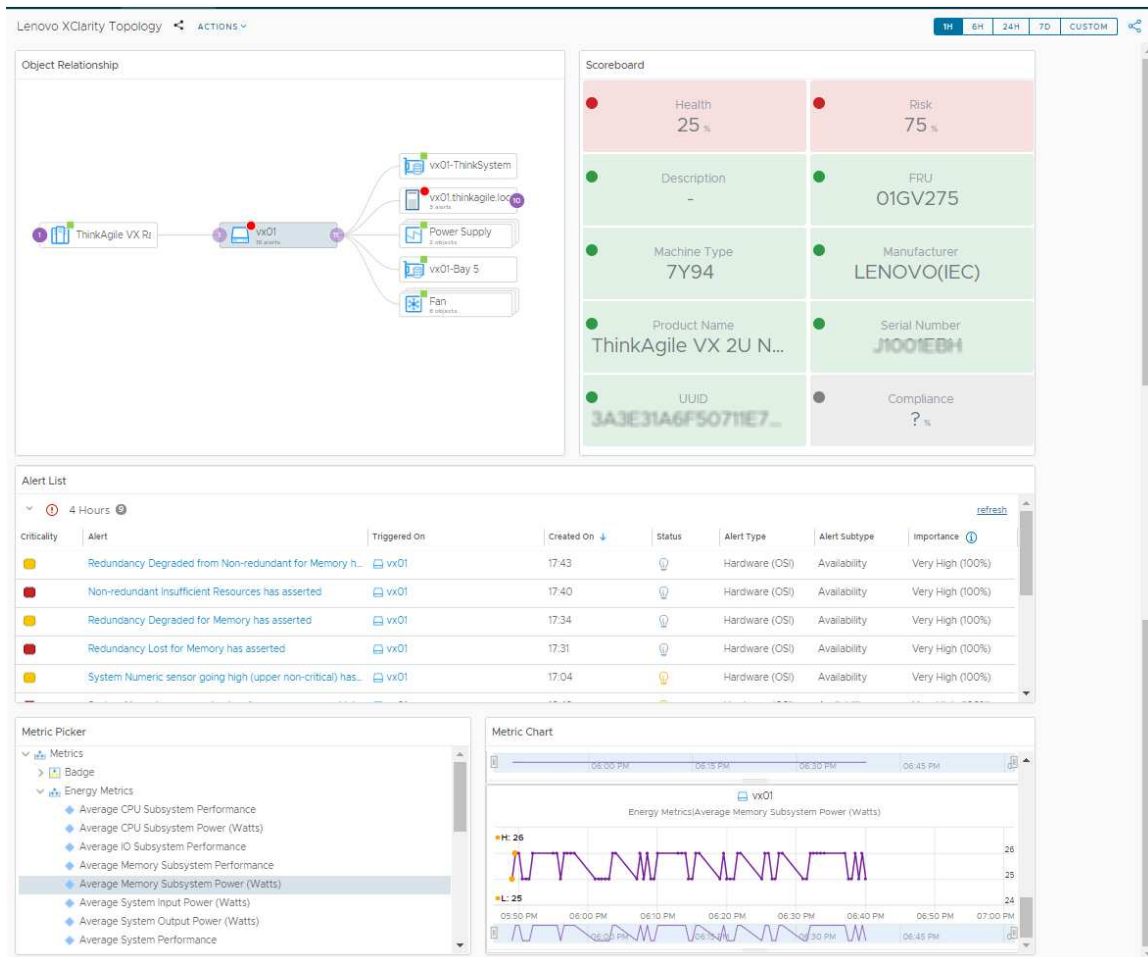
Widget	Description
Object List	Lists the details of the object selected in the Environment Overview widget. It also displays the collection state and status of the resource.
vSAN Cluster	Lists the details of the vSAN cluster. Select a vSAN cluster to populate the related widgets.
Lenovo Node to Host Mapping	Lists the node to host mapping of the resource selected in the vSAN Cluster widget.
Lenovo Rack to Node Mapping	Lists the rack to node mapping details.

- **Lenovo XClarity Power & Thermal Information**



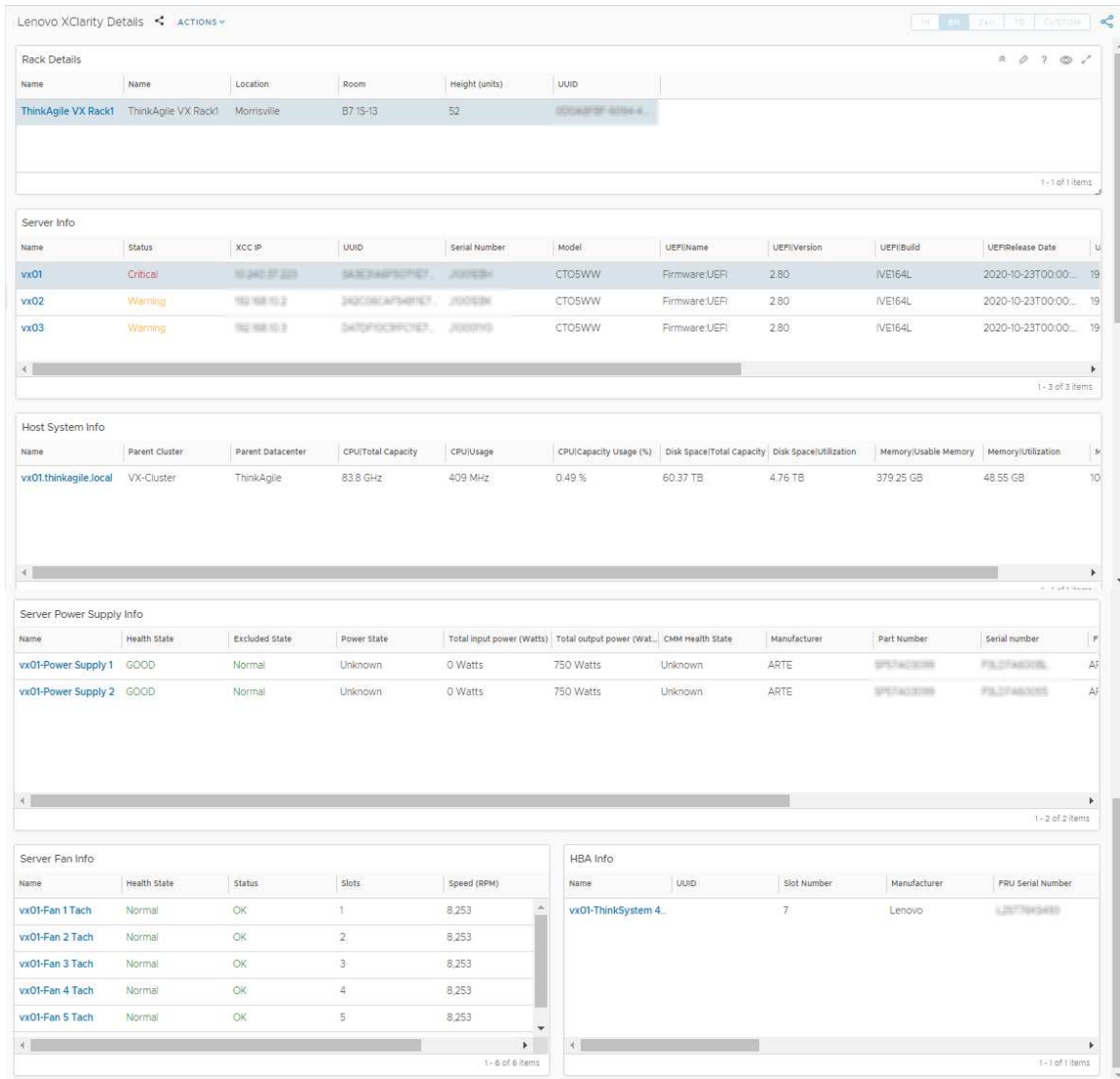
Widget	Description
Rack	Lists the details and utilization of the rack. To view further details of a rack, click the rack on the pie chart. Select a rack to populate the related widgets.
Server	Lists the server details and utilization for the rack selected in the Rack widget. To view further details of a server, click the required server on the pie chart. Select a server to populate the related widgets.
System Input Power	Lists the system input power graphical details of the server selected in the Server widget. Hover over the graph to view further details.
System Output Power	Lists the system output power graphical details of the server selected in the Server widget. Hover over the graph to view further details.
Inlet Air Temperature	Lists the inlet air temperature to the time of the server selected in the Server widget. Hover over the graph to view further details.
Outlet Air Temperature	Lists the outlet air temperature to the time of the server selected in the Server widget. Hover over the graph to view further details.
Memory Subsystem Power	Lists the memory details.
Effective CPU speed	Lists the effective CPU speed.
Top 10 servers based on system input power	Lists the top 10 servers that have maximum system input power.
Top 10 servers based on system output power	Lists the top 10 servers that have maximum system output power.
Top 10 servers based on memory subsystem power	Lists the top 10 servers that have maximum utilized memory subsystem power.
Top 10 servers based on inlet air temperature	Lists the top 10 servers that have maximum inlet air temperature.
Top 10 servers based on outlet air temperature	Lists the top 10 servers that have maximum outlet air temperature.
Top 10 servers based on effective CPU speed	Lists the top 10 servers that have maximum CPU speed.

- **Lenovo XClarity Topology**



Widget	Description
Object Relationship	Lists the relationship between the resources. Select the required object to populate the related widgets. Hover over the resource to view more details of the resource.
Scoreboard	Lists the details of the resource selected in the Object Relationship widget. Hover over the score to view more details.
Alert List	Lists the alerts of the selected resource. To view further details, click on the required alert to display the Alerts table.
Metric Picker	Navigate to the required metric and the selected metric details are listed in the adjacent Metric Chart widget.
Metric Chart	Lists the metric as selected in the Metric Picker widget.

- **Lenovo XClarity Details**



Widget	Description
Rack Details	Lists the rack details. Select a rack to populate the details in related widgets.
Server Info	Lists the server details of the rack selected in the Rack widget.
Host System Info	Lists the host system details.
Server Power Supply Info	Lists the server power supply details.
Server Fan Info	Lists the server fan details.
HBA Info	Lists the HBA details.

Viewing the inventory tree

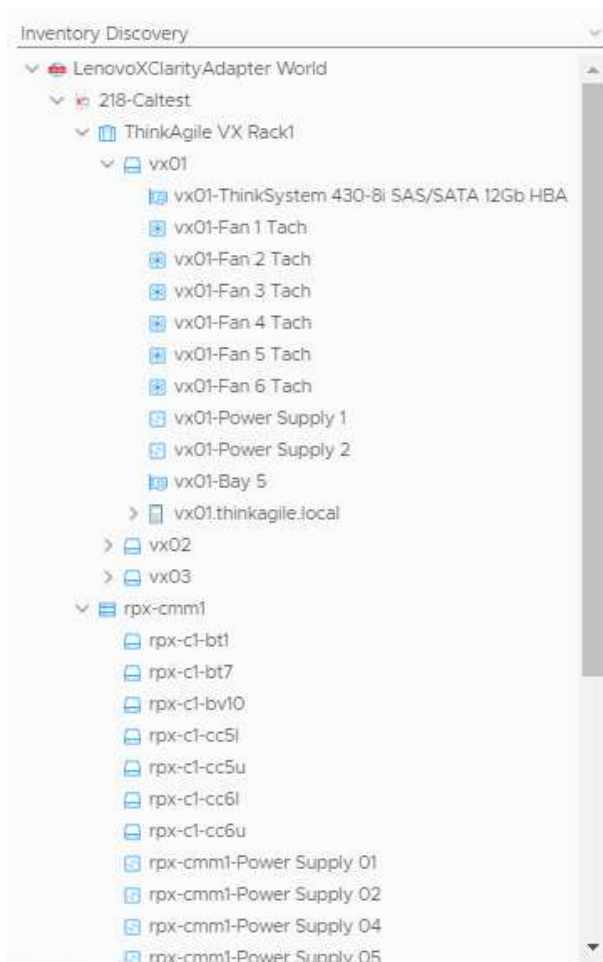
The inventory tree feature in vROps helps you to browse and select a Lenovo XClarity Adapter resource. The hierarchical structure of the inventory tree shows the relationship among the resources. It enables you to browse and view the resources to the lower level. This view helps to analyze the root cause of issues.

Procedure

To view the inventory tree, complete the following steps.

1. Log in to vROps as an admin user.
2. Navigate to **Environment** → **Object Browser** → **Lenovo XClarity Adapter**
3. View the data collection status:
 - a. To view the collection status and state in the **Objects** pane, select one of the following:
 - **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World** → **Lenovo XClarity Adapter Instance** → **Rack** → **Summary**
 - **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World** → **Lenovo XClarity Adapter Instance** → **Chassis** → **Summary**
 - b. To view the object relationship between Lenovo XClarity Adapter and vSphere/vSAN Adapter, select **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World** → **Lenovo XClarity Adapter Instance** → **Rack** → **Metrics** → **Show Object Relationship**.
4. To display the polled data, click **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World** → **Lenovo XClarity Adapter Instance** → **Rack** → **Metrics** → **Metrics** → **Resource group** → **Metrics (double click on metrics)** → **Metric Chart**.

The left navigation pane displays the Lenovo XClarity Adapter inventory tree.











The Lenovo XClarity Adapter World displays all the Lenovo XClarity Adapter MP resources in a parent-child relationship format. For more details on navigating to a resource, see [“Monitoring the discovered resources”](#) on page 27.

Monitoring the discovered resources

This topic gives an overview of the discovered Lenovo XClarity Adapter resources.

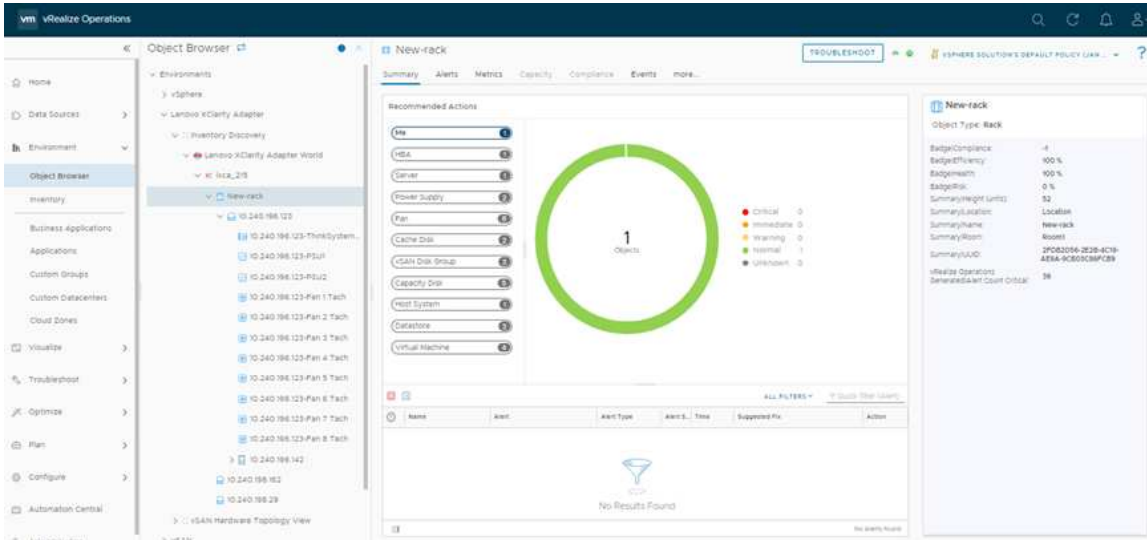
The MP discovers and collects defined metrics such as performance data, relationships, events, for the Lenovo XClarity Adapter resources. You can discover the following resources of the Lenovo XClarity ThinkAgile VX system:

Discovered resource	Icon
Rack	
Chassis	
Server Node	
PCI devices	
HBA	
Network Adaptor	
Server fan	
Power Supply	
Chassis fan	
Lenovo World	
Adapter Instance	

Procedure

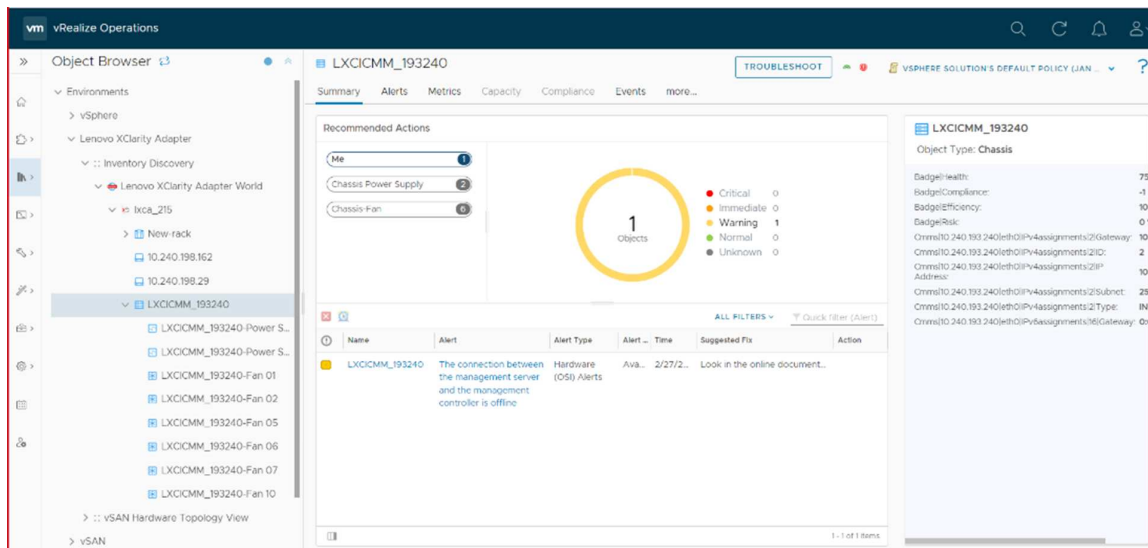
To view Lenovo XClarity Adapter resources, complete the following steps.

1. Log in to vROps as an admin user.
2. Navigate to **Environment** → **Object Browser**.
3. View the resources related to Lenovo XClarity Adapter in the inventory tree, click **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World** → **Lenovo XClarity Adapter Instance** → **Rack** → **Summary**.

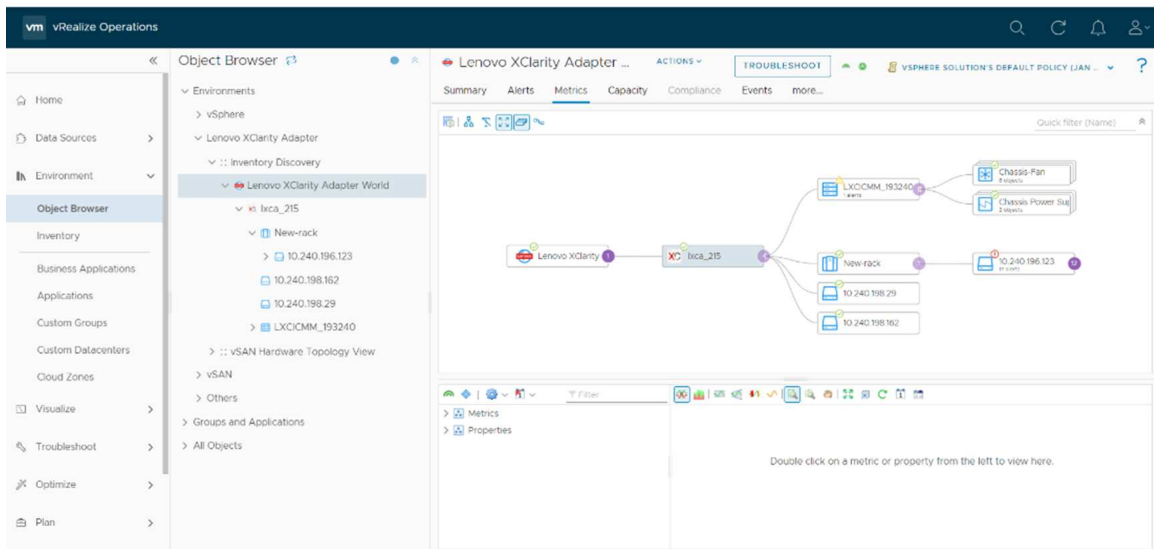


4. View the monitoring discovered resource as follows:

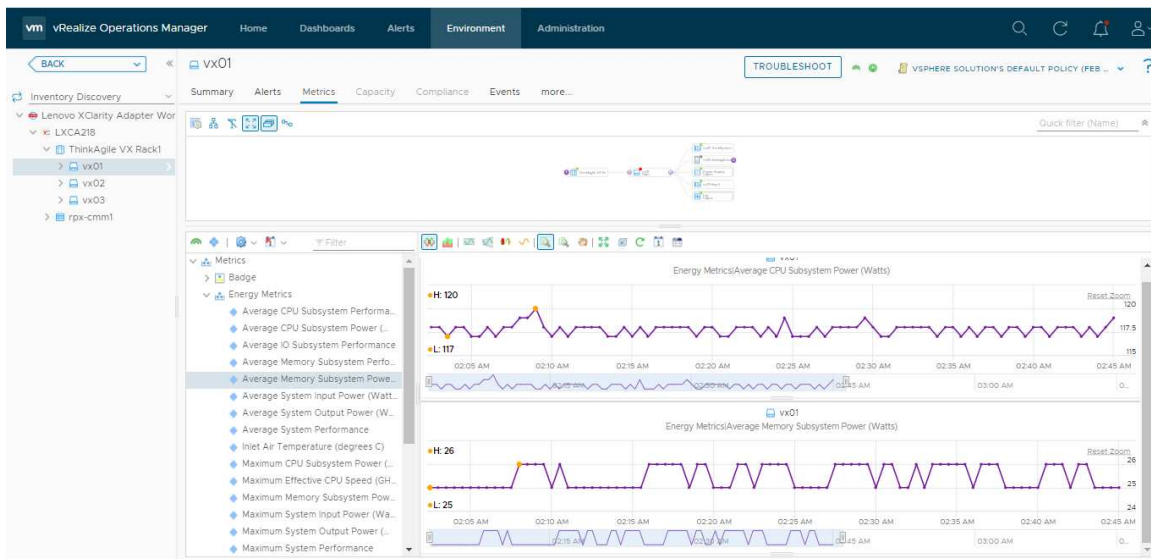
- a. To view the collection status and state in the resources pane, click
 - **Lenovo XClarity Adapter → Inventory Discovery → Lenovo XClarity Adapter World → Lenovo XClarity Adapter Instance → Rack → Summary.**
 - **Lenovo XClarity Adapter → Inventory Discovery → Lenovo XClarity Adapter World → Lenovo XClarity Adapter Instance → Chassis → Summary.**



- b. To view the resource relationship between Lenovo XClarity Adapter and vSphere/vSAN Adapter, click **Lenovo XClarity Adapter → Inventory Discovery → Lenovo XClarity Adapter World → Lenovo XClarity Adapter Instance → Rack → Metrics → Show Object Relationship.**



5. To view the metrics and badges of the resource:
 - a. Click the **Metrics** tab.
 - b. Click the required resource in the right pane.
 - c. Navigate **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World** → **Lenovo XClarity Adapter Instance** → **Rack** → **Metrics** → **Metrics** → **Resource group** → **Metrics** (double click on metrics) → **Metric Chart**.



Using the badges to monitor resources

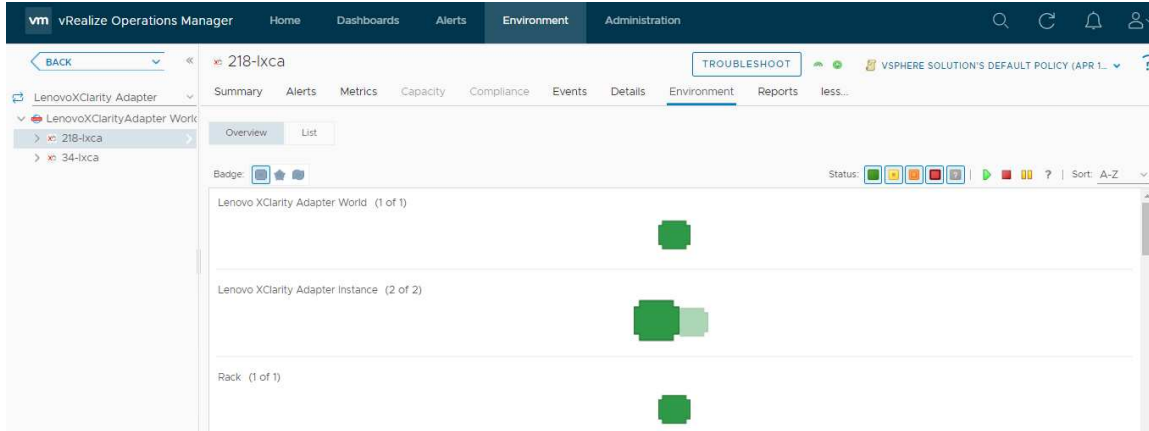
Badges are high-level indicators of the system. vROps computes the values of the badges depending upon how the system is performing. Badges are computed on a lot of parameters internally by vROps. One of the important criteria for badge computation is alerts generated in the system with impact specified as a badge.

Based on VMware best practices, the Badge severity is defined. The health badge reflects the current health of a particular object. The Risk badge indicates potential problems that might eventually degrade the performance of the system. For more details of badges, see [VMware documentation](#).

Procedure

To view Lenovo XClarity Adapter resources, complete the following steps.

1. Log in to vROps as an admin user.
2. Navigate to the **Environment** tab and navigate to the resource level to view the badges of the resource. For more details on how to navigate to a specific resource, see [“Monitoring the discovered resources” on page 27](#).
3. Select the resource and click the **Environment** tab in the right pane.



Viewing alerts

The alerts are fault events that are directly coming from LXCA. The alerts include a short description of the alert and recommendations.

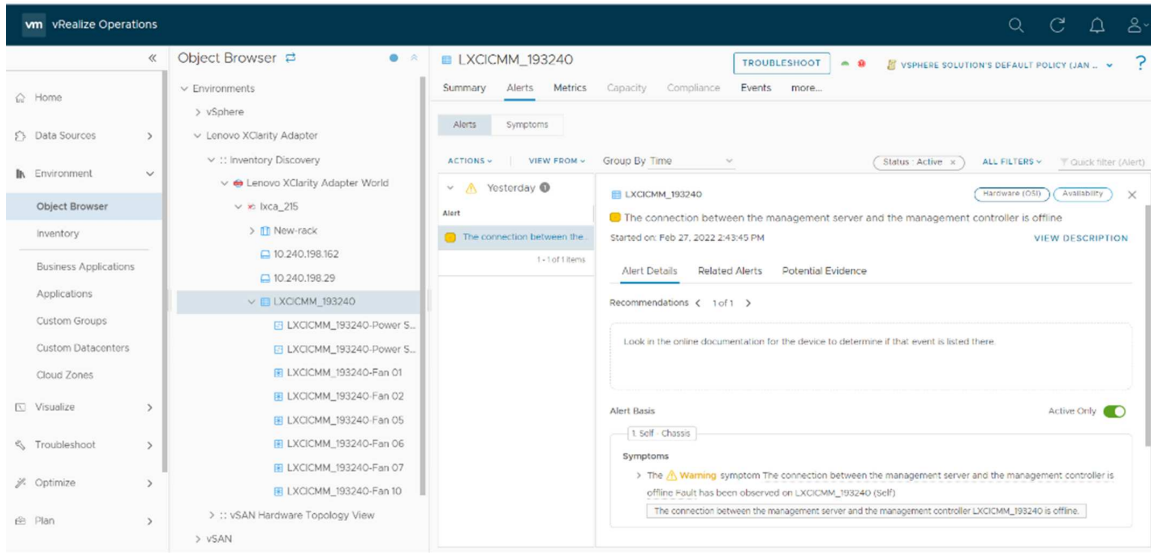
The Lenovo XClarity Adapter Management Pack provides a set of pre-defined alerts and symptoms for resources that the Lenovo XClarity Adapter instance monitors.

The plugin helps to monitor the hardware events in a Lenovo XClarity Administrator-managed environment. Quickly identify trends based on hardware events received, including hardware failures, power/thermal thresholds that exceeded, and PFAs (predicted failure alerts). These events categorize by source, type of hardware surfacing the events, and whether service is required. This information can help identify issues in your data centers so that you can react before more serious issues occur.

Procedure

To view alerts, complete the following steps.

1. Log in to vROps as an admin user.
2. To view alerts of specific resources, click **Environment** → **Object Browser** → **Lenovo XClarity Adapter** → **Inventory Discovery** → **Lenovo XClarity Adapter World**, and select the target resource.
3. Click the **Alerts** tab in the right pane to view the alerts of the selected resource.



- To view more details of each alert, click the alerts link to open the details in the right pane. For more details on Alerts, see [VMware documentation](#).

Please note that if two or more alerts are triggered in LXCA with the same `msgID` and different `commonEventIDs`, then only one alert is triggered in vROps that is defined for the `msgID`. A common alert message is created by using an alert message from all alerts with the same `msgID` from LXCA.

For example; Alert message in vROps is displayed as follows:

[Alert 1 message] [Alert 2 message] [Alert 3 message] [...] [...]

⌵ ! **vx01** has symptom Numeric sensor going low (lower critical) has asserted Fault

[Numeric sensor Sys Fan Pwr going low (lower critical) has asserted.] [Numeric sensor CPU Power going low (lower critical) has asserted.] [Numeric sensor Exhaust Temp going low (lower critical) has asserted.] [Numeric sensor PCH Temp going low (lower critical) has asserted.]

Event source: Server
Source event object name: vx01
Source event name: [Numeric sensor Sys Fan Pwr going low (lower critical) has asserted.] [Numeric sensor CPU Power going low (lower critical) has asserted.] [Numeric sensor Exhaust Temp going low (lower critical) has asserted.] [Numeric sensor PCH Temp going low (lower critical) has asserted.]

Appendix A. Troubleshooting

This chapter provides the details to view the logs troubleshoot and resolve problems with Lenovo XClarity vROps.

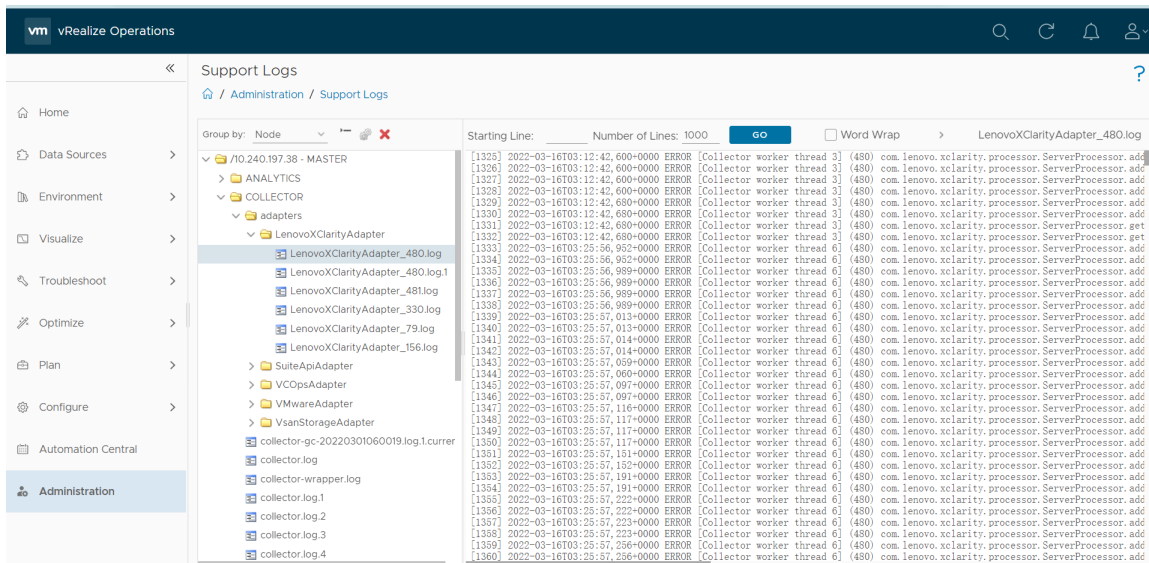
Viewing logs

This topic provides information about the MP logs and their location. The MP must provide logging details at various log levels including INFO, DEBUG, TRACE, and ERROR.

Procedure

To view logs, complete the following steps:

1. Log in to vROps as an admin user.
2. Click **Administration** → **Support Logs**.
3. Expand the node **Collector** → **adapters** → **Lenovo XClarity Adapter** folder to view the list of available log files.
4. Double-click the log entry to view the details of a specific log.



Note: For V8.5 and earlier versions of vROps, navigate to **Administration** → **Support** → **Logs**.

Known limitations

The following limitations apply to the Lenovo XClarity vROps, version 1.1.0:

- Alert threshold values are not displayed
- Top-10 widgets taking a minimum of 4 collection cycles to reflect the data.
- The scoreboard widget displays the data automatically based on the selected object.
- All alerts present on the LXCA are not displayed.
- The child widgets contain the data which is not changed unless you select the server (parent) resource.

Workaround: To view the object data of the child widgets, you must select the parent resource each time to render updated data. For example; In the Lenovo Power and thermal dashboard, the rack is a parent resource and top-level selector. Under rack, the server is a child, and the server has multiple child

widgets. Select one server to populate the child widgets of the server. Later if you select a rack but did not select a server, the previously selected server data is present on the server child widgets.

Troubleshooting issues

This topic details the cause and resolution of the known issues.

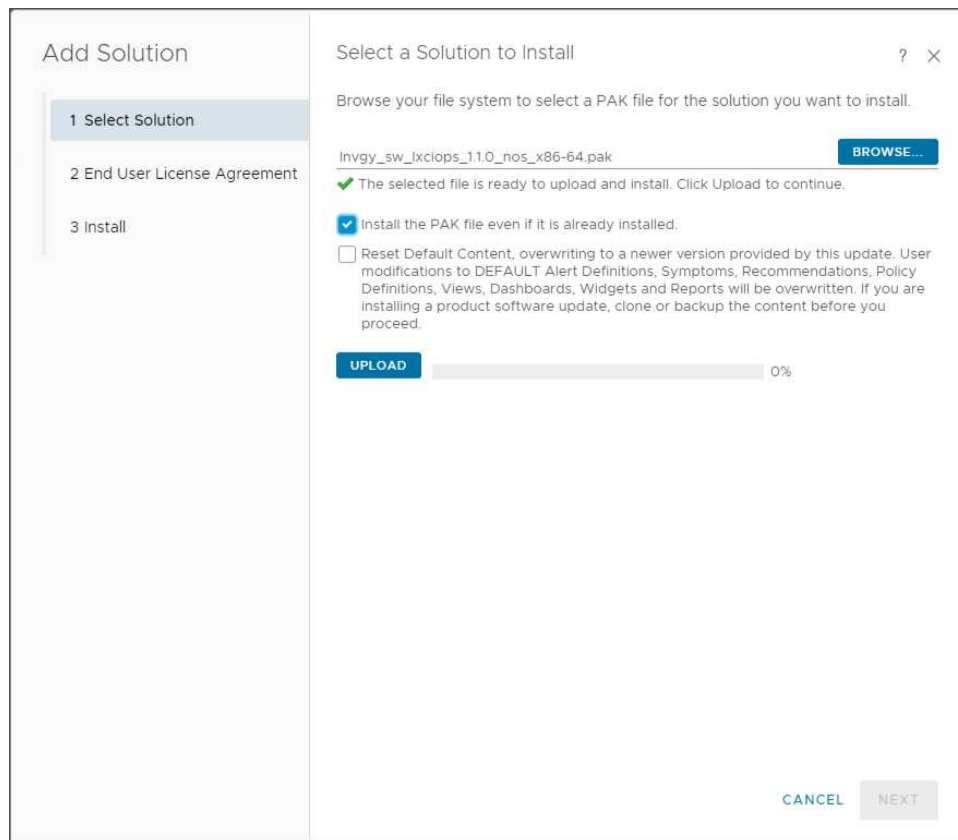
Duplicate dashboard entries

Issue

Duplicate dashboard entries are listed.

Cause

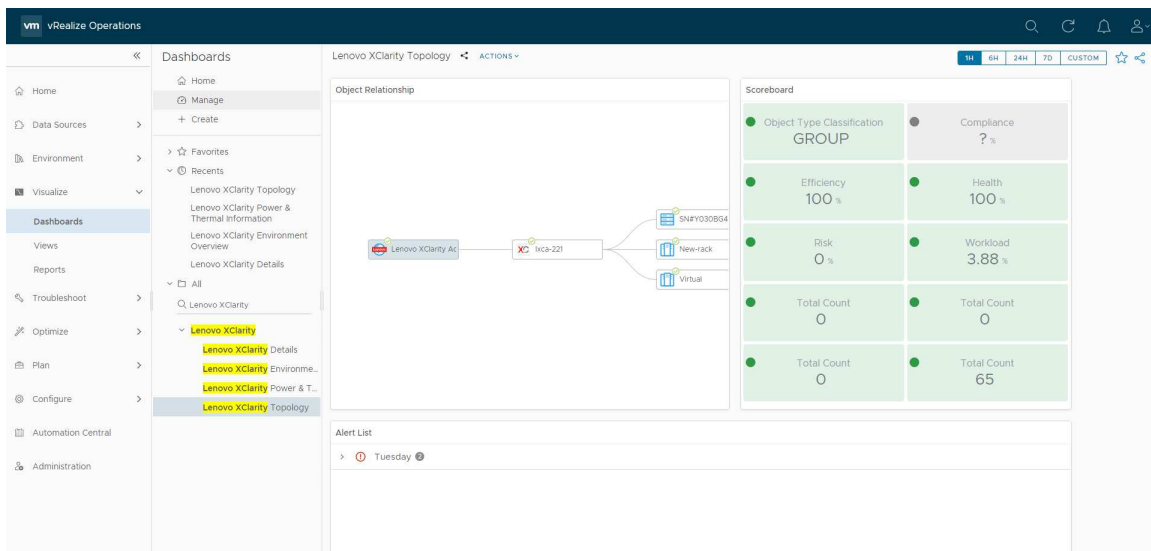
If the management pack was upgraded without selecting the **Reset Default Content** option, duplicate dashboard entries are listed. You must select this option so that the alert definitions, symptoms, recommendations, policy definitions, views, dashboards, reports are overwritten. For details on installing the MP, see [“Installing the Lenovo XClarity Adapter” on page 7](#).




Solution

To remove the duplicate dashboard entries in V8.6.2 of vROps, do the following:

1. Log in to the vRealize Operations Manager UI using admin credentials.
2. Navigate to **Visualize** → **Dashboards**.
3. In the right pane, click **All** → **Lenovo XClarity**.



4. Select the target duplicate dashboards and click **ACTIONS** → **Delete Dashboard**

Note: For V8.5 and earlier versions of vROps, click **Dashboards**, click  to display the **Manage Dashboards** page. Select the target duplicate dashboard, click the menu icon to display its options, select the target option, and click the delete icon.

Dashboard not listing the resources

Issue

The dashboards (**Lenovo XClarity Details** and **Lenovo XClarity Power & Thermal Information**) are not listing the resources.

Cause

The dashboards are not listing the resources as the rack is not available in LXCA.

Solution

Add a rack in LXCA to list the rack details and rack servers in the dashboard widgets.

Installation errors

For any installation-related errors and exceptions, check the `collector.log` file.

Procedure

To view logs, complete the following steps.

1. Log in to vROps as an admin user.
2. Click **Administration**.
3. In the left pane, select **Support Logs**.

Note: For V8.5 and earlier versions of vROps, select **Support** → **Logs**.

4. In the **Logs** pane, click **<Master node IP>**, and click **View_Bridge** → **view-bridge.log**.

vm vRealize Operations

Support Logs

/ Administration / Support Logs

Group by: Node

Starting Line: Number of Lines: 1000

Word Wrap

view-bridge.log

966	2022-03-06T13:31:25.319+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
967	2022-03-06T13:46:25.325+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
968	2022-03-06T14:01:25.330+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
969	2022-03-06T14:16:25.360+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
960	2022-03-06T14:31:25.368+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
961	2022-03-06T14:46:25.378+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
962	2022-03-06T15:01:25.389+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
963	2022-03-06T15:16:25.398+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
964	2022-03-06T15:31:25.406+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
965	2022-03-06T15:46:25.417+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
966	2022-03-06T16:01:25.428+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
967	2022-03-06T16:16:25.437+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
968	2022-03-06T16:31:25.445+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
969	2022-03-06T16:46:25.454+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
970	2022-03-06T17:01:25.464+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
971	2022-03-06T17:16:25.471+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
972	2022-03-06T17:31:25.481+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
973	2022-03-06T17:46:25.491+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
974	2022-03-06T18:01:25.501+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
975	2022-03-06T18:16:25.510+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
976	2022-03-06T18:31:25.518+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
977	2022-03-06T18:46:25.527+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
978	2022-03-06T19:01:25.537+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
979	2022-03-06T19:16:25.544+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
980	2022-03-06T19:31:25.554+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
981	2022-03-06T19:46:25.561+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
982	2022-03-06T20:01:25.571+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
983	2022-03-06T20:16:25.581+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
984	2022-03-06T20:31:25.591+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
985	2022-03-06T20:46:25.600+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
986	2022-03-06T21:01:25.610+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
987	2022-03-06T21:16:25.620+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re
988	2022-03-06T21:31:25.629+0000	INFO	[DistTaskReportRenderDistributedScheduler]	com.vmware.vcops.bridge.content.server.re

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