



# Power Management Application vSphere Plug in

**Installer/User Guide**

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If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit <https://www.vertiv.com/en-us/support/> for additional assistance.

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# 1 Product Overview

vSphere Plug in is a power management application that enables you to administer the UPS and PDU data of Power Insight in vSphere. It also provides alarms alerts from Power Insight.

## 1.1 Features and Advantages

Following are the features and advantages of plug in:

- Simple deployment and convenient operation
- Centralized access to power readings
- Upload power equipment alarms to vSphere, and users can configure related measures to protect the server
- Monitoring

## 1.2 Compatible vSphere Version

Above vSphere 6.7.

## 1.3 Compatible Power Insight Version

Above Power Insight 2.4.

## 1.4 System Requirements

The hardware and software pre-requisites for the installation of vSphere plug in are:

### 1.4.1 Hardware

- A normal vSphere environment, with at least one cluster and three servers under vSphere.
- At least one server to run a virtual machine with 2CPU, 2GB memory, and 8GB hard disk.

### 1.4.2 Network

- Plug in network to access Power Insight.
- Plug in to run in the vSphere network environment.

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## 2 Installation

The following instructions will help you to download and install the vSphere plug in:

### 2.1 User Account Registration

If the power management vSphere plug in is the first Vertiv™ software you want to download, then you need to register on the Vertiv™ software download portal. After registration, you can download and install the latest version of the application.

**To do user registration:**

1. Please navigate to [www.Vertiv.com](http://www.Vertiv.com) in the web browser and hover your mouse over the Support tab.
2. Click *Get Software Downloads*, and then click the *Software Product Downloads*, menu option. The Software Download page appears.
3. Click *View Details* and then click the *Register* menu option.

**NOTE: Do not close the web page. The web page will refresh automatically and display the "Create an Account for Infrastructure Management Software" registration form, where you can enter your account activation code.**

4. Enter the mandatory field details, agree to the terms of use, and then click the *Create Account*.
5. Visit the email account you provided during the registration process and obtain the activation code from the "Welcome to Vertiv Software Downloads" email.
6. Type the activation code in the Code field on the Create an Account for Infrastructure Management Software registration form and click *Submit*.

**To download the vSphere Plug in application:**

1. In the Software Download page, type the application name in the Search box that you want to download.
2. Click the *Download* option. Once the application is downloaded, you can install the power management application. For more information on account registration and application download, refer section 2.2 Software Download of Power Insight User Manual.

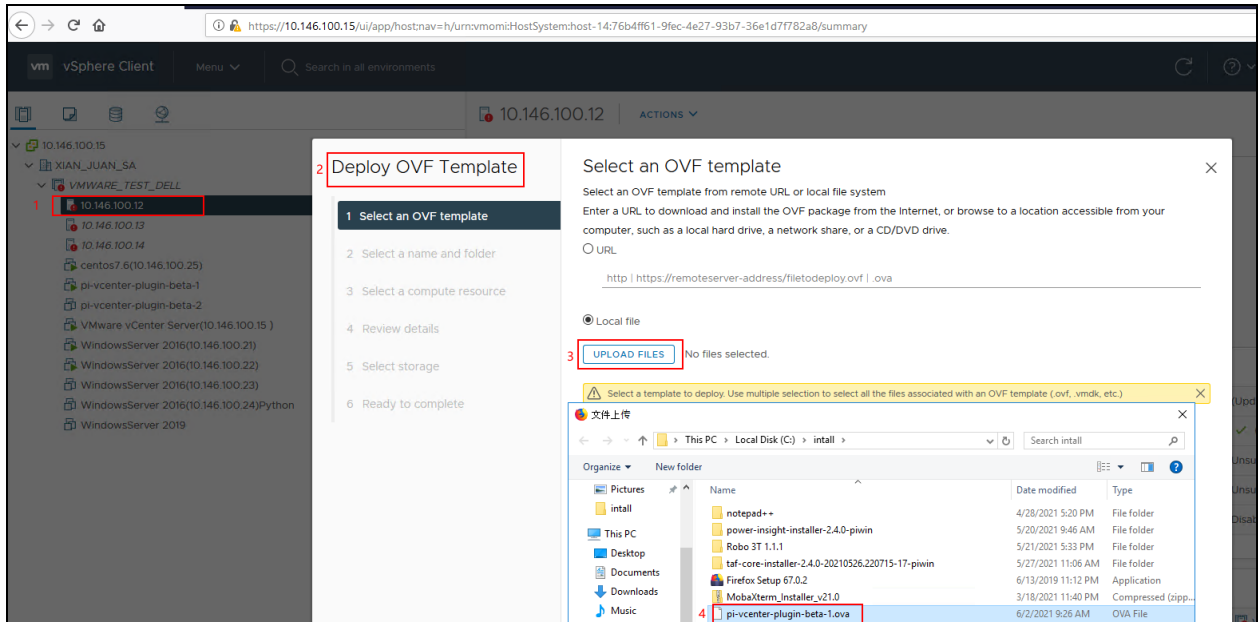
### 2.2 Power Management vSphere Plug in Installation

Install Plug in in vSphere to generate a virtual machine and set the virtual machine IP address manually or automatically.

1. Type vSphere (1). Select a Host (2). Deploy the Plug in service (3). Upload the Plug in package (4).

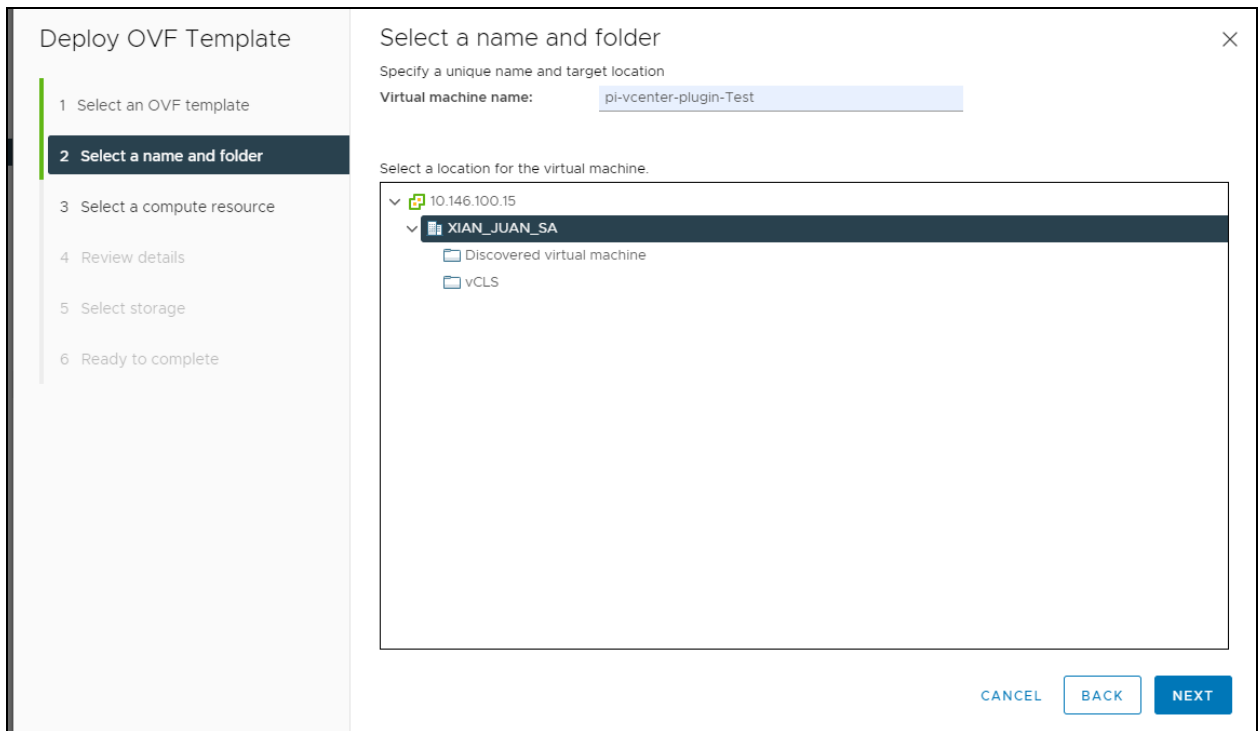
**NOTE: Ensure that you have downloaded the Plug in installation package from the [www.Vertiv.com](http://www.Vertiv.com) website.**

Figure 2.1 Upload Installation Package



2. Select the name and folder of the Plug in virtual machine.

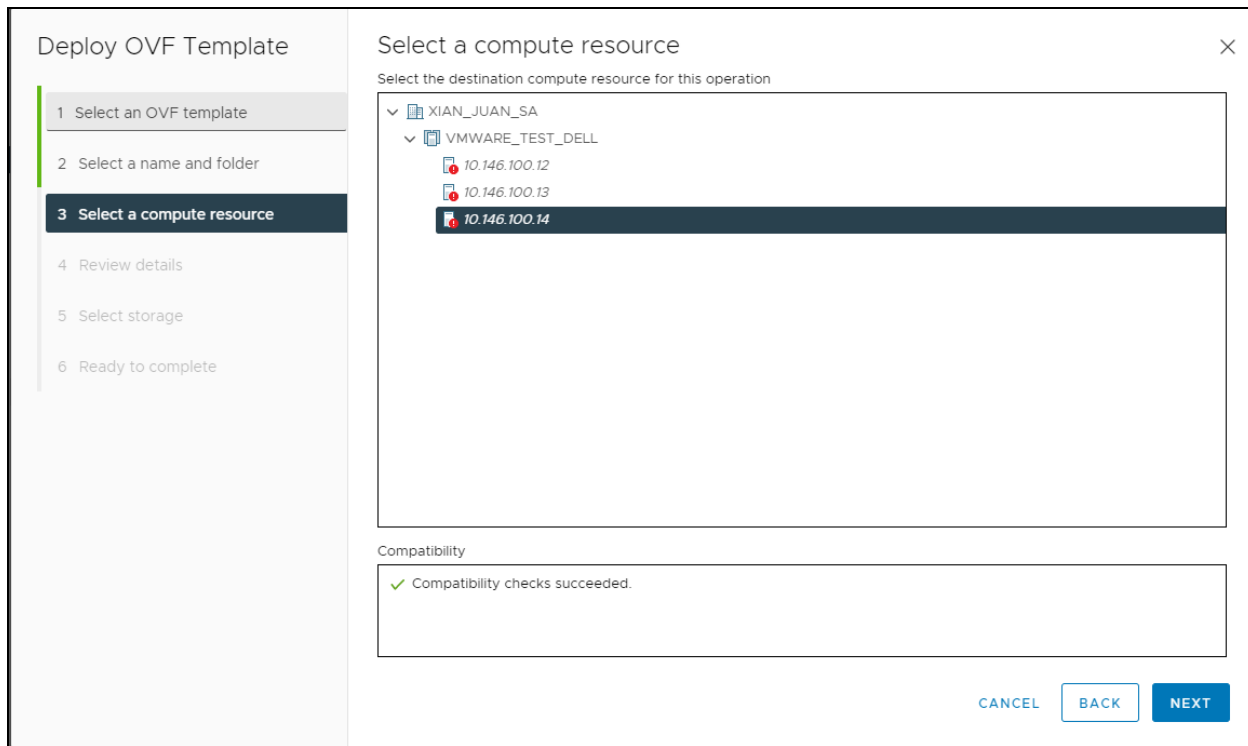
Figure 2.2 Set Plug in Virtual Machine Name





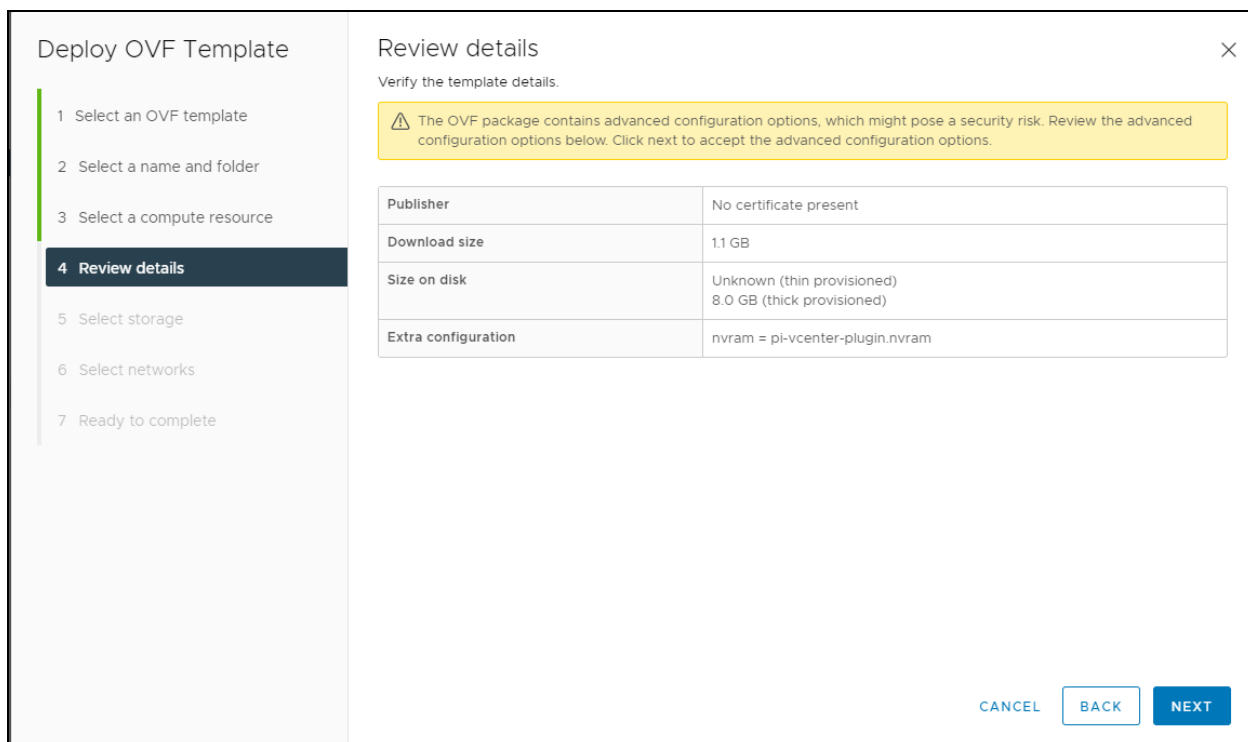
3. Select the host name on which the virtual machine is deployed.

**Figure 2.3 Select the Host**



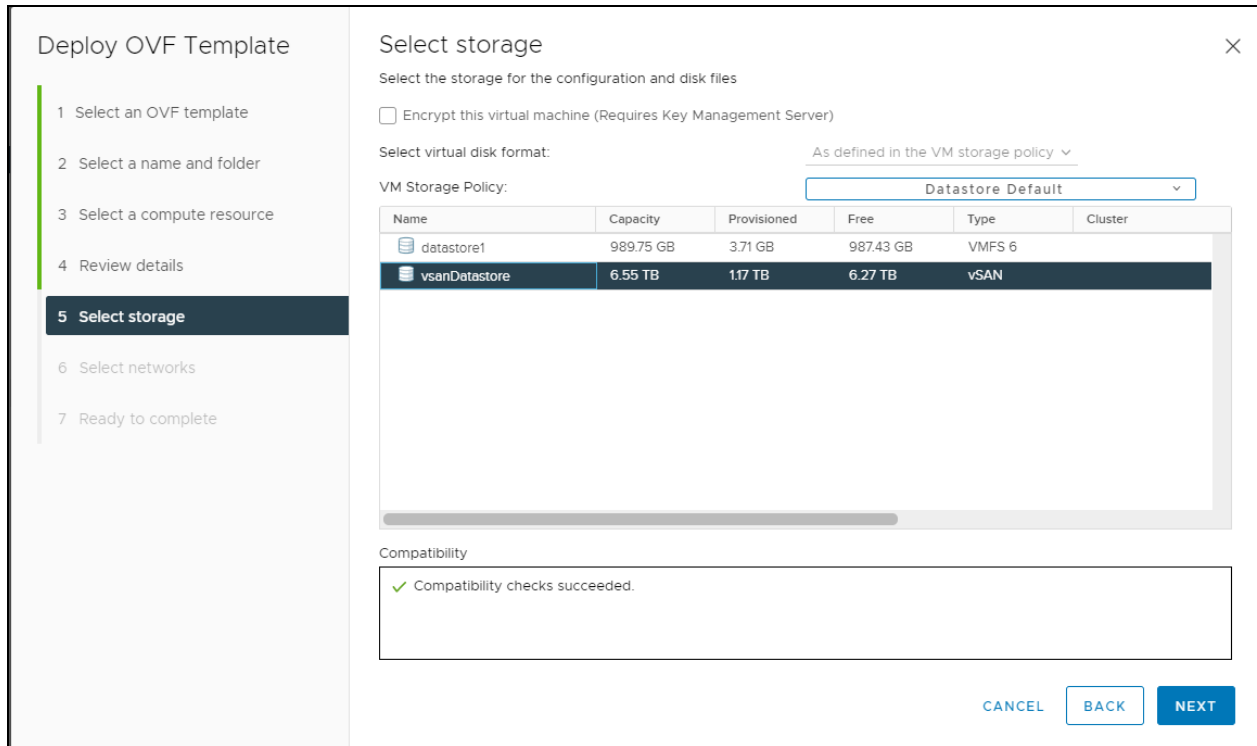
4. Verify the details of the plug in upload package.

**Figure 2.4 View Installation Package Information**



5. Select the storage device where the virtual machine is installed. Typically, it is installed on vsan storage.

**Figure 2.5 Virtual Machine Storage Selection**



6. Set up the virtual machine network.

Specify the correct network configuration as follows:

**NOTE: Do not enter the network configuration if the DHCP service is available.**

**NOTE: The IP Address, Netmask Prefix, Gateway and DNS parameters is effective only when the Hostname is specified.**

- Hostname-** Type the host name if you need to set the IP statically.
- IP Address-** Type the IP address if you need to set the IP statically.
- Netmask Prefix-** Type the Netmask Prefix if you need to set the IP statically.
- Gateway-** Type the network gateway if you need to set the IP statically.
- Specify the DNS and DNS Domain details if DNS service is available.
- Root Password-** Modify the password corresponding to root used by ssh.

**NOTE: If password is not provided, the default password “vertiv” will be used.**

Figure 2.6 Virtual Machine Network Selection

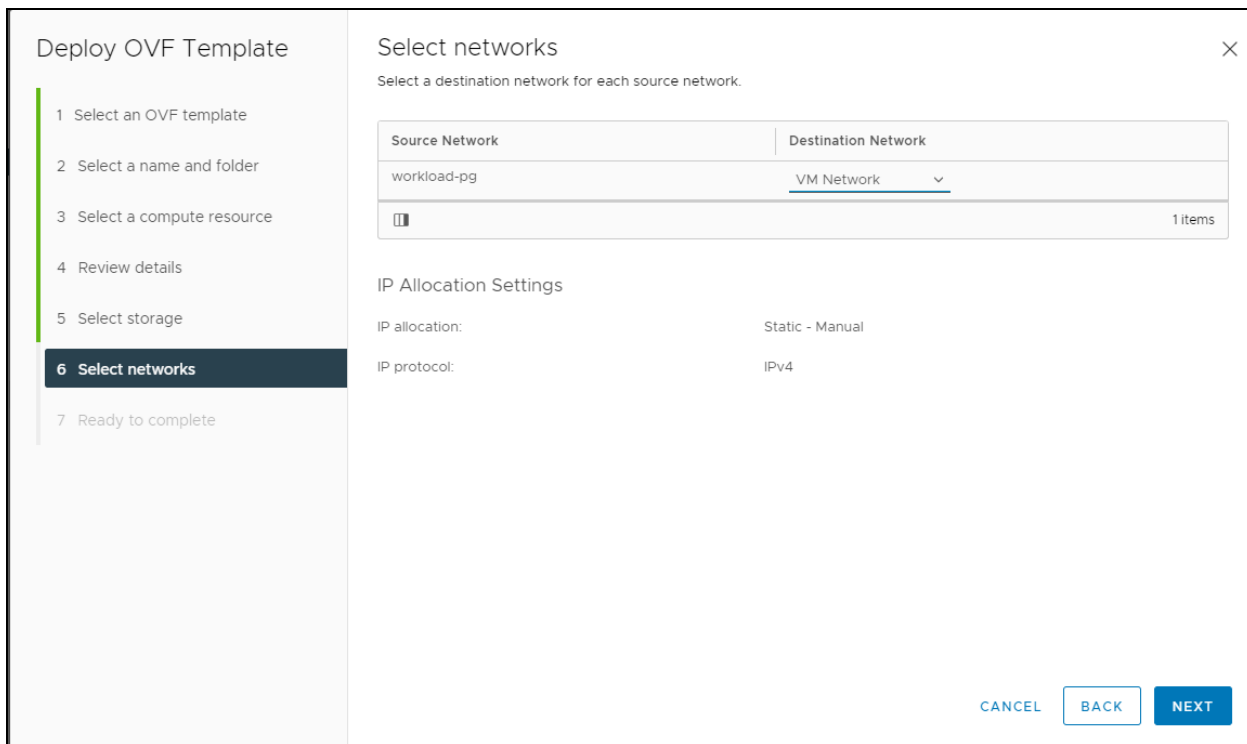


Figure 2.7 Virtual Machine Information View

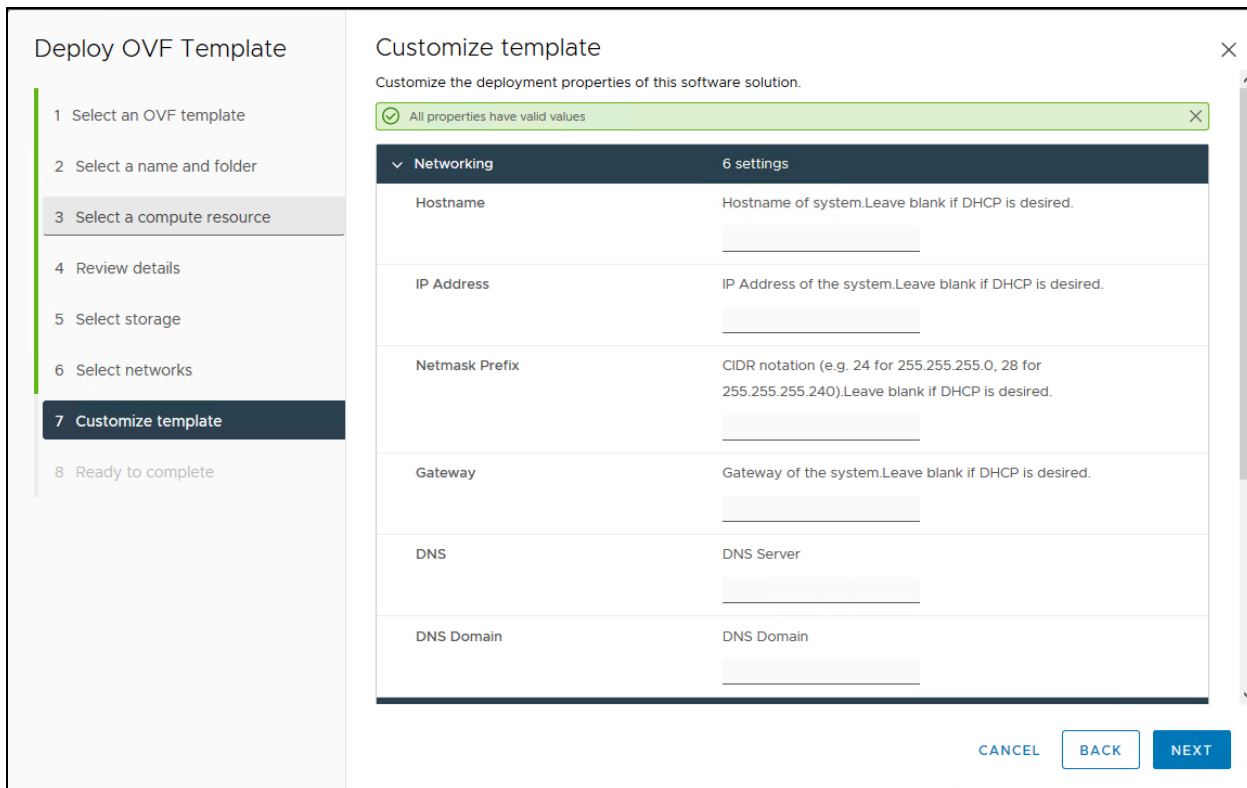
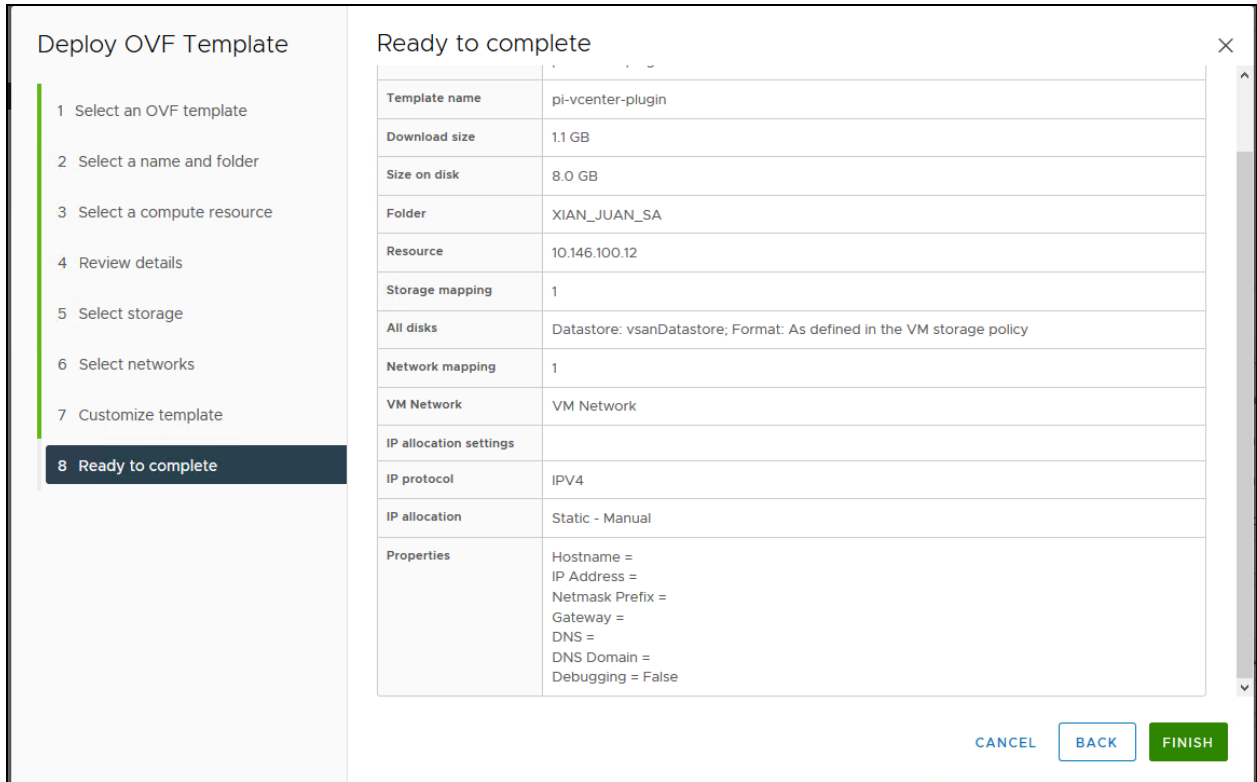
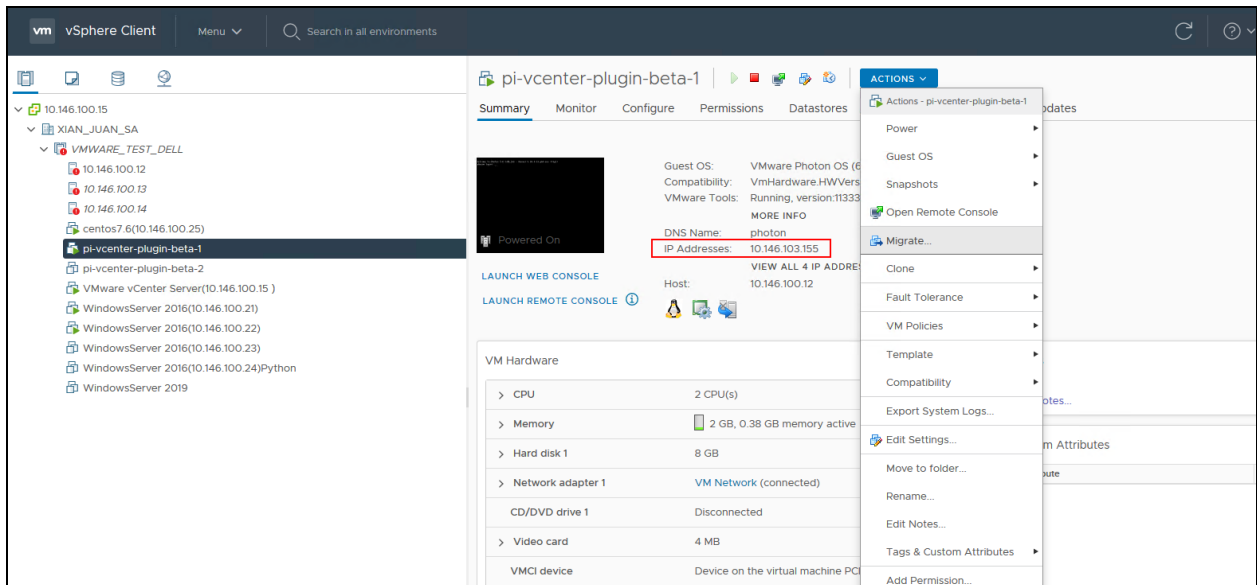


Figure 2.8 Virtual Machine Information View



**NOTE:** If the user does not enter the host name and other information in the network configuration process, the system uses the DHCP service to obtain the IP address and DNS server address by default. Otherwise, the network parameters set by the user are used. After the virtual machine is turned on, the user can also manually modify the IP address. For the steps, refer to the following link: [https://vmware.github.io/photon/assets/files/html/3.0/photon\\_admin/setting-a-static-ip-address.html](https://vmware.github.io/photon/assets/files/html/3.0/photon_admin/setting-a-static-ip-address.html)

Figure 2.9 Virtual Machine IP Address



7. Log in to the Plug in registration interface.

After starting the Plug in virtual machine, enter the IP address of the Plug in in the browser and enter the Plug in service web interface for registration and authentication.

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## 3 Application Usage

The following instructions describe the screen elements of the user interface.

### 3.1 Register vSphere and Power Insight

#### 3.1.1 Overview

To complete the registration of Plug in and vSphere, as well as the registration of Plug in and Power Insight, first you need to install the plug in virtual service, and then access the Web interface of the Plug in service to perform bilateral authentication; The registration process of the plugin and vSphere will install the preset Power Insight alarms in Plug in to vSphere and all interfaces for data interaction with vSphere will be installed successfully. The authentication process of Plug in and Power Insight will authenticate the interfaces of both parties to ensure that the data is normal Interactive.

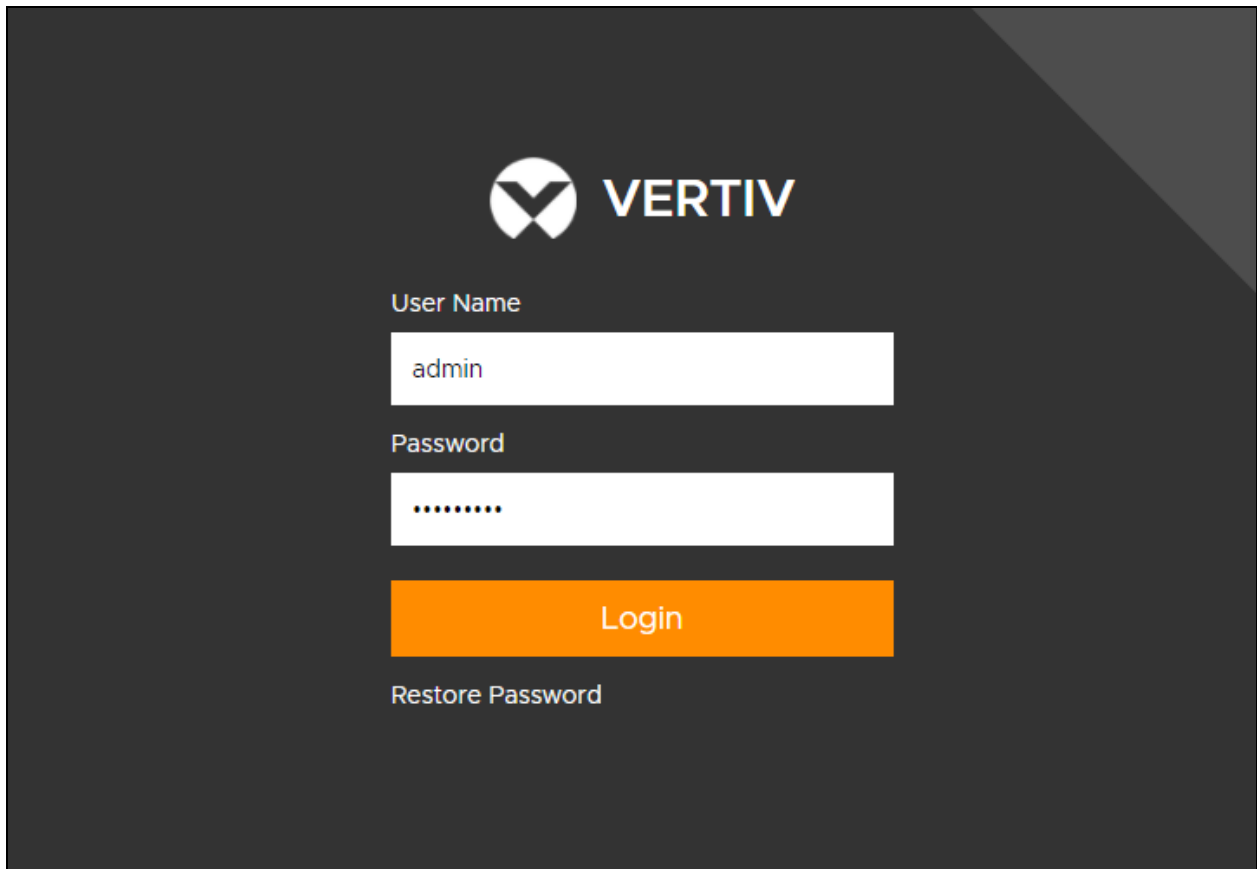
#### 3.1.2 Plug in Login Page

Once you complete the registration process, you can log in to Plug in.

##### Login steps:

1. Open a web browser and enter the Plug in IP address to access Web service. For example: <https://1.1.1.3/#/>  
The Plug in Login page appears.
2. Enter the UserName and Password and then click Login. The default login credentials are:
  - User Name: admin
  - Password: vertiv-pi

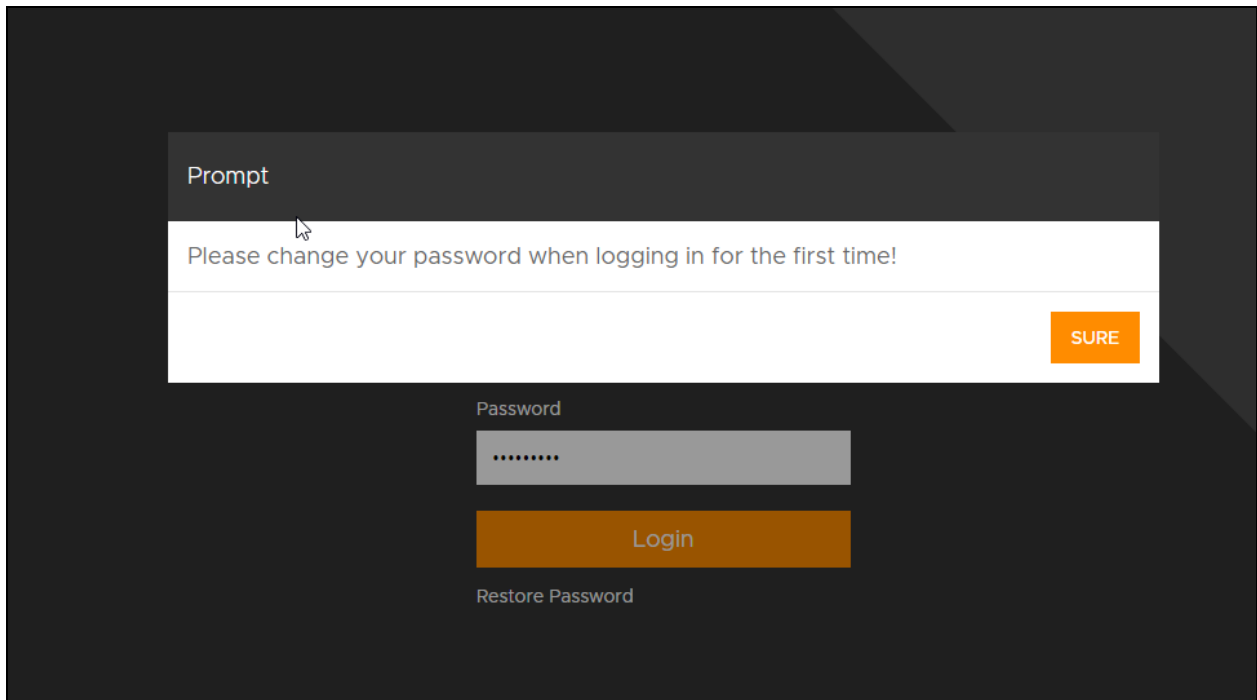
Figure 3.1 Plugin Login Page



**NOTE:** When logging in for the first time, the web interface prompts you to change the default password. See **Figure 3.2** on the facing page .



Figure 3.2 First Login Password Modification



### Changing the Password

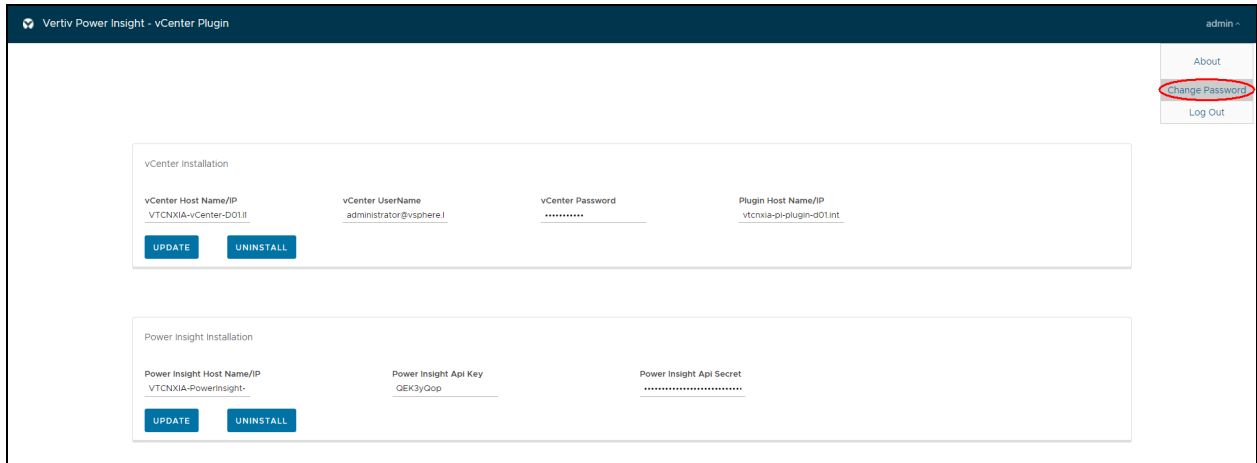
After a successful login, you can change your password

1. Click the user drop-down menu at the upper right corner of the interface.
2. Click the Change Password option.
3. Enter a new vSphere Password and then click Update. The interface resets the default password. See **Figure 3.3** below .

Once the password is changed successfully, make sure to use the new password at next login.

**NOTE:** You cannot change the default User Name.

Figure 3.3 Change Password



## Restoring the Default Password

If you forgot your login password, it is recommended to restore the default password (vertiv-pi) to access the Plug in application. Click Restore Password in the Login page to reset the password to default password. See **Figure 3.4** below .

**Figure 3.4 Reset Password**



### 3.1.3 Register Plug in to vSphere and Complete Plug in and Power Insight Certification

Register Plug in to vSphere and Complete Plug in and Power Insight certification.

To register Plug in to vSphere:

1. Follow the prompts on the Plug in service web interface
2. Enter the *vSphere IP address*, *login user name*, *login password* and the *Host Name/IP* of the plug in.
3. Click *Install*.

To Plug in and Power Insight registration certification:

1. Enter the Power Insight IP address, Power Insight API Key, Power Insight API Secret according to the interface prompts.
2. Click *Install*. The Power Insight API Key and API Secret is obtained from Power Insight's system settings—>Integrated management menu. For more details, refer to the Vertiv™ Power Insight User Manual.

Figure 3.5 Plug in Registration



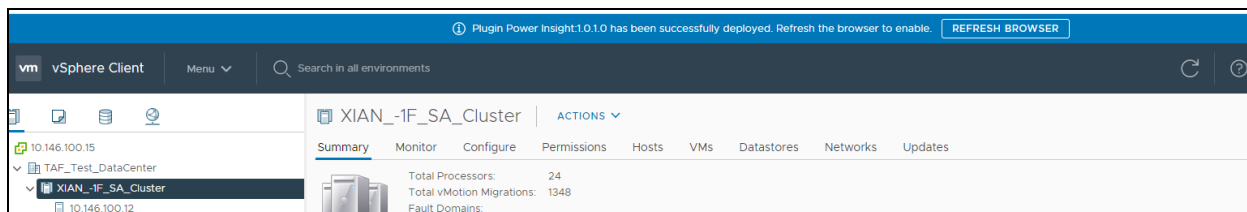
**CAUTION:** Plug in registration may fail due to these situations:

- If incorrect authentication information is entered. In this case, confirm the information and try again.
- Plug in has been registered before. When the Plug in is uninstalled, the warning information of the Vertiv power supply is left in vSphere. You need to enter vSphere to manually delete the global alarms and custom alarms of the Vertiv power supply.

## 3.2 Enabling Power Insight Plugin

1. VMware vSphere V7.0 and above-After users register PI Plugin to vSphere, re-enter the vSphere interface, a "Plugin has been successfully deployed" prompt will appear at the top of the page, click "Refresh Browser" to refresh the browser, as shown in **Figure 3.6** below .

Figure 3.6 Plugin has been Successfully Deployed Prompt

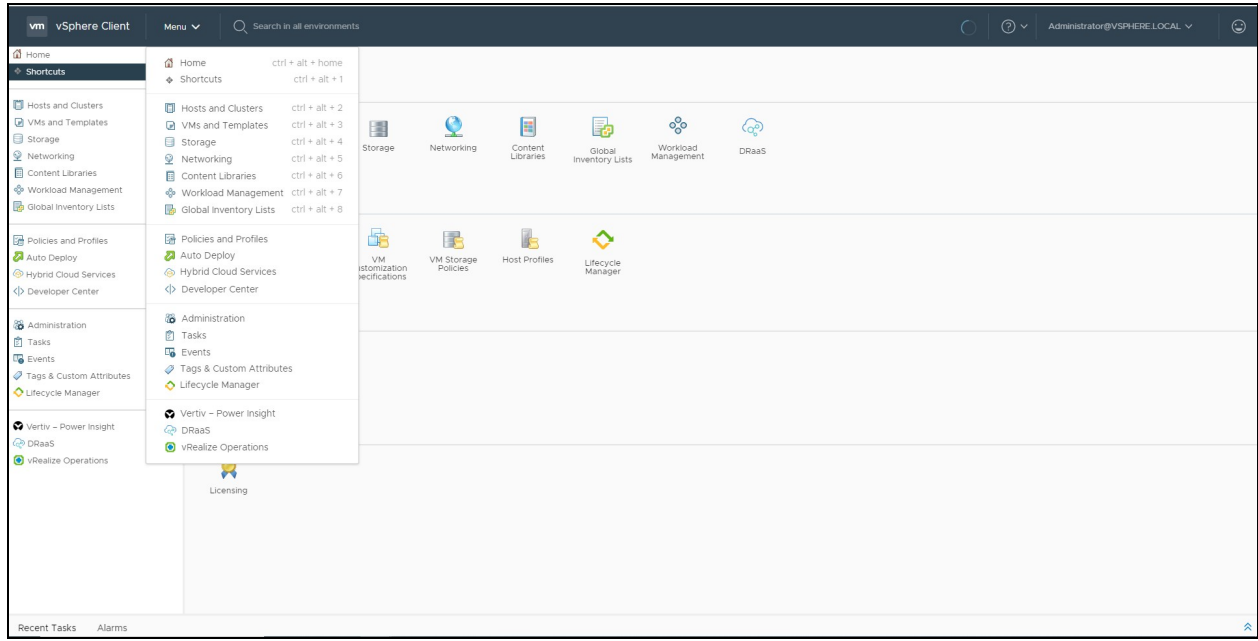


2. VMware vSphere V6.7 Version- After users register PI Plugin to vSphere, you need to log out and log in to vSphere again, and after that the blue prompt will appear in the vSphere interface, click "Refresh Browser" to enable the PI Plugin.

### 3.3 Associate Server and Power Supply Equipment

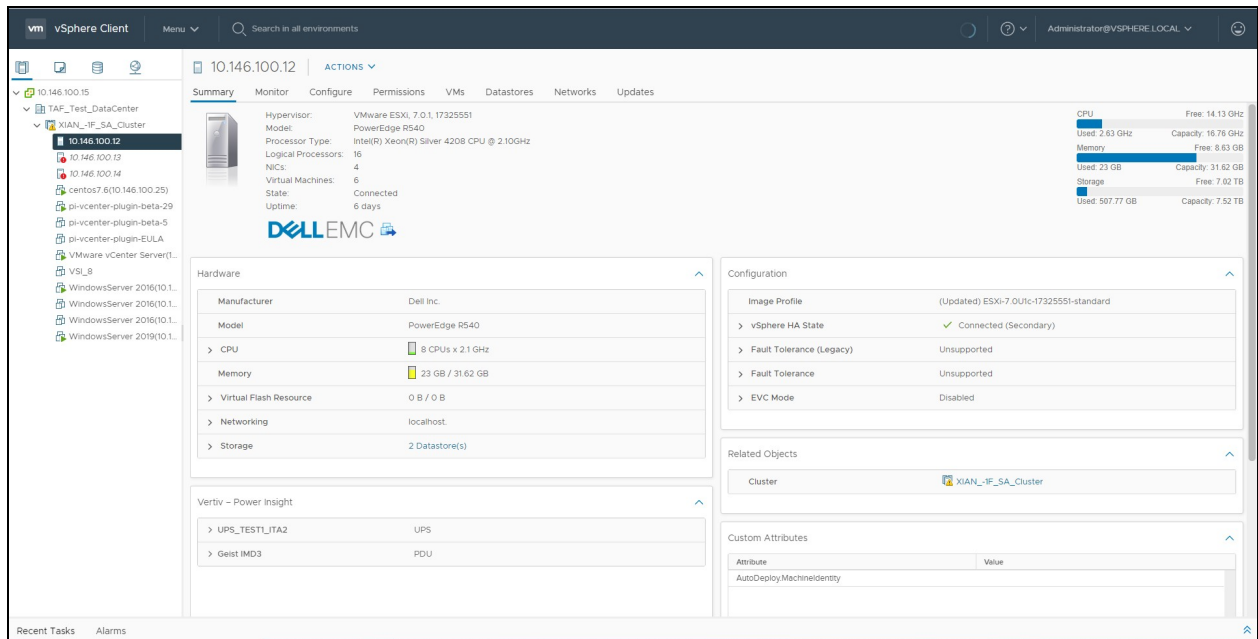
1. On specifying the vSphere interface, click Menu at the top of the page, and then select the Host and Clusters option, as shown in Figure 3.7 below .

Figure 3.7 Device Association Entrance



2. Now, select a host under the cluster and click to enter the current host summary interface. For example, 10.146.100.12 is a host name, as shown in Figure 3.8 below .

Figure 3.8 Host Summary Interface



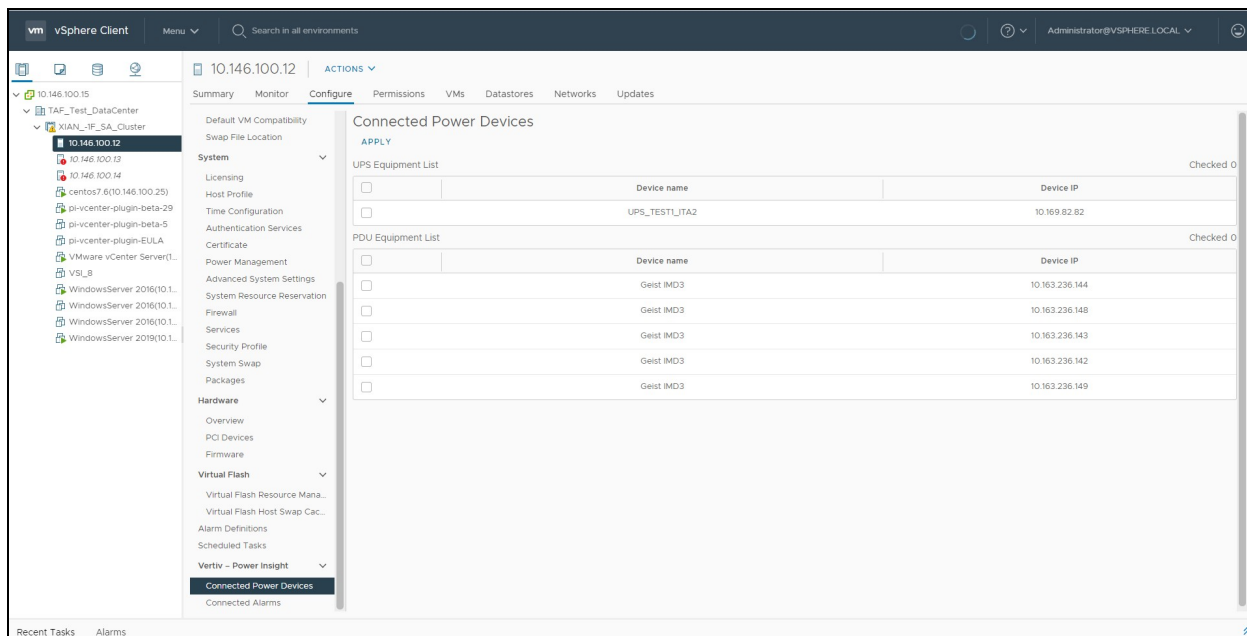
- After entering the summary interface, since the current host is not connected to the device, the user can see the Vertiv-Power Insight interface prompts that the device is not connected, as shown in **Figure 3.9** below .

**Figure 3.9 Summary Interface of Unbound Device**



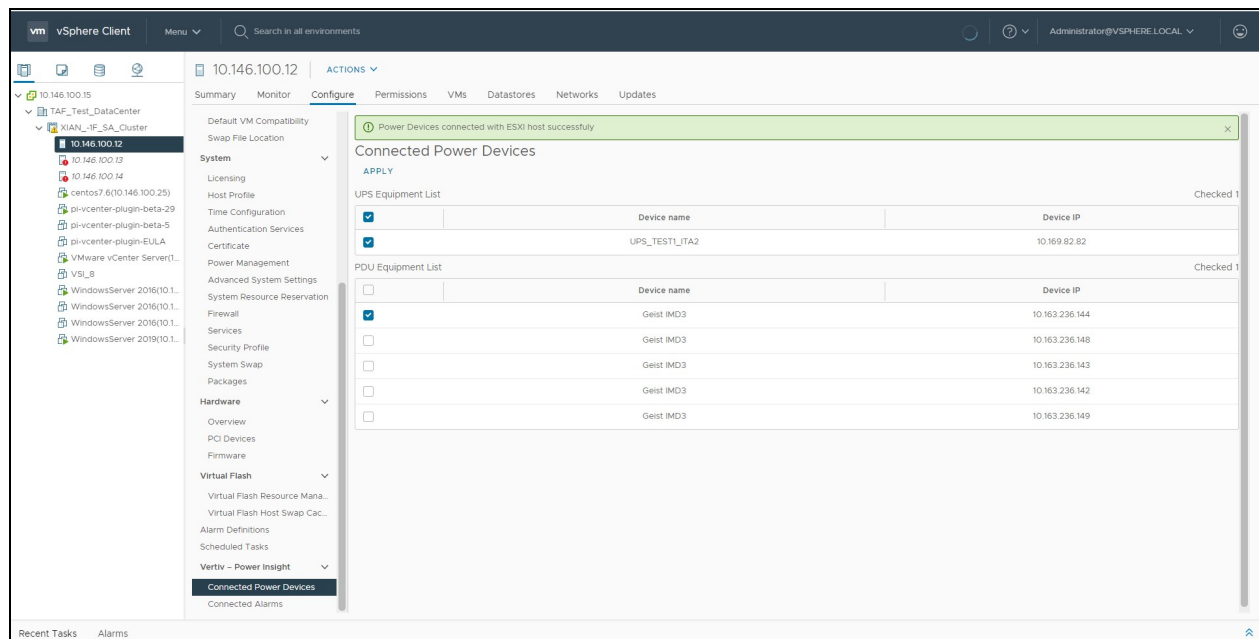
- The user can switch to the configuration interface by clicking the Configure tab. Select Vertiv-Power Insight -> Connected Power Device in the left menu bar to enter the vertiv configuration interface, as shown in **Figure 3.10** below .

**Figure 3.10 Vertiv Device Association Interface**



- In the configuration interface, you can view the UPS Equipment List and the PDU Equipment List. Click the check box against the UPS and PDU devices that need to be configured, and then click the APPLY in the upper left corner. The prompt "Power Devices connected with ESXi host successfully" is displayed which indicates that the selected UPS and PDU equipments are connected to the server, as shown in **Figure 3.11** on the next page .

Figure 3.11 Device Binding Successfully



To associate devices to other hosts, repeat [Step 2](#), [Step 3](#), [Step 4](#) and [Step 5](#).

## 3.4 Setting Alarms for a Single Server

### 3.4.1 Overview

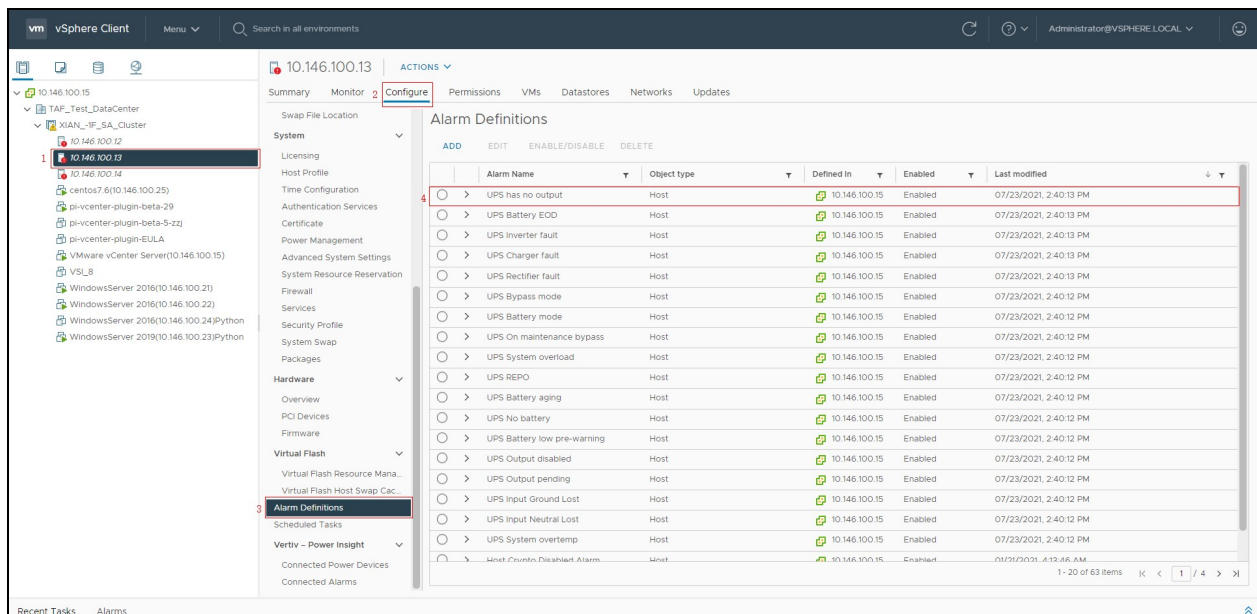
For the Host level, we provide two types of alarms:

- **Global alarms:** These are the default Vertiv™ power supply alarms installed by Plug in to all hosts under vSphere when it is registered and installed in vSphere. These alarms need not be set manually by the user.
- **Custom alarms:** These alarms need to be selected from the list according to the power supplied by the device to the Host. Only the custom alarms installed on the device can be triggered on vSphere, and the linkage actions preset in the alarm definition can be executed.

### 3.4.2 Function Module

View the global alarms of vSphere-level installations. When the Plug in is installed, the global alarm gets installed on all Hosts in vSphere.

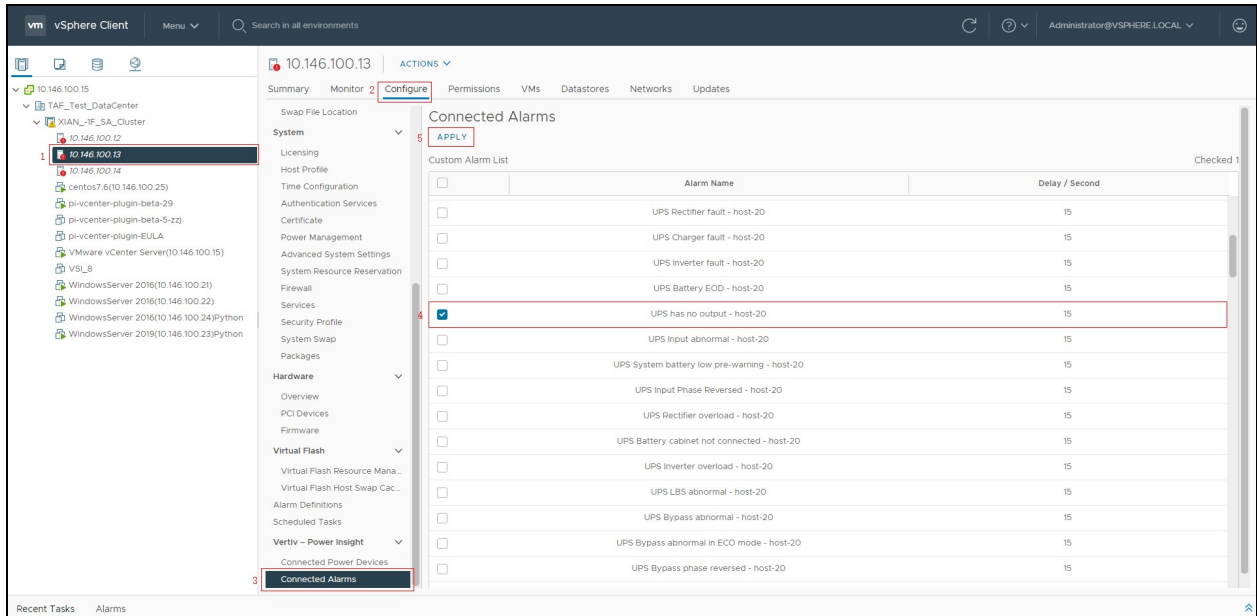
Figure 3.12 Host Installed Global Alarm



#### Associate Custom Alarms on Host

1. Select Host in the left pane. Click the *Configure* tab, and then select Vertiv-Power Insight -> Connected Alarms menu option.
2. In the Connected Alarms page, list of custom alarms is displayed. , select the alarm that needs to be installed on the Host, and then click *Apply*.

Figure 3.13 Host Association Custom Alarm

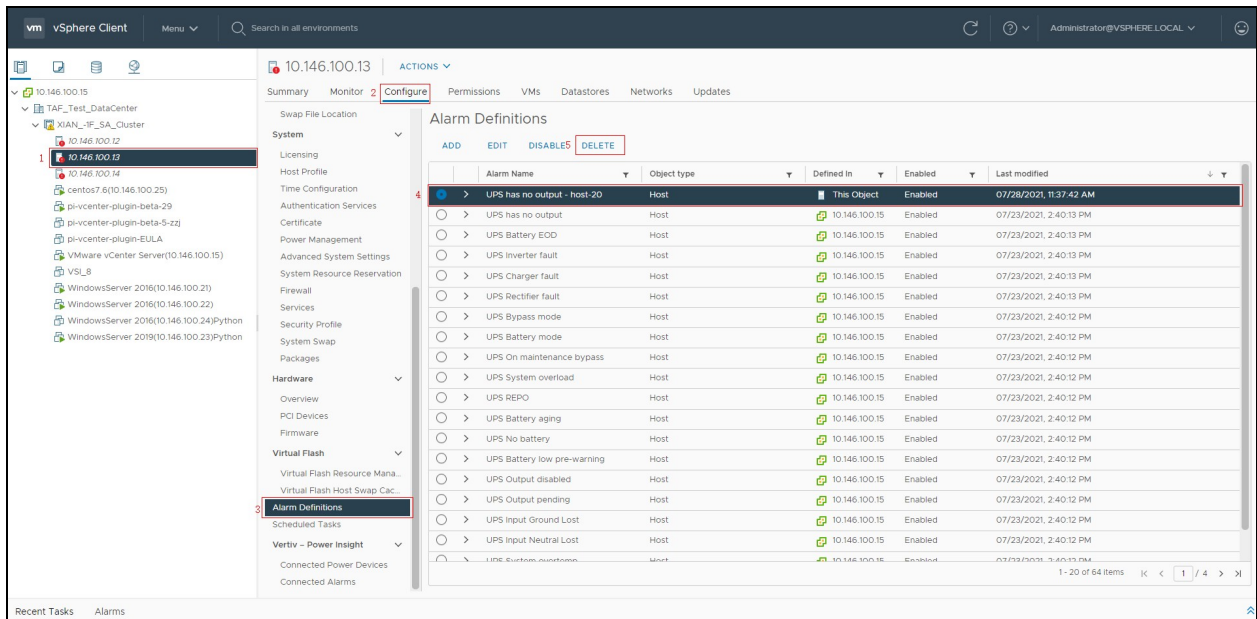


Cancel the Connected Custom Alarm

You can cancel the associated custom alarms in any of the following ways:

- Delete the associated custom alarm in the Alarm Definitions page.
- Uncheck the associated custom alarms in the Connected Alarms page, and then click *Apply*.

Figure 3.14 Host Delete Custom Alarm





**CAUTION:**

- When an alarm occurs on the power device connected the Host, it must be pre-installed on the Host to trigger the alarm in vSphere, and then execute the alarm preset action. The alarms installed on the host can be global alarms or manually associated custom alarms.
- The custom alarms also include some alarms with the same name as the global alarms, but their scope of action is different. By default, the global alarms are installed on all hosts and are effective for all hosts. Custom alarms are only effective for the associated Host.
- If the global alarm and custom alarm installed by a Host have the same name, it is recommended to disable the global alarm manually on the Host to avoid conflicts.

**Figure 3.15 Host Alarm**

The screenshot shows the vSphere Client interface for host 10.146.100.13. The 'Configure' tab is selected, and the 'Alarm Definitions' section is open. The table below shows the list of alarms installed on the host.

Alarm Name	Object type	Defined In	Enabled	Last modified
UPS has no output - host-20	Host	This Object	Enabled	07/28/2021, 1:03:17 PM
UPS System overtemp - host-20	Host	This Object	Enabled	07/28/2021, 1:02:35 PM
UPS has no output	Host	10.146.100.15	Enabled	07/23/2021, 2:40:13 PM
UPS Battery EOD	Host	10.146.100.15	Enabled	07/23/2021, 2:40:13 PM
UPS inverter fault	Host	10.146.100.15	Enabled	07/23/2021, 2:40:13 PM
UPS Charger fault	Host	10.146.100.15	Enabled	07/23/2021, 2:40:13 PM
UPS Rectifier fault	Host	10.146.100.15	Enabled	07/23/2021, 2:40:13 PM
UPS Bypass mode	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Battery mode	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS On maintenance bypass	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS System overload	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS REPO	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Battery aging	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS No battery	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Battery low pre-warning	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Output disabled	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Output pending	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Input Ground Lost	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM
UPS Input Mismatch Fault	Host	10.146.100.15	Enabled	07/23/2021, 2:40:12 PM

## 3.5 Power Equipment Alarm

### 3.5.1 Alarm Definition

After the Plug in is registered to vSphere, the pre-installed alarms is displayed under the vSphere -> Configure -> Alarm Definitions page.

Figure 3.16 Alarm Definition

	Alarm Name	Object type	Defined In	Enabled	Last modified
<input type="radio"/>	UPS UPS has no output	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS Battery EOD	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS inverter fault	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS Charger fault	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS Rectifier fault	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS Bypass mode	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS Battery mode	Host	This Object	Enabled	06/02/2021, 6:40:31 PM
<input type="radio"/>	UPS On maintenance bypass	Host	This Object	Enabled	06/02/2021, 6:40:30 PM
<input type="radio"/>	UPS System overload	Host	This Object	Enabled	06/02/2021, 6:40:30 PM
<input type="radio"/>	UPS REPO	Host	This Object	Enabled	06/02/2021, 6:40:30 PM
<input type="radio"/>	UPS Battery aging	Host	This Object	Enabled	06/02/2021, 6:40:30 PM
<input type="radio"/>	UPS No battery	Host	This Object	Enabled	06/02/2021, 6:40:30 PM
<input type="radio"/>	UPS Battery low pre-warning	Host	This Object	Enabled	06/02/2021, 6:40:30 PM
<input type="radio"/>	UPS Output disabled	Host	This Object	Enabled	06/02/2021, 6:40:30 PM

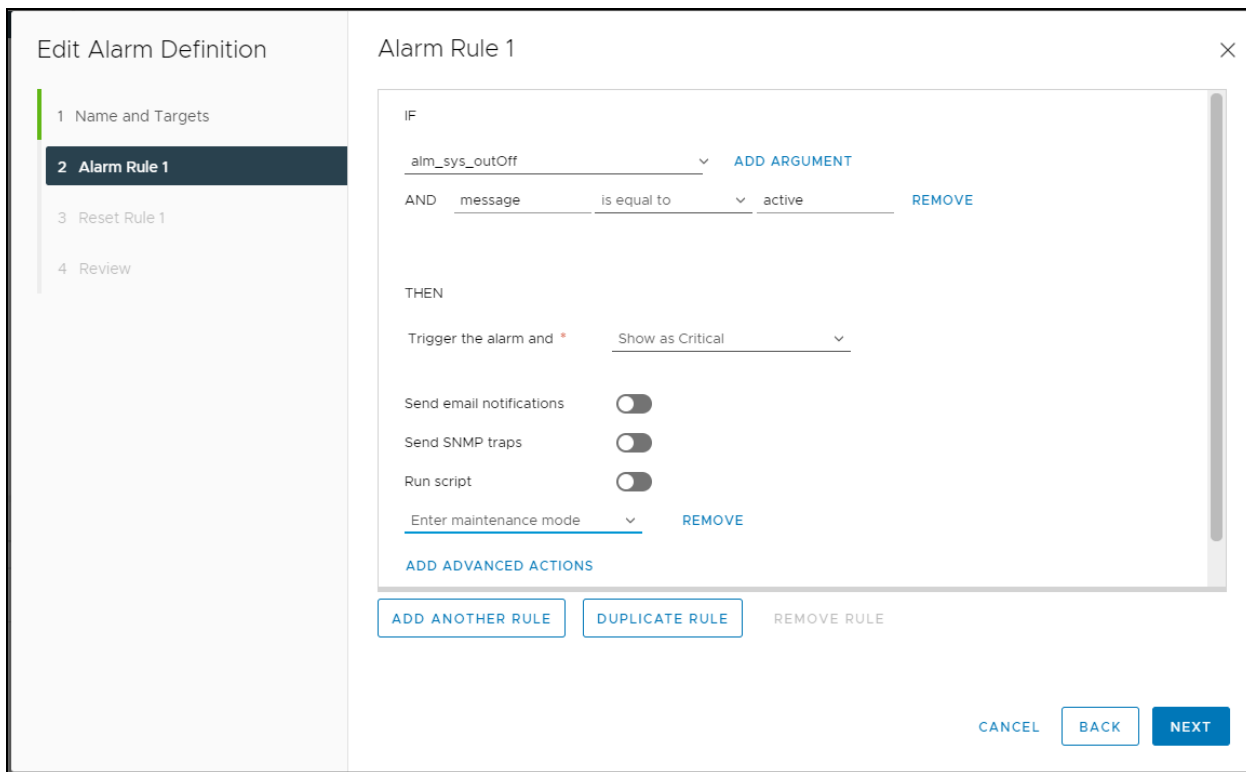
- For the newly added alarm definition, the object type is the host, and the definition scope is the entire vSphere.
- 10.146.100.15 represents the name of vSphere.
- You can edit, disable/enable, and delete alarm definitions.

You can add some advanced operations to the alert rule when editing alarm rule. These operations are:

- Entering the maintenance mode
- Adding the maintenance mode
- Exiting the maintenance mode

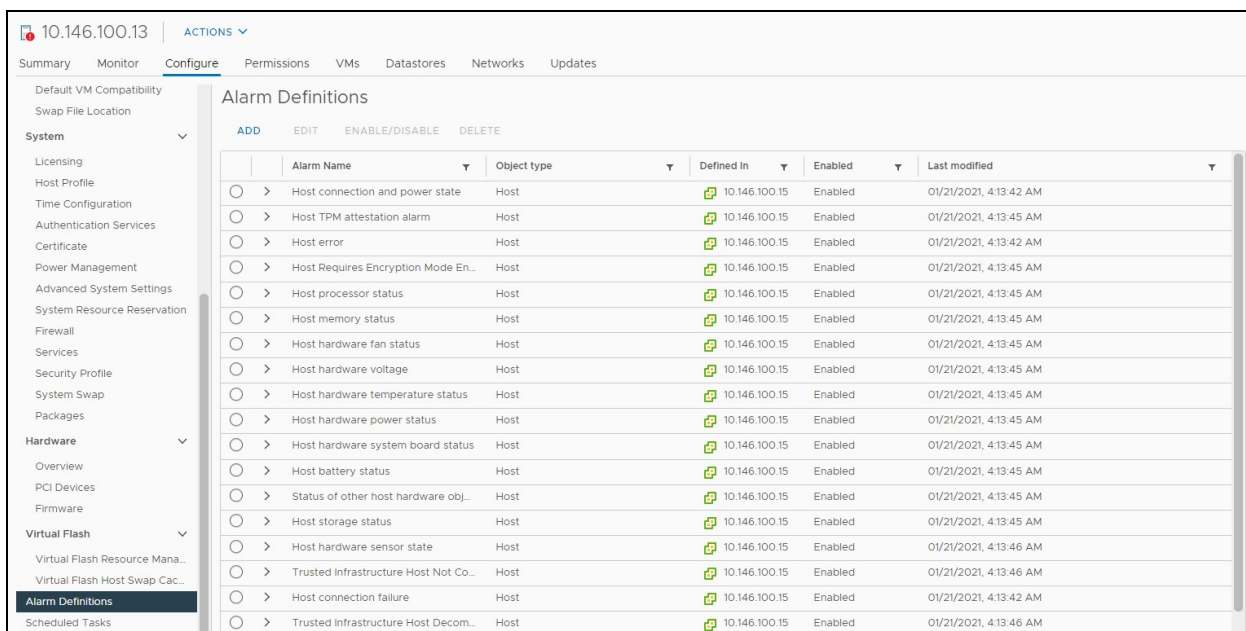
**NOTE: Do not modify the IF rules. Otherwise, alarms will not be triggered.**

Figure 3.17 Edit Alarm Definition



After configuring the alarms for a single server, the corresponding alarms will be displayed under the selected server -> Configure -> Alarm Definitions list.

Figure 3.18 Single Server Alarm Definition List



For newly added alarm definitions, the Object Type is Host, and the Definition Scope is the current server.

**NOTE: You can edit, disable/enable, and delete alarm definitions.**

While editing, you can add advanced operations to the alert rule. These operations are:

- Entering the maintenance mode
- Adding the maintenance mode
- Exiting the maintenance mode.

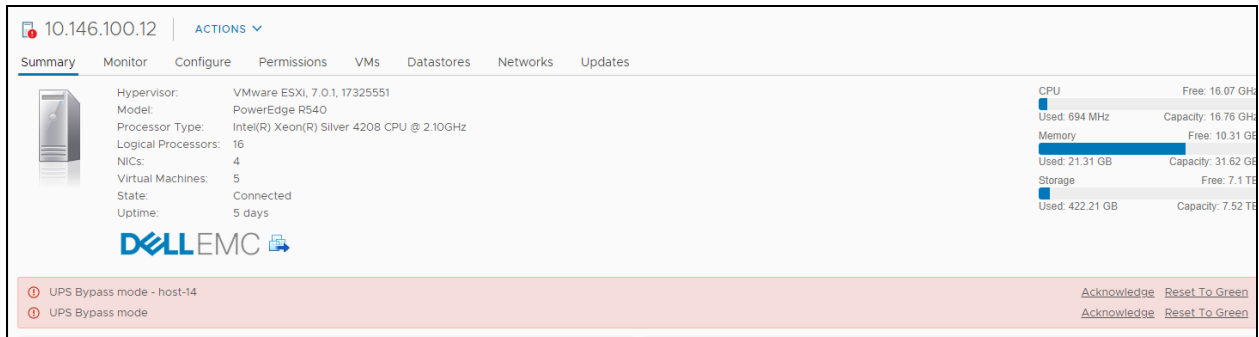
**NOTE: You cannot edit the alarm definitions at the vSphere level. You can only disable/enable the alarm definitions at vSphere level. However, you can edit the alarm definitions at Host level.**

**NOTE: All operations on this interface are only applicable to the selected server.**

### 3.5.2 Trigger an Alarm

Once the device is connected as mentioned in section [Associate Server and Power Supply Equipment](#) on page 16 , vSphere displays the alarm information received from Power Insight.

**Figure 3.19 Summary**



The alarm name is displayed in the Summary tab.

**Figure 3.20 Monitoring-All Problems**

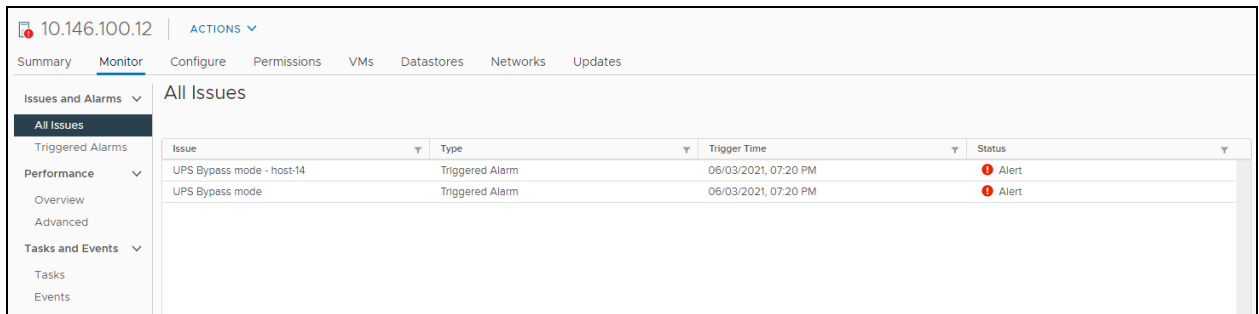


Figure 3.21 Monitoring-Triggered Alarm

Alarm Name	Object	Object type	Severity	Triggered Time	Acknowledged Time	Acknowledged By
<input type="checkbox"/> UPS Bypass mode - host-14	10.146.100.12	Host	CRITICAL	06/03/2021, 7:20:18 PM		
<input type="checkbox"/> UPS Bypass mode	10.146.100.12	Host	CRITICAL	06/03/2021, 7:20:18 PM		
<input type="checkbox"/> Host hardware power status	10.146.100.12	Host	CRITICAL	02/11/2021, 10:29:33 PM	02/11/2021, 10:33:12 PM	VSPHERE.LOCAL\Administrator

## Monitoring Triggered Alarms

To view the details of triggered alarms:

1. Click Monitor tab, and then select Issues and Alarms menu option.
2. In the All Issues list, select Triggered Alarms option.

Figure 3.22 Alarm Rule

**Edit Alarm Definition**

- 1 Name and Targets
- 2 Alarm Rule 1**
- 3 Reset Rule 1
- 4 Review

**Alarm Rule 1**

IF

alm\_sys\_outOff [ADD ARGUMENT](#)

AND message is equal to active [REMOVE](#)

THEN

Trigger the alarm and \* Show as Critical

Send email notifications

Send SNMP traps

Run script

[ADD ADVANCED ACTIONS](#)

[ADD ANOTHER RULE](#) [DUPLICATE RULE](#) [REMOVE RULE](#)

[CANCEL](#) [BACK](#) [NEXT](#)

## Alarm Rule

When an alarm occurs, the alarm rules will be executed, as shown in **Figure 3.22** above.

For example, An Alarm operation is set for sending emails, SNMP traps, run scripts etc. It indicates that you have configured these options in advance.

**NOTE:** In this example, the Maintenance mode is selected. Entering the maintenance mode will migrate the virtual machines running on the server, and then shuts down the server. For more details on the migration strategy of virtual machines, please read <https://www.vmware.com/products/vsphere/drs-dpm.html>

**NOTE:** Entering and exiting the maintenance mode requires a time duration. If alarms are frequently generated and ended, it prevents the maintenance mode from completing and ending normally. It is strongly recommended not to set the warning rule to "enter maintenance mode" and to "exit maintenance mode" as well.

### 3.5.3 End of Alarm

When the alarm is over, the alarm information in the Triggered Alarms page will no longer be displayed.

Figure 3.23 Summary Window: After the Alarm Ends

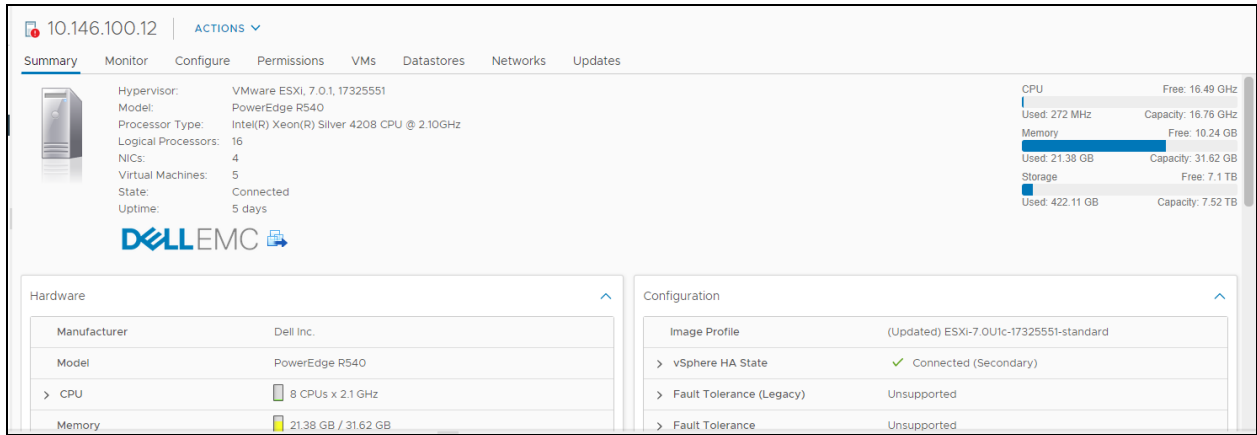
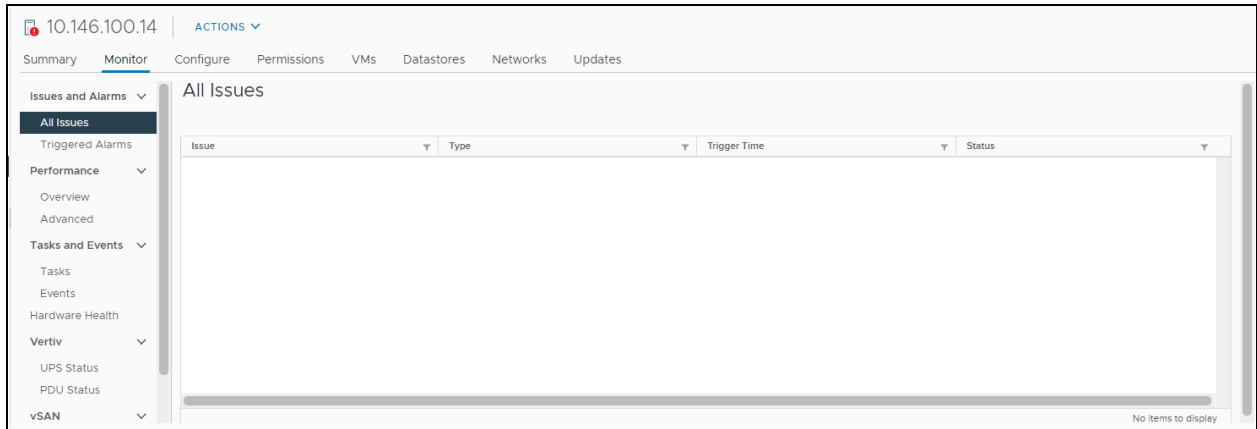


Figure 3.24 Monitor->All Issues: After the Alarm Event



The "Monitor->All Issues" window after the alarm is over. The figure do not show the UPS PDU alarms.

Figure 3.25 Monitor-&gt;All Issues: After the Alarm is Over

10.146.100.14 ACTIONS

Summary Monitor Configure Permissions VMs Datastores Networks Updates

Issues and Alarms

All Issues

Triggered Alarms

Performance

Overview

Advanced

Tasks and Events

Tasks

Events

Hardware Health

Vertiv

UPS Status

PDU Status

vSAN

### Triggered Alarms

ACKNOWLEDGE RESET TO GREEN

Alarm Name	Object	Object type	Severity	Triggered Time	Acknowledged Time	Acknowledged By
Host hardware power status	10.146.100.14	Host	CRITICAL	01/29/2021, 4:05:32 AM	02/07/2021, 11:33:52 PM	VSPHERE.LOCAL\Administrator

1 items

vSphere will execute the "Reset Rule" in the "Alarm Definition".

Figure 3.26 Reset Rules

### Edit Alarm Definition

- 1 Name and Targets
- 2 Alarm Rule 1
- 3 Reset Rule 1
- 4 Review

#### Reset Rule 1

Reset the alarm to green

alm\_sys\_outOff [ADD ARGUMENT](#)

AND message is equal to cleared [REMOVE](#)

THEN

Reset the alarm to  Normal

Send email notifications

Send SNMP traps

Run script

Exit maintenance mode [REMOVE](#)

[ADD ADVANCED ACTIONS](#)

[ADD ANOTHER RESET RULE](#) [DUPLICATE RULE](#) [REMOVE RULE](#)

[CANCEL](#) [BACK](#) [NEXT](#)

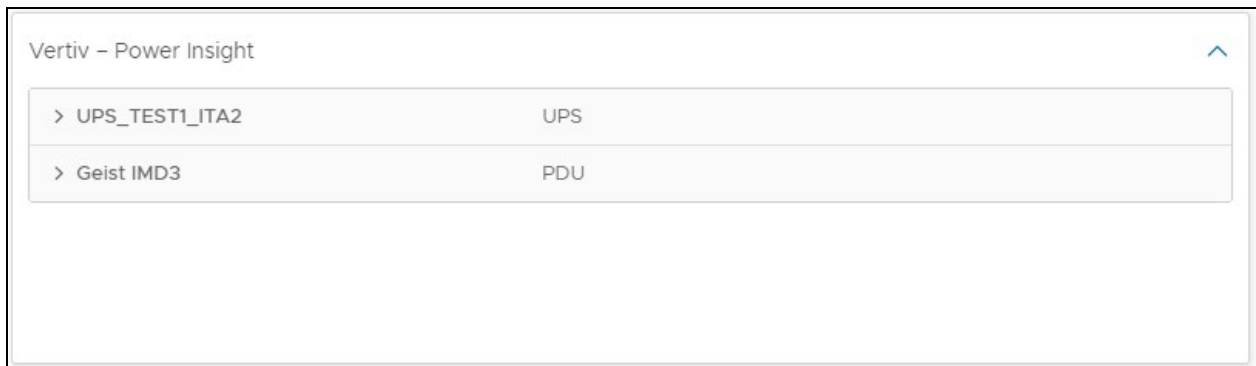
If the user is configured to send emails or scripts, it implies that these actions are executed when the alarm is triggered.

## 3.6 Displaying the Power Insight Device Information

### 3.6.1 Host Level Summary Interface

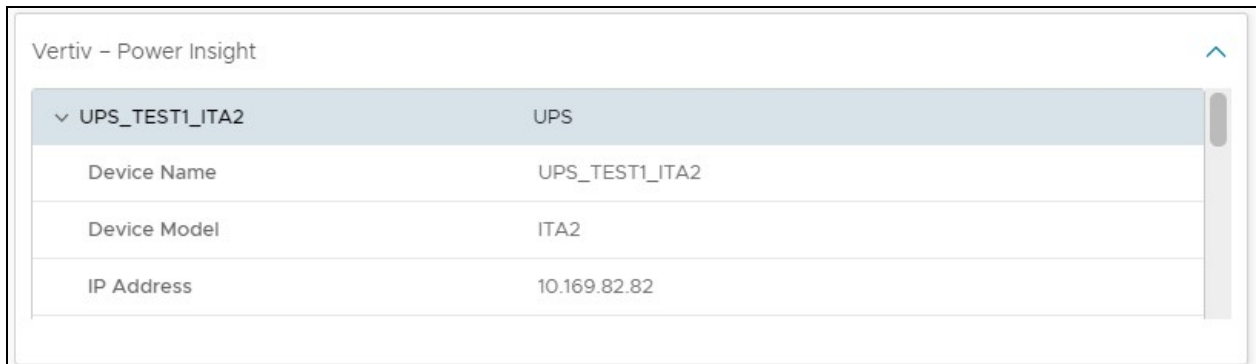
Once the device is connected, click Summary to return to the summary interface. The Summary area lists all the devices that are connected to Power Insight.

Figure 3.27 Summary Window



**NOTE:** Click the '>' sign on the left of the device name view the detailed information of device.

Figure 3.28 Summary Expand

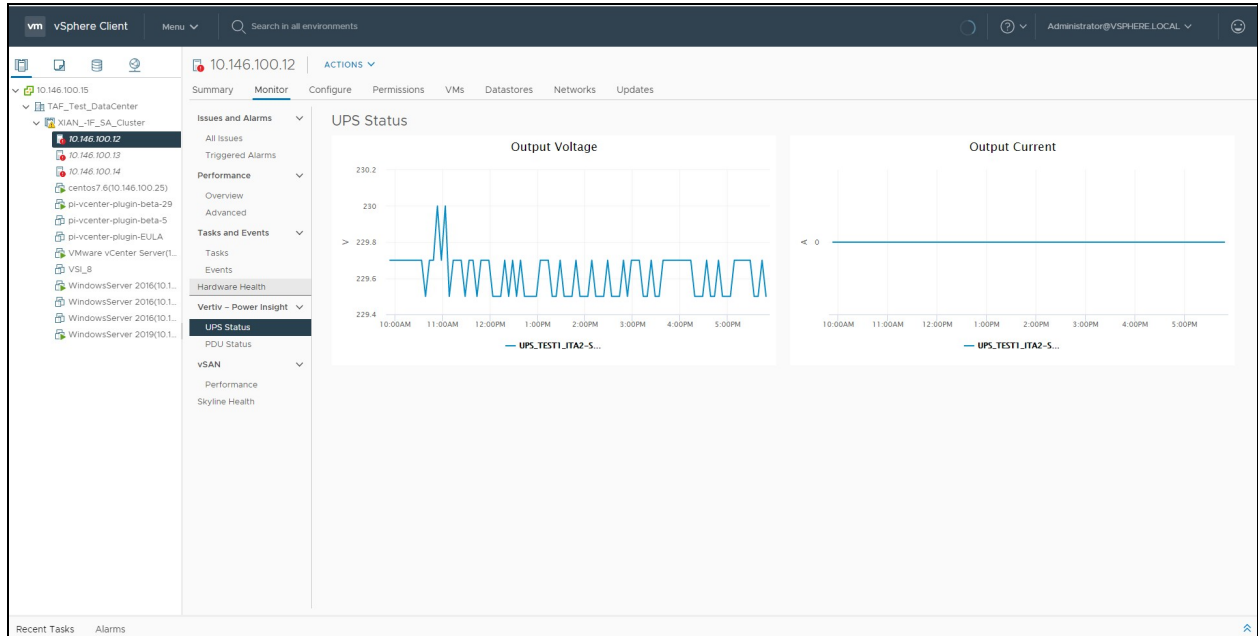




## 3.6.2 Host-Level Monitoring Page

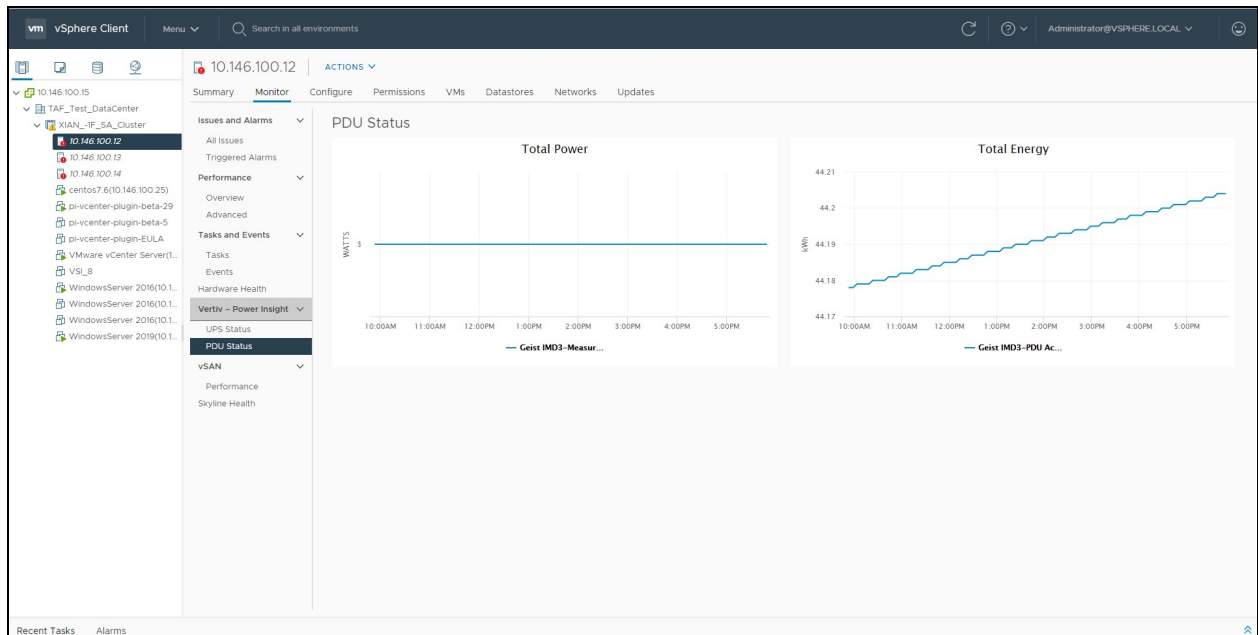
You can view the UPS device status. Click the Monitor tab and select Vertiv-Power Insight -> UPS Status menu option on the left side of the monitoring page, as shown in **Figure 3.29** below .

**Figure 3.29 UPS Status**



- The UPS Status page displays the Output Voltage and Output Current trend through the line chart.
- Click the PDU status option to view the PDU device status.

**Figure 3.30 PDU Status Page**

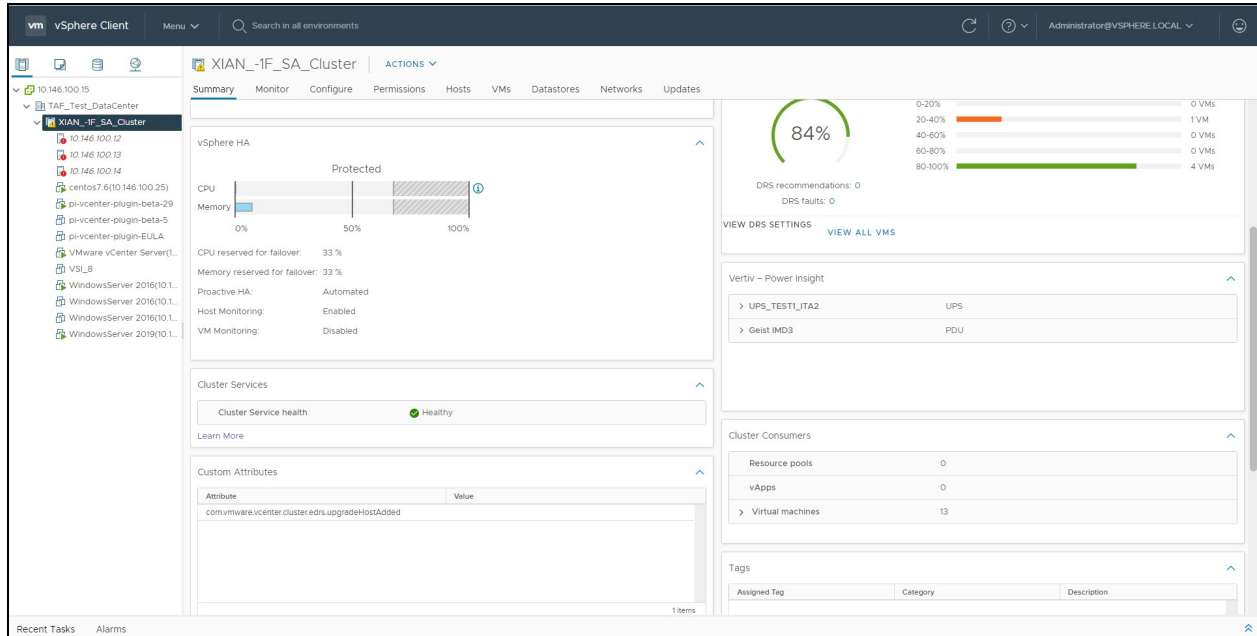


The PDU Status area displays the Total Power and Total Energy trend through the line chart.

### 3.6.3 Cluster Level Summary Interface

Since the same device can be connected by multiple hosts, users can view the entire cluster-level host-bound devices on the Cluster-level Summary Page, as shown in **Figure 3.31** below .

**Figure 3.31 Cluster Level Summary Page**

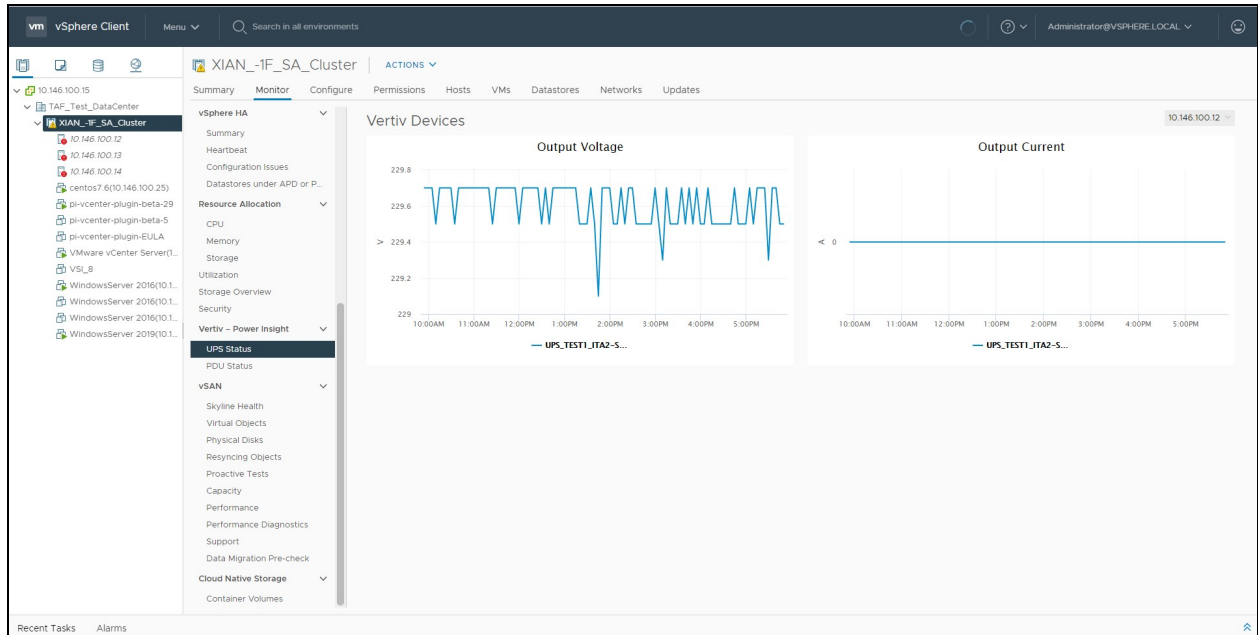


Users can view the summary of all host-bound devices on the current page.

### 3.6.4 Cluster-Level Monitoring Page

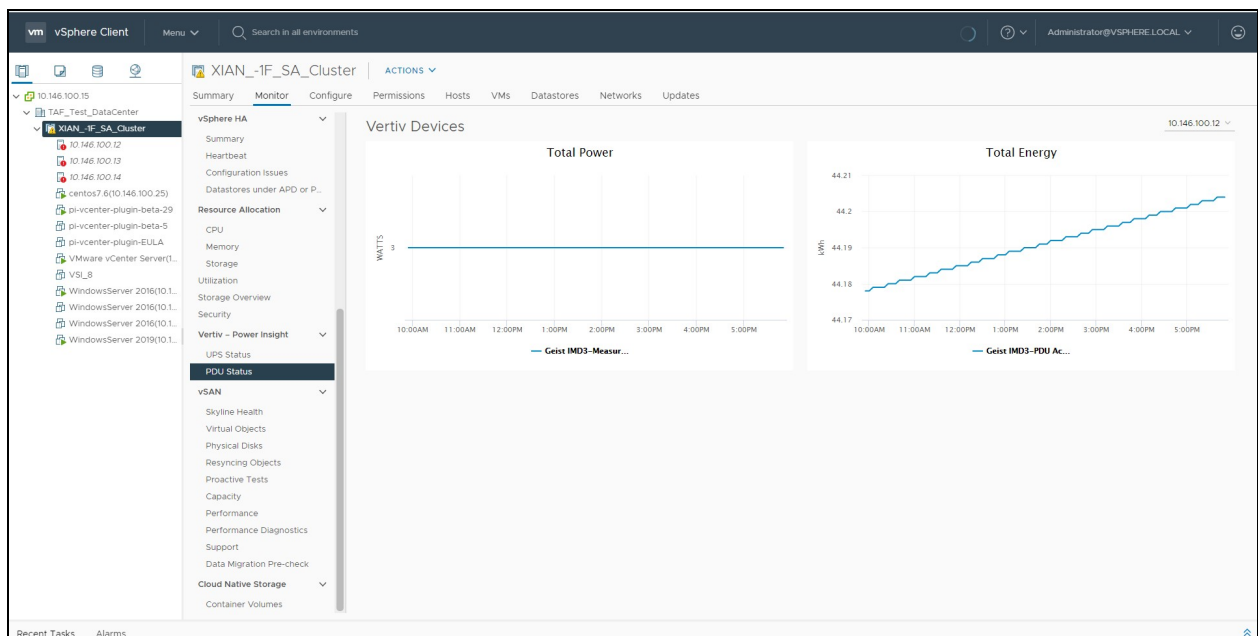
You can view the UPS and PDU operation status at cluster level when the current host device is connected. Select the cluster in the left pane, and then click the Monitor tab. Now, select Vertiv-Power Insight -> UPS Status menu option, as shown in Figure 3.32 below.

Figure 3.32 Cluster-Level Monitoring UPS Status Page



To view the Output Voltage and Output Current line graph of other host connected to the UPS device, select a host name in the drop-down box displayed on the top-right corner of the page. Click the PDU Status menu option to view the cluster-level PDU status, as shown in Figure 3.33 below.

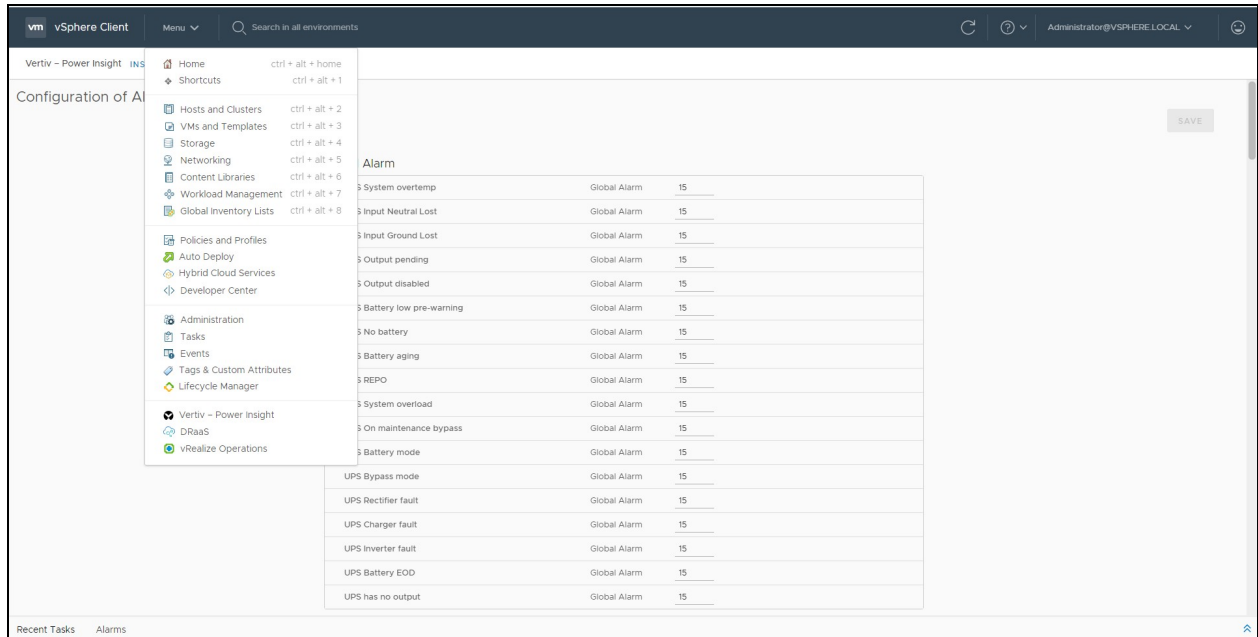
Figure 3.33 Cluster-Level Monitoring PDU Status Page



### 3.7 Alarm Delay

The alarm delay function triggers the alarm rules and prompts the alarm based on the delay time. For unnecessary impact on vSphere, avoid the short interval between the generation and end of the alarm (for example, thunderstorms may cause fluctuations in the power supply network and UPS generates an alarm with a very short duration. In this situation, the time interval between Alarm occurrence and end of alarm is very short and hence it is not recommended to trigger safety action.) You can view the alarm delay interface in the menu-"Vertiv-Power Insight".

Figure 3.34 Vertiv-Power Insight Window



#### 3.7.1 Alarm Classification

Alarms are classified as:

- **Global alarms:** These are the default alarms which gets installed when the plug in is registered to vSphere.
- **Custom alarms:** These are extended alarms. It is used to configure special alarms for a single server.

The alarm data displayed in three columns indicates the alarm name, alarm type, and delay time (in seconds).

## 3.7.2 Modify Delay

To modify the alarm time, enter the delay time (in seconds) in the text box, and then click Save.

Figure 3.35 Vertiv Window

n seconds

Global Alarm

UPS System overtemp	Global Alarm	15
UPS Input Neutral Lost	Global Alarm	15
UPS Input Ground Lost	Global Alarm	0
UPS Output pending	Global Alarm	15

As shown in the figure, the delay time of the UPS Input Ground Lost alarm is modified to 0 seconds. It indicates that the alarm will trigger immediately and the "warning rule" will be executed.

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## 4 Common Problem

1. To uninstall the Plug in from vSphere and Power Insight:
  - Click Uninstall on the Plug in Management interface.
  - Shut down the virtual machine on the vSphere interface and delete the virtual machine.
2. If you need to use two plug ins, it may happen that the IP addresses of the two virtual machines running the plug-ins are the same. Please run the following command to reset the IP address.
  - `echo -n> /etc/machine-id`
  - `systemd-machine-id-setup`
3. The vSphere version used in the example picture of this document is v7.0, if you use other versions (such as v6.7), the vSphere interface function menu order may not be consistent with the document, the specific menu path and differences are as follows:
  - Host > Configuration > Vertiv - Power Insight > [Associated Alarms], [Associated Power Devices] : Order may be different
  - Host > Monitor > Vertiv - Power Insight > [UPS Status], [PDU Status]: Order may be different
  - Menu > [Vertiv - Power Insight]: Location may be different

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