

# VMware Skyline Collector User Guide

VMware Skyline Collector 3.0

You can find the most up-to-date technical documentation on the VMware website at:

<https://docs.vmware.com/>

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# About VMware Skyline Collector User Guide

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The VMware Skyline Collector User Guide provides instructions for the VMware® Skyline™ Collector. The guide contains information about managing the Skyline Collector, adding, editing, or removing products, and information regarding the privacy and security of data that VMware receives.

## Intended Audience

This information is intended for anyone who wants to work with the VMware Skyline Collector. It is written for VMware® vSphere® administrators.

# Network Requirements

# 2

Ensure proper communication between the Skyline Collector and all products and services.

The Skyline Collector requires network access to VMware products and solutions within your environment, and external network access to VMware.

**Table 2-1. External Network Requirements**

Connection From	Connection To	Type	Protocol	Port
Skyline Collector	vcsa.vmware.com	HTTPS	TCP/IP	443
Skyline Collector	vapp-updates.vmware.com	HTTPS	TCP/IP	443

**Table 2-2. Internal Network Requirements**

Connection From	Connection To	Type	Protocol	Port
Skyline Collector	vCenter Server	HTTPS	TCP/IP	443
Skyline Collector	ESXi Hypervisor Hosts	HTTPS	TCP/IP	443
Skyline Collector	vSphere 5.5 PSC/SSO Provider	HTTPS	TCP/IP	7444
Skyline Collector	VSphere 6.0 and above PSC/SSO Provider	HTTPS	TCP/IP	443
Skyline Collector	NSX-V Manager	HTTPS	TCP/IP	443
Skyline Collector	NSX-T Manager nodes	HTTPS	TCP/IP	443
Skyline Collector	Horizon Connection Server	HTTPS	TCP/IP	443
Skyline Collector	vRealize Operations Manager	HTTPS	TCP/IP	443
Skyline Collector	SDDC Manager	HTTPS	TCP/IP	443
Web Browser	Skyline Collector	HTTPS	TCP/IP	443

**Note** The tables contain the default port values and might not match a customized environment.

# Access the Skyline Collector

# 3

Login to the Skyline Collector to view system status and to make configuration changes.

## Prerequisites

The Skyline Collector fully-qualified domain name (FQDN) or IP address.

## Procedure

- 1 In a web browser, enter the Skyline Collector FQDN / IP address: **https://collector-IP-address-or-FQDN**.
- 2 Log in as *admin*, or use an Active Directory account if you have enabled Active Directory authentication to the Collector.

The default admin password is *default*. You are required to change the *admin* password during the initial configuration of the Skyline Collector.

- 3 Click **Log In**.

# System Status

# 4

The **System Status** provides an overview of the health of the Skyline Collector.

## Overview

The **Overview** section displays the health of the Skyline Collector. Additionally, the health of each product added to the Skyline Collector is displayed.

## Collector

The [Manage Collector](#) section allows you to Stop, and Restart the Collector, view Collector details, and view the latest log entries for the Skyline Collector.

## Endpoints

You can view the products added to the Skyline Collector, including the health of each product endpoint.

This chapter includes the following topics:

- [Manage Collector](#)
- [Products Added](#)

## Manage Collector

View Skyline Collector details, and Restart or Stop the Collector.

The Manage Collector page displays the following information for the Skyline Collector.

Property	
ID	Alphanumeric unique identifier.
Last Seen	The amount of time since the Skyline Collector last checked-in with VMware.
Registered Under	The Cloud Services Organization the Skyline Collector is registered with.

You can perform the following actions:

Restart Collector	Click <b>Restart</b> to restart the Skyline Collector. A restart takes 3 and 5 minutes to complete. The Skyline Collector web interface may be unresponsive during this time.
Stop Collector	Click <b>Stop</b> to stop the Skyline Collector. If the Skyline Collector is in a Stopped state, an alert appears within the Skyline Collector stating <b>Your Collector is Not Running</b> . Stopping the Skyline Collector does not shut down the virtual appliance. The virtual appliance remains running and the Skyline Collector remains available. Do not stop the Skyline Collector virtual appliance unless troubleshooting with VMware Global Support Services (GSS). Stopping the Skyline Collector will pause the collection of, and sending of product usage data to VMware.
Start Collector	If the Skyline Collector is in a Stopped state, the Skyline Collector can be started again by clicking <b>Start</b> .

The **Collector Log** displays the latest log entries. You can choose to show the latest 200, 400, or 1000 log entries. This information can be used if troubleshooting with VMware Global Support Services (GSS). Click **Show Latest Log** to view the most recent log files for the Skyline Collector.

## DeRegister Skyline Collector

Remove an inactive Skyline Collector from Skyline.

Deregistering a Skyline Collector permanently removes the Collector from Skyline. Deregistering a Skyline Collector also removes the Collector from participating in the Customer Experience Improvement Program (CEIP) Enhanced participation level. The capability to remove an inactive Skyline Collector is available within Skyline Advisor. A Skyline Collector becomes inactive if it has not communicated with VMware for 60 minutes. If your Skyline Collector is in a Healthy state, power-off the Skyline Collector virtual appliance, wait ~60 minutes, then view the status of the Skyline Collector within Skyline Advisor.

Follow these steps to De-Register a Skyline Collector from your Cloud Services Organization:

**Important** Only users assigned the Skyline Administrator service role can DeRegister an inactive Skyline Collector. Users assigned the Skyline User service role do not have this capability. For more information regarding Skyline Advisor service roles, see [Service Roles in Skyline Advisor Pro and Skyline Advisor](#) in Skyline Advisor.

### Procedure

- 1 Shutdown the respective Skyline Collector Virtual Appliance.
- 2 Wait 1 hour.
- 3 Login into Skyline Advisor.
- 4 Navigate to the Collector Card on the Skyline Advisor Dashboard.
- 5 Click **View All**.
- 6 Find the Skyline Collector that you want to De-register.
- 7 Click the **DEREGISTER** button and confirm.



## Results

The Skyline Collector has been De-Registered from your Cloud Services Organization. Skyline Collector is removed from participation in the Customer Experience Improvement Program (CEIP).

## What to do next

To re-register the Skyline Collector, see [Re-Register Skyline Collector](#).

## Re-Register Skyline Collector

Re-Register the Skyline Collector with an existing Cloud Services Organization where the Skyline Advisor service is already enabled.

Follow these steps to Re-Register a Skyline Collector from your Cloud Services Organization:

### Prerequisites

Ensure that you have deregistered the Skyline Collector. See [DeRegister Skyline Collector](#). And perform the following steps:

- Using the vSphere Client, open the remote console of the Skyline Collector virtual appliance.
- Login to the console of the Skyline Collector virtual appliance with user 'root'.
- Change directory to generated as follows: `cd /usr/local/skyline/ccf/config/generated`
- Remove all JSON files `rm -f *.JSON`
- Run the following commands:

- ```
rm /usr/local/skyline/ccf/config/generated/*.json
```
- ```
/usr/local/skyline/ccf/bin/gen-mf.sh> /usr/local/skyline/ccf/config/generated/  
GeneralConfiguration.json
```
- ```
chown -R skyline:skyline /usr/local/skyline/ccf/config/generated/  
GeneralConfiguration.json
```
- ```
systemctl restart ccf-collector
```

- Reboot the Skyline Collector virtual appliance using the following command: `reboot -f`.

### Procedure

- 1 Open a web browser, and browse to <https://cloud.vmware.com>.
- 2 Login to VMware Cloud Services, then click Console (top right-hand corner).
- 3 Under My Services, click **LAUNCH SERVICE** in the Skyline Advisor card.
- 4 On the Skyline Advisor dashboard, Click **Add New Collector** in the Collector card.

You must be a Skyline Administrator (role) in order to add a new Skyline Collector to your Cloud Services Organization.

- 5 For the purposes of Re-Registering a Skyline Collector, you do not need to Download or Install the Skyline Collector virtual appliance.
- 6 Copy the Token provided in the wizard.
- 7 Login to the Skyline Collector user interface. Open a web-browser, and browse to `https://<fqdn_or_ip_address_of_skyline_collector>`.
- 8 Login with user admin. The default password for the user admin is 'default'.

If the Collector does not load correctly and the UI is just spinning, then run:

- ```
mv /usr/local/skyline/ccf/config/generated/endpoints /usr/local/skyline/ccf/config/generated/endpoints.bak
```
- register the collector
- do not configure any products
- ```
mv /usr/local/skyline/ccf/config/generated/endpoints.bak /usr/local/skyline/ccf/config/generated/endpoints
```

- 9 Complete the Initial Configuration wizard for the Skyline Collector. On Step 3 of the Initial Configuration wizard, paste the Token you previously copied into the Registration field.
- 10 Any previously added products (vCenter Server, NSX Manager, vRealize Operations, Horizon Connection Server, VMware Cloud Foundation, vRealize Suite Lifecycle Manager, and vRealize Automation) are not removed during Collector De-registration. Therefore, you do not need to re-add products that were previously added to the Skyline Collector.
- 11 Refresh your web browser page to complete the Initial Configuration of the Skyline Collector.
- 12 Log in to the Skyline Collector user interface, and verify product health.

## Results

You have successfully re-registered your Skyline Collector.

## Products Added

You can view the products added to the Skyline Collector, including the health of each product endpoint.

Each product added to the Skyline Collector is listed under the product name. The product names include vCenter Server, NSX-V, NSX-T, Horizon View, vRealize Operations, VMware Cloud Foundation, vRealize Automation, and vRealize Suite Lifecycle Manager.

For each product, expand the object name. Each product endpoint is displayed.

The following table lists all endpoints for each product.

Product	Endpoint
vCenter Server	VC_EXTRA
	VC_HOSTS
	VC_CHANGES
NSX-V (NSX Data Center for vSphere)	NSX
NSX-T (NSX-T Data Center)	NSX_T
Horizon View	HORIZON_VIEW
vRealize Operations	VROPS
VMware Cloud Foundation	VCF
vRealize Suite Lifecycle Manager	vRSLCM
VRealize Automation	vRA

For each product endpoint, the only action that can be performed is **Restart**. Restarting the product endpoint stops, then restarts the data collection for that particular product endpoint.

The following details are available for each product endpoint:

Property	Details
Host	Product object name.
Type	The product endpoint type.
Last Seen	The amount of time since this product endpoint collected data.
User Account	The user account used to add the product to the Skyline Collector.

The following is available for the last known execution details.

Property	Details
Message	Details regarding whether the data collection was successful, or if there was an error.
State	Whether the data upload was successful, or not
Payload File	The name of the file
Payload Size	The size of the file
Last execution	The amount of time since the last file was collected.

The **Collector Log** displays the latest log entries. You can choose to show the latest 200 log, 400 log, or 1000 log entries. This information can be used if the troubleshooting with VMware Global Support Services (GSS). Click **Show Latest Log** to view the most recent log files for the Skyline Collector.

# Configuration

# 5

Configure the Skyline Collector, including products, network configuration, and Active Directory authentication.

The following options are available within the **Configuration** page of the Skyline Collector:

Menu	Options
Products	<ul style="list-style-type: none"><li>■ vCenter Server</li><li>■ NSX-V</li><li>■ NSX-T</li><li>■ Horizon View</li><li>■ vRealize Operations</li><li>■ VMware Cloud Foundation</li><li>■ vRealize Suite Lifecycle Manager</li><li>■ vRealize Automation</li></ul>
Bulk Product Operations	<ul style="list-style-type: none"><li>■ Bulk Product Operations</li></ul>
Collector	<ul style="list-style-type: none"><li>■ Network Configuration</li><li>■ Auto-Upgrade</li><li>■ Collector Name</li><li>■ Active Directory Authentication</li></ul>
System	<ul style="list-style-type: none"><li>■ Web Server Certificate</li><li>■ Root Password Expiration</li></ul>

This chapter includes the following topics:

- vCenter Server
- NSX-V
- NSX-T
- Horizon View
- vRealize Operations
- VMware Cloud Foundation
- vRealize Suite Lifecycle Manager
- vRealize Automation

- [Bulk Product Operations](#)
- [Network Configuration](#)
- [Auto-Upgrade](#)
- [Collector Name](#)
- [Active Directory Authentication](#)
- [Web Server Certificate](#)
- [Root Password Expiration](#)

## vCenter Server

You can add, edit, or delete vSphere to/from the Skyline Collector. vSphere includes vCenter Server, and ESXi hosts and virtual machines managed by that vCenter Server.

Follow these steps to add, edit, or delete a vCenter Server to/from the Skyline Collector:

### Prerequisites

The following permissions are required for the account used to add a vCenter Server to the Skyline Collector. These permissions are sufficient for both collecting product usage data, and transferring support bundles to VMware Global Support Services (GSS) using Skyline Log Assist.

- vCenter Server Read-Only role
- Global.Diagnostics
- Global.Health
- Global.Licenses
- Global.Settings
- Host profile.View
- Storage views.View

For detailed instructions for how to create a user account with the given permissions, see [Knowledge Base Article 59661](#).

---

**Important** If you have enabled ESXi Host Encryption, or vSAN Encryption, the **Cryptographic operations > Direct Access** permission is required to allow the successful transfer of encrypted support bundles. This permission is only required for this reason, and is not needed unless you have enabled ESXi Host Encryption, or vSAN Encryption. This permission does not apply to Virtual Machine Encryption.

---

**Important** You must assign the required permission to a user account. Assigning the required permission to a group, and using a user account within that group to vCenter Server to the Skyline Collector fails the privileges check within the Skyline Advisor.

---

## Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **vCenter Server**.
- 3 Choose one of the following three options:

Option	Description
<b>Add vCenter Server</b>	To add a new vCenter Server to the Skyline Collector, click <b>Add vCenter Server</b> . To complete the adding of a vCenter Server to the Skyline Collector, follow the given steps.
<b>Edit vCenter Server</b>	To edit a vCenter Server, click <b>Edit</b> . You can only edit the following properties for a vCenter Server instance: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing the vCenter Server instance, click <b>Update</b> .
<b>Delete vCenter Server</b>	To delete a vCenter Server from the Skyline Collector, click <b>Delete</b> . Deleting a vCenter Server removes it from the Skyline Collector, and discontinues the collection of product usage data for all vCenter Server objects. Findings, Upgrade Recommendations, and Log Assist will not be available for the deleted vCenter Server (vSphere) environment.

- 4 After clicking **Add vCenter Server**, follow these steps to add a vCenter Server to the Skyline Collector.
  - a Enter the **FQDN/IP Address** of the vCenter Server.
  - b Enter a **Account Username** for connecting to the vCenter Server, from the Skyline Collector.
  - c Enter the **Account Password**.
- 5 To complete adding the vCenter Server to the Skyline Collector, click **Add**.

## Results

vCenter Server has been added to the Skyline Collector. Repeat these steps to add additional vCenter Servers to the Skyline Collector.

## NSX-V

You can add, edit, or delete NSX-V to/from the Skyline Collector. NSX-V includes Managers, Controllers, and Edges.

Follow these steps to add, edit, or delete NSX-V to/from the Skyline Collector:

## Prerequisites

For NSX-V version 6.4.5 and below, the NSX Auditor role does not have sufficient permission to generate and collect support bundles from NSX-V objects. To generate and collect support bundles from NSX-V objects, a user account with the NSX Administrator role is required. Therefore, you have two options for adding NSX-V version 6.4.5 to a Skyline Collector.

For the collection of product usage data only:

- NSX Auditor

---

**Important** If an account with the NSX Auditor role is used to add NSX-V, the following is displayed within Skyline Advisor:

- On the Collector Details page, the Status of NSX-V is: `Insufficient Privileges`.
- On the **Initiate Log Transfer** page, the privileges check for NSX-V fails.

If using an account with the NSX Auditor role, you cannot transfer support bundles to VMware GSS using Skyline Log Assist.

---

For the collection of both product usage data, and transferring support bundles with Log Assist:

- NSX Administrator

For NSX-V version 6.4.6, and above:

The NSX Auditor role in NSX-V version 6.4.6 supports the ability to transfer NSX Edge support bundles. This capability was not available in NSX-V versions previous to 6.4.6. Therefore, a user account assigned the NSX Auditor role can be used for product usage data collection, and for the transferring of support bundles using Log Assist.

For the collection of both product usage data, and transferring support bundles with Log Assist:

- NSX Administrator

---

**Important** You must assign the required permission to a user account. Assigning the required permission to a group, and using a user account within that group to add NSX-V to the Skyline Collector fails the privileges check within the Skyline Advisor.

---

## Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **NSX-V**.

### 3 Choose one of the following three options:

Option	Description
<b>Add NSX-V</b>	To add a new NSX-V Manager to the Skyline Collector, click <b>Add NSX-V</b> . Follow the given steps to add NSX-V to the Skyline Collector.
<b>Edit NSX-V</b>	To edit NSX-V, click <b>Edit</b> . You can only edit the following properties for NSX-V: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing NSX-V, click <b>Update</b> .
<b>Delete NSX-V</b>	To delete NSX-V from the Skyline Collector, click <b>Delete</b> . Deleting NSX-V removes it from the Skyline Collector, and discontinues the collection of product usage data for all NSX-V objects. Findings, Upgrade Recommendations, and Log Assist will not be available for the deleted NSX-V environment.

### 4 After clicking **Add NSX Manager**, follow these steps to add an NSX Manager to the Skyline Collector.

- a Enter the **FQDN/IP Address** of the NSX Manager.
- b Enter a **Account Username** for connecting to the NSX Manager.
- c Enter the **Account Password**.

### 5 To complete adding NSX-V to the Skyline Collector, click **Add**.

#### Results

NSX-V has been added to the Skyline Collector. Repeat these steps to add additional NSX Managers to the Skyline Collector.

## NSX-T

You can add, edit, or delete NSX-T to/from the Skyline Collector. NSX-T includes the Management Nodes, Edge Clusters, Edge Nodes, and Edge Transport Nodes.

Follow these steps to add, edit, or delete NSX-T to/from the Skyline Collector:

#### Prerequisites

For NSX-T, the NSX Auditor role does not have sufficient permissions to generate and collect support bundles from NSX-T objects. To generate and collect support bundles from NSX-T objects, a user account with the NSX Administrator role is required. Therefore, you have two options for adding NSX-T to a Skyline Collector.



For the collection of product usage data only:

- NSX Auditor

---

**Important** If an account with the NSX Auditor role is used to add NSX-T, the following is displayed within Skyline Advisor:

- On the Collector Details page, the Status of NSX-T is: *Insufficient Privileges*.
- On the Initiate Log Transfer page, the privileges check for NSX-T fails.

If using an account with the NSX Auditor role, you cannot transfer support bundles to VMware GSS using Skyline Log Assist.

---

For the collection of both product usage data, and transferring support bundles with Log Assist:

- NSX Enterprise Administrator

---

**Important** You must assign the required permission to a user account. Assigning the required permission to a group, and using a user account within that group to add NSX-T to the Skyline Collector fails the privileges check within the Skyline Advisor.

---

#### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **NSX-T**.
- 3 Choose one of the following three options:

Option	Description
<b>Add NSX-T</b>	To add NSX-T to the Skyline Collector, click <b>Add NSX-T</b> . To add NSX-T to the Skyline Collector, follow the given steps.
<b>Edit NSX-T</b>	To edit NSX-T, click <b>Edit</b> . You can only edit the following properties for NSX-T: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing NSX-T, click <b>Update</b> .
<b>Delete NSX-T</b>	To delete NSX-T from the Skyline Collector, click <b>Delete</b> . Deleting NSX-T removes it from the Skyline Collector, and discontinues the collection of product usage data for all NSX-T objects. Findings, Upgrade Recommendations, and Log Assist will not be available for the deleted NSX-T environment.

---

- 4 After clicking **Add NSX-T**, follow these steps to add an NSX-T to the Skyline Collector.
  - a Enter the **FQDN/IP Address** of the NSX-T Manager nodes cluster virtual IP address (VIP). See [Configure a Virtual IP Address for a Cluster](#) (NSX-T Data Center documentation) for more details.
  - b Enter a **Account Username** for connecting to the NSX-T Manager nodes cluster VIP.
  - c Enter the **Account Password**.
- 5 To complete adding NSX-T to the Skyline Collector, click **Add**.

### Results

NSX-T has been added to the Skyline Collector. Repeat these steps to add additional NSX Managers to the Skyline Collector.

## Horizon View

You can add, edit, or delete Horizon View to the Skyline Collector. Horizon View includes Connection Servers.

Follow these steps to add, edit, or delete Horizon View to/from the Skyline Collector:

### Prerequisites

The following permissions are required for the account used to add the Horizon Connection Server to the Skyline Collector. These permission are sufficient for both collecting product usage data, and transferring support bundles with Log Assist.

- Administrator (read-only) Role

- Collect Operation Logs

---

**Important** You must assign the required roles to a user account. Assigning the required roles to a group, and using a user account within that group to add Horizon View to the Skyline Collector will fail privileges check within Skyline Advisor.

---

**Important** If you are using a Horizon Cloud POD architecture, only add a single Horizon Connection Server to the Skyline Collector. Adding multiple Horizon Connection Servers to the Skyline Collector will result in duplicate Horizon Connection Server entries within Skyline Advisor, within Inventory, Findings & Recommendations, and Log Assist.

If the Horizon Connection Server added to the Skyline Collector is unavailable, Log Assist will not be available for any of the remaining Horizon Connection Servers within the Cloud POD architecture. In this situation, please use My VMware, or SFTP, to transfer support bundles to VMware for the remaining Horizon Connection Servers in the Cloud POD architecture.

If the Horizon Connection Server added to the Skyline Collector is unavailable, product usage data for the remaining Horizon Connection Servers within the Cloud POD architecture will not be collected. Findings, and Affected Objects, will not be updated accurately within Skyline Advisor until the Horizon Connection Server added to the Skyline Collector is available again to Skyline.

---

#### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **Horizon View**.
- 3 Choose one of the following three options:

Option	Description
<b>Add Horizon View</b>	To add Horizon View to the Skyline Collector, click <b>Add Horizon View</b> . Follow the given steps to add a Horizon Connection Server to the Skyline Collector.
<b>Edit Horizon View</b>	To edit Horizon View, click <b>Edit</b> . You can only edit the following properties for a Horizon Connection Server: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing the Horizon Connection Server, click <b>Update</b> .
<b>Delete Horizon View</b>	To delete a Horizon View from the Skyline Collector, click <b>Delete</b> . Deleting a Horizon Connection Server removes the Horizon Connection Server from the Skyline Collector, and discontinues the collection of product usage data for that Horizon Connection Server. Findings, Upgrade Recommendations, and Log Assist will not be available for the Horizon Connection Server.

---

- 4 After clicking **Add Horizon View**, follow these steps to add a Horizon Connection Server to the Skyline Collector.
  - a Enter the **FQDN/IP Address** of the Horizon Connection Server.
  - b Enter a **Account Username** for connecting to the Horizon Connection Server.
  - c Enter the **Account Password**.
- 5 To complete the adding of Horizon View to the Skyline Collector, click **Add**.

### Results

The Horizon Connection Server has been added to the Skyline Collector. Repeat these steps to add additional Horizon Connection Servers to the Skyline Collector.

## vRealize Operations

You can add, edit, or delete vRealize Operations to/from the Skyline Collector.

Follow these steps to add, edit, or delete vRealize Operations to/from the Skyline Collector:

### Prerequisites

---

**Important** Skyline Log Assist does not support the transferring of vRealize Operations Manager support bundles to VMware Global Support Services. Any vRealize Operations Manager added to a Skyline Collector does not appear within the Log Assist page of Skyline Advisor.

---

The following permission is required for the account used to add the vRealize Operations Manager to the Skyline Collector. This permission are sufficient for collecting product usage data.

- vRealize Operations Read-Only Role

---

**Important** You must assign the required permission to the user account. Assigning the required permission to a group, and using a user account within that group to add vRealize Operations Manager to the Skyline Collector fails the privileges check within Skyline Advisor.

---

### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **vRealize Operations**.

### 3 Choose one of the following three options:

Option	Description
<b>Add vRealize Operations</b>	To add vRealize Operations to the Skyline Collector, click <b>Add vRealize Operations</b> . To add a vRealize Operations Manager to the Skyline Collector, advance to Step 4.
<b>Edit vRealize Operations</b>	To edit a vRealize Operations Manager, click <b>Edit</b> . You can only edit the following properties for vRealize Operations Manager: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing vRealize Operations Manager, click <b>Update</b> .
<b>Delete vRealize Operations</b>	To delete a vRealize Operations Manager from the Skyline Collector, click <b>Delete</b> . Deleting a vRealize Operations Manager removes the vRealize Operations Manager from the Skyline Collector, and discontinues the collection of product usage data for that vRealize Operations Manager. Findings, and Upgrade Recommendations is not available for the vRealize Operations Manager.

### 4 After clicking **Add vRealize Operations**, follow these steps to add a vRealize Operations Manager to the Skyline Collector.

- a Enter the **FQDN/IP Address** of the vRealize Operations Manager.
- b Enter a **Account Username** for connecting to the vRealize Operations Manager.
  - `user` - local vRealize Operations user.
  - `user@authSource` - where "authSource" is the authentication source ("Source Display Name") as defined in vROPS.
  - `user@domain@authSource`- where "domain" is the domain name of the AD configuration, "authSource" is the authentication source ("Source Display Name") as defined in vROPS.
  - `user@domain.com@VIDM` - external vRealize Operations user with authorization source "domain.com" defined in VIDM authType, where the same authSource exists in another authType.
- c Enter the **Account Password**.

### 5 To complete adding the vRealize Operations Manager to the Skyline Collector, click **Add**.

#### Results

vRealize Operations has been added to the Skyline Collector. Repeat these steps to add additional vRealize Operation Managers to the Skyline Collector.

## VMware Cloud Foundation

You can add, edit, or delete VMware Cloud Foundation to/from the Skyline Collector.

To add, edit, or delete VMware Cloud Foundation to/from the Skyline Collector, follow these steps:

### Prerequisites

**Important** Skyline Log Assist does not support the transferring of SDDC Manager support bundles to VMware GSS. Any SDDC Manager added to a Skyline Collector will not appear within the Log Assist page of Skyline Advisor.

The following role is required for the account used to add SDDC Manager to the Skyline Collector. This role is sufficient for collecting product usage data.

- SDDC Manager Viewer Role

**Important** You must assign the required role to the user account. Assigning the required role to a group, and using a user account within that group to add SDDC Manager to the Skyline Collector fails the privileges check within Skyline Advisor.

### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **VMware Cloud Foundation**.
- 3 Choose one of the following three options:

Option	Description
<b>Add VMware Cloud Foundation</b>	To add an SDDC Manager to the Skyline Collector, click <b>Add VMware Cloud Foundation</b> . To add a SDDC Manager to the Skyline Collector, advance to Step 4.
<b>Edit VMware Cloud Foundation</b>	To edit an SDDC Manager, click <b>Edit</b> . You can only edit the following properties for SDDC Manager: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing SDDC Manager, click <b>Update</b> .
<b>Delete VMware Cloud Foundation</b>	To delete a VMware Cloud Foundation from the Skyline Collector, click <b>Delete</b> . Deleting the SDDC Manager removes the VMware Cloud Foundation from the Skyline Collector, and disables the collection of product usage data for that VMware Cloud Foundation. Findings, and Upgrade Recommendations are not available for the deleted VMware Cloud Foundation.

- 4 After clicking **Add VMware Cloud Foundation**, follow these steps to add VMware Cloud Foundation to the Skyline Collector.
  - a Enter the **FQDN/IP Address** of the SDDC Manager.
  - b Enter a **Account Username** for connecting to the VMware Cloud Foundation, from the Skyline Collector.
  - c Enter the **Account Password**.

## 5 Click **Add**.

### Results

VMware Cloud Foundation has been added to the Skyline Collector. Repeat these steps to add additional SDDC Managers to the Skyline Collector.

### What to do next

If you did not add the VMware Cloud Foundation components, including vCenter Server, NSX-T, or vRealize Operations to the Skyline Collector, do so now. Skyline cannot provide VMware Cloud Foundation Findings unless all components of VMware Cloud Foundation have been added to the Skyline Collector.

You can add vCenter Server, NSX-T, and vRealize Operations, to the Skyline Collector after completing the initial configuration of the Skyline Collector. After completing the initial configuration, log in to the Skyline Collector, click **Configuration**, and follow.

## vRealize Suite Lifecycle Manager

You can add, edit, or delete vRealize Suite Lifecycle Manager to/from the Skyline Collector.

vRealize Suite Lifecycle Manager displays all of the vRealize Automation instances in Skyline Advisor, as well as the vRealize Automation Organizations associated with those instances.

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**Note** Only local vRealize Suite Lifecycle Manager user (such as admin@local) are supported.

---

To add, edit, or delete vRealize Suite Lifecycle Manager to/from the Skyline Collector, follow these steps:

### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **vRealize Suite Lifecycle Manager**.

### 3 Choose one of the following three options:

Option	Description
<b>Add vRealize Suite Lifecycle Manager</b>	Click <b>ADD VREALIZE SUITE LIFECYCLE MANAGER</b> . To add a vRealize Suite Lifecycle Manager to the Skyline Collector, advance to Step 4.
<b>Edit vRealize Suite Lifecycle Manager</b>	To edit vRealize Suite Lifecycle Manager, click <b>Edit</b> . You can only edit the following properties for vRealize Suite Lifecycle Manager : <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing vRealize Suite Lifecycle Manager, click <b>Update</b> .
<b>Delete vRealize Suite Lifecycle Manager</b>	To delete a vRealize Suite Lifecycle Manager from the Skyline Collector, click <b>Delete</b> . Deleting vRealize Suite Lifecycle Manager removes the it from the Skyline Collector, and discontinues the collection of product usage data for that vRealize Suite Lifecycle Manager. Findings, and Upgrade Recommendations are not available for the deleted vRealize Suite Lifecycle Manager.

### 4 After clicking **ADD VREALIZE SUITE LIFECYCLE MANAGER**, follow these steps to add vRealize Suite Lifecycle Manager to the Skyline Collector.

- a Enter the **FQDN/IP Address** of the vRealize Suite Lifecycle Manager.
- b Enter a **Account Username** for connecting to the vRealize Suite Lifecycle Manager, from the Skyline Collector.

Only local accounts (such as admin@local) are currently supported; no vIDM or AD users are supported.

- c Enter the **Account Password**.

### 5 Click **Add**.

#### Results

vRealize Suite Lifecycle Manager has been added to the Skyline Collector. vRealize Automation instances get automatically added when you add vRealize Suite Lifecycle Manager.

Repeat these steps to add additional vRealize Suite Lifecycle Manager to the Skyline Collector.

## vRealize Automation

You can add, edit, or delete vRealize Automation Organization to/from the Skyline Collector.

A single vRealize Automation instance can be associated with multiple vRealize Automation Organizations.

To add, edit, or delete vRealize Automation Organization to/from the Skyline Collector, follow these steps:



## Prerequisites

The following permission is required for the account used to add the vRealize Automation Organization to the Skyline Collector. This permission is sufficient for collecting product usage data.

- vRealize Automation Viewer (Read-Only) Role

**Important** You must add vRealize Suite Lifecycle Manager to Skyline Collector to access proactive findings and enable Log Assist for vRealize Automation Instances.

Linking the vRealize Suite Lifecycle Manager and vRealize Automation enables you to access the proactive findings for the vRealize Automation Organizations associated with vRealize Automation instances.

## Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Products**, click **vRealize Automation**.
- 3 Choose one of the following three options:

Option	Description
<b>Add vRealize Automation</b>	Click <b>ADD VREALIZE AUTOMATION</b> . To add a vRealize Automation Organization to the Skyline Collector, advance to Step 4.
<b>Edit vRealize Automation</b>	To edit vRealize Automation Organization, click <b>Edit</b> . You can only edit the following properties for vRealize Automation Organization: <ul style="list-style-type: none"> <li>■ Account Username</li> <li>■ Account Password</li> </ul> After you have finished editing vRealize Automation Organization, click <b>Update</b> .
<b>Delete vRealize Automation</b>	To delete a vRealize Automation Organization from the Skyline Collector, click <b>Delete</b> . Deleting vRealize Automation Organization removes it from the Skyline Collector, and discontinues the collection of product usage data for that vRealize Automation. Findings, and Upgrade Recommendations are not available for the deleted vRealize Automation Organization.

- 4 After clicking **ADD VREALIZE AUTOMATION**, follow these steps to add vRealize Automation Organization to the Skyline Collector.
  - a Enter the **FQDN/IP Address** of the vRealize Automation Organization.
  - b Enter a **Account Username** for connecting to the vRealize Automation Organization , from the Skyline Collector.
  - c Enter the **Account Password**.
- 5 Click **Add**.

## Results

vRealize Automation Organization has been added to the Skyline Collector. Repeat these steps to add additional vRealize Automation Organizations to the Skyline Collector.

# Bulk Product Operations

Add, update, or remove products in bulk using a CSV file.

You can choose a blank template, or a prefilled template containing products that the Skyline Collector is having issues communicating with. Follow these steps to perform bulk product operations for your Skyline Collector.

## Prerequisites

Agree to participate in the VMware [Customer Experience Improvement Program \(CEIP\)](#).

## Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Bulk Product Operations**, click **Import & Update Products**.
- 3 If this is your first time using Bulk Product Operations, click **Continue** to agree to participate in the [Customer Experience Improvement Program \(CEIP\)](#). This step will only appear the first time using Bulk Product Operations, or if Bulk Product Operations is deactivated.
- 4 Download the **Blank Template**, or the **Problem Products** template. The chosen template will download to your local machine.
- 5 For both the **Blank Template** and **Problematic Products** template files, enter the following for each column.

Option	Description
<b>bulkOperationType</b>	To add a new product, enter <b>CREATE</b> . To update a product already added, enter <b>UPDATE</b> . To remove a product, enter <b>DELETE</b> .
<b>productType</b>	The type of product for the bulk operation. The following are valid entries: For vSphere, enter <b>VSPHERE</b> . For NSX-V, enter <b>NSX</b> . For NSX-T, enter <b>NSX_T</b> . For vRealize Operations Manager, enter <b>VROPS</b> . For Horizon, enter <b>HORIZON_VIEW</b> . For VMware Cloud Foundation, enter <b>VCF</b> . For vRealize Suite Lifecycle Manager, enter <b>VRSLCM</b> . For vRealize Automation, enter <b>vRA</b> .
<b>hostName</b>	Enter the <b>name</b> of the object to perform the bulk operation for. The name of the object must be able to be resolved (DNS) by the Skyline Collector.

Option	Description
<b>username</b>	Enter the <b>username</b> for the account to be used to perform the product operation. If using an authorization source, enter the username in the following format: <b>username@authorizationsource</b> .
<b>password</b>	Enter the <b>password</b> for the account to be used to perform the product operation.
<b>thumbprint (optional)</b>	If using untrusted, self-signed certificates to authenticate connections, you can enter the thumbprint of the product. This field is optional, and not required to complete bulk product operations.

- 6 Upload the edited template file to the Skyline Collector. You can either **drag-and-drop** the file into the Skyline Collector, or click **Select A File**, and choose the edited template file.
- 7 Click **Execute Operations** to begin the bulk product operation process.

### Results

The desired operation is completed on all products listed in the template file.

### What to do next

If any of the bulk product operations fail, click **View Failed Operations** to view which products failed to execute the desired operation. Click **Download Failed Operations CSV** to download a template file containing only those products that failed bulk product operation execution.

## Network Configuration

Configure hostname verification, a proxy, for Skyline Collector communication to VMware.

Hostname Verification verifies that the Skyline Collector is connecting to VMware (vcsa.vmware.com), by looking at the 'dnsName' and 'subjectAltName'. Hostname Verification ensures customer product usage data is being sent to VMware.

Also, the Skyline Collector supports a proxy for accessing the Internet.

### Prerequisites



Ensure the Skyline Collector can communicate with the following external network destinations:

- `vcsa.vmware.com` / Port 443
- `vapp-updates.vmware.com` / Port 443



### Procedure

- 1 Click **Configuration** in the Skyline Collector user interface.
- 2 Under **Collector**, click **Network Configuration**.


- 3 To activate or deactivate the Hostname Verification, follow these steps:

Option	Description
<b>Activate Hostname Verification</b>	To activate Hostname Verification, toggle the switch to the right. The switch states <b>Enabled</b> , and turns Green [  ].
<b>Deactivate Hostname Verification</b>	To deactivate Hostname Verification, toggle the switch to the left. The switch states <b>Disabled (Not Recommended)</b> , and turns Grey [  ].

- 4 To configure a Proxy for the Skyline Collector, follow these steps.

Option	Description
<b>Activate Proxy</b>	To activate a Proxy, toggle the switch to the right. The switch states <b>Enabled</b> , and turns Green [  ]. Follow the given steps to complete the Proxy configuration.
<b>Deactivate Proxy</b>	To deactivate a Proxy, toggle the switch to the left. The switch states <b>Disabled</b> , and turns Grey [  ]. No further action is needed.

- a Enter the Proxy **IP Address**.
- b Enter the Proxy **Port Number**.
- c If necessary to authenticate to the Proxy, toggle the Authentication switch to the right. The

switch states **Enabled**, and turns Green [  ].

The Skyline Collector supports basic access authentication.

The Skyline Collector does not support NTLM access authentication.

- d Enter the Proxy **Username**.
- e Enter the Proxy **Password**.

- 5 Click **Test & Save**.

## Auto-Upgrade

Choose to automatically upgrade the Skyline Collector when a new version is made available.

When a new version of the Skyline Collector is made available, there are two options for upgrading your Skyline Collector.

1. When a new version is detected, manually upgrade using notification banner that will appear in the Skyline Collector web interface.


2. Automatically upgrade by enabling Auto-Upgrade in the Skyline Collector web interface.

If you enable Auto-Upgrade, you no-longer have to complete the manual process of upgrading your Skyline Collector.

### Prerequisites

The Skyline Collector must be able to communicate with [vapp-updates.vmware.com](https://vapp-updates.vmware.com). For more details regarding networking requirements, see the [Skyline Planning and Deployment Guide](#).

### Procedure

- 1 In the Skyline Collector, Click **Configuration**.
- 2 Under **Collector**, click **Auto-Upgrade**.
- 3 To Enable Auto-Upgrade, toggle the switch to the right. The switch states **Yes**, and turns Green [  ].
  - a Using the **dropdown menu**, pick a day of the week for the Skyline Collector to check for and install updates, if available.
  - b Using the **dropdown menu**, pick a time of the day for the Skyline Collector to check for and install updates, if available.
- 4 To save your settings, click **Set Upgrade Configuration**.

### Results

If enabled, your Skyline Collector will check for updates on the day/time that you have chosen. If an update is available, your Skyline Collector will automatically be upgraded.

## Collector Name

You can create a friendly name for the Skyline Collector for ease of identification.

A friendly name describes the environment you are configuring the Skyline Collector to collect data from. This name is used to make it easier for VMware Global Support Services (GSS) to communicate the information about the Skyline Collector with you. An example is: East-Production.

The Collector Name must be between 4 and 32 characters. Letters, numbers, and the following symbols are allowed: period [.] , hyphen [-], and underscore [\_].

The Skyline Collector does not support Collector Name's that contain a space.

### Procedure

- 1 In the Skyline Collector, Click **Configuration**.
- 2 Under **Collector**, click **Collector Name**.
- 3 Enter a **Friendly Name** for the Skyline Collector.

- 4 Click **Set Friendly Name**.

## Active Directory Authentication

Allow specific Active Directory Users and Groups to access the Skyline Collector.

Enabling Active Directory Authentication within the Skyline Collector allows specific Active Directory Users and Groups to login to the Skyline Collector.

---

**Important** To modify the Active Directory configuration, login using the 'admin' account. Active Directory configuration options are disabled when logging-in to the Skyline Collector using an Active Directory User.

---

### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **Collector**, click **Active Directory**.
- 3 Toggle the **Enable Active Directory** switch to **Yes**.
  - a Enter the **Domain Controller FQDN**.
  - b **Enable LDAPS (LDAP over TLS/SSL)** switch is set to Yes.  
 LDAPS(LDAP over TLS/SSL) is enabled by default to ensure that authentication takes place through secure ports. To disable the LDAPS, toggle the switch to No .
  - c The default **Port** number is 3269.  
 Default Ports: Default plain-text ports are 3268 and 389 and default LDAPS (LDAP over TLS/SSL) ports are 3269 and 636.
  - d Enter the **Base DN for Users** (optional).
  - e Enter the **Base DN for Groups** (optional).
  - f Enter the **Domain Name**.
- 4 Validate your Active Directory configuration by specifying an Active Directory account Username and Password. These credentials are not stored within the Skyline Collector.
  - a Enter a **Validation Account Username**.
  - b Enter a **Validation Account Password**.
- 5 Add at least one Active Directory User, or Group, that is allowed to log in to the Skyline Collector using their Active Directory Username and Password.
  - a To add a Group, click **Add Group**.
  - b To add a User, click **Add User**.
- 6 Click **Continue**.
- 7 Click **Set Configuration**.

## Results

Users can now log in to the Skyline Collector using their Active Directory account information.

## Web Server Certificate

Replace the Skyline Collector Web Server Certificate used to encrypt the connection between the Skyline Collector web server and the user interface.

The Web Server Certificate is used to encrypt the connection between the Skyline Collector user interface and the local client web-browser.

### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **System**, click **Web Server Certificate**.
- 3 For Certificate, click **Choose File**, then choose the custom certificate file (.cert/.cer/.crt/.pem).
- 4 For Certificate key, click **Choose File**, then choose the custom certificate key file (.key/.pem).
- 5 Click **Set Certificate** to upload the chosen certificates to the Skyline Collector.



## Root Password Expiration

You can modify the root password expiration policy.

You can modify the root password expiration policy. This includes activating and deactivating the root password expiration and the number of days after which the root password expires.

### Procedure

- 1 In the Skyline Collector, click **Configuration**.
- 2 Under **System**, click **Root Password Expiration**.
- 3 To activate or deactivate the Root Password Expiration, follow these steps:

Option	Description
Activate Root Password Expiration	To activate Root Password Expiration, toggle the switch to the right. The switch states <b>Yes</b> , and turns Green [  ]. Choose the number of days after which the Root Password expires. You can choose between 7 and 365 days.
Deactivate Root Password Expiration	To deactivate Root Password Expiration, toggle the switch to the left. The switch states <b>Disabled (Not Recommended)</b> , and turns Grey [  ]. The Root Password does not expire.

- 4 Click **Save Settings**.

### What to do next

If you have set a few days for the root password to expire, enable the Skyline Collector Password Expiry email notification available within Skyline Advisor. Within Skyline Advisor, click **Settings**, to access Email Notification Preferences. See the [Skyline Advisor User Guide](#) for more details.



# Change the admin Account Password

# 6

Change the Skyline Collector `admin` account password.

To change the Skyline Collector admin account password, select the admin account at the top-right corner of the Skyline Collector, and click **Change Password** from the drop-down menu.

The new password must meet the password complexity policy as described on the Change Password page. Click **Set Password** to save the new password.

The 'admin' password must meet the following complexity requirements.

- Minimum length: 8 characters.
- Ensure string has one uppercase letter.
- Ensure string has one special case letter (!@#\$%).
- Ensure string has one digit.
- Ensure string has one lowercase letter.

# Update Skyline Collector

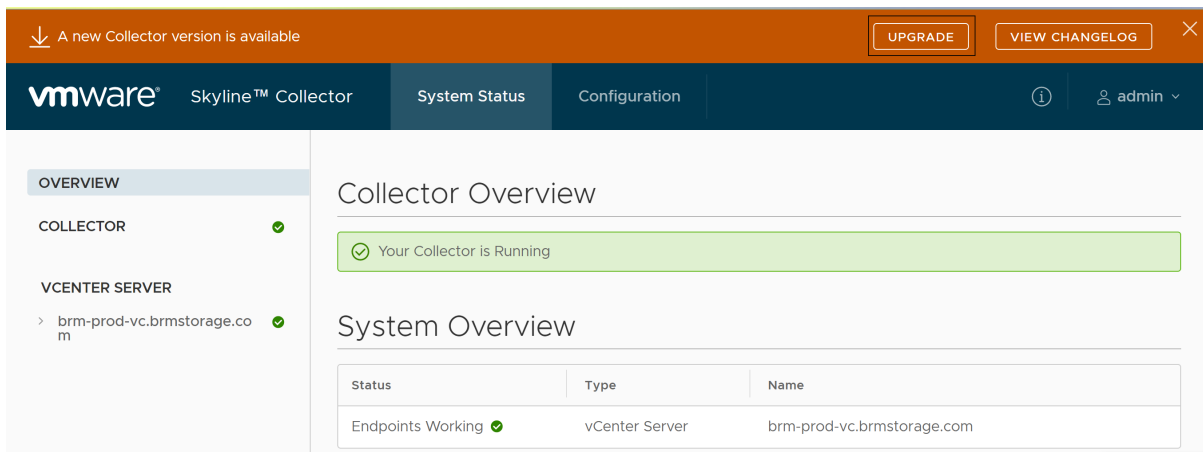
# 7

Update your Skyline Collector to the most recent version available.

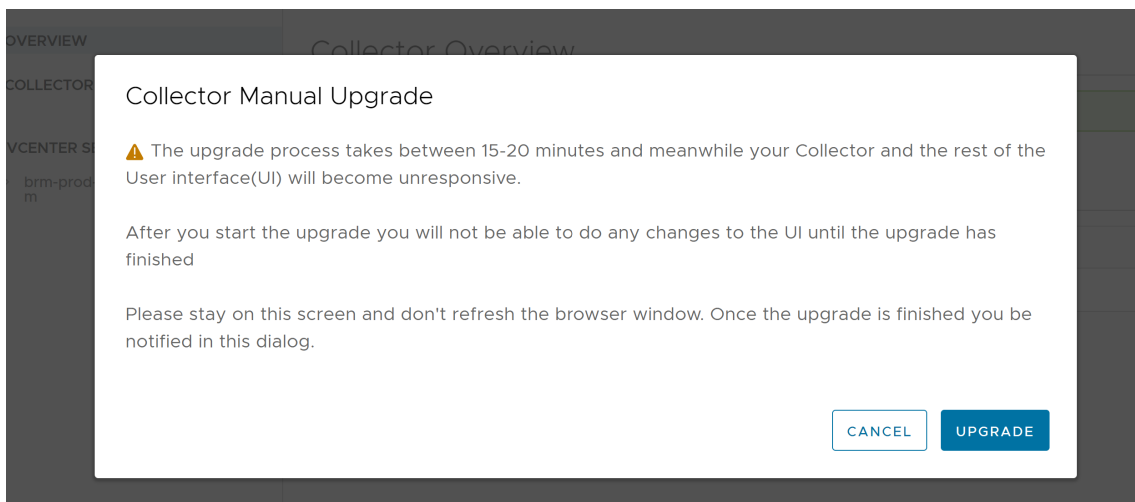
When a new version is detected, manually upgrade using notification banner that will appear in the Skyline Collector web interface.

## Procedure

- 1 On the notification banner, click **UPGRADE**.



- 2 Select **AGREE** in the End-User License Agreement.
- 3 Click **UPGRADE** to start upgrading the collector. The upgrade process takes 15-20 mins.



## Results

Your Collector has been upgraded successfully.

## What to do next

You can enable Auto-Upgrade within the Skyline Collector to allow the Skyline Collector virtual appliance to automatically check, and upgrade, when a new version of the Skyline Collector is made available. This assists with removing the manual step of updating the Skyline Collector detailed in this topic.

# Customer Experience Improvement Program (CEIP)



Participation in the VMware Customer Experience Improvement Program (CEIP) Enhanced participation level is required as part of VMware Skyline.

Joining this program is done as part of the initial configuration of the Skyline Collector.

As part of the Enhanced Customer Experience Improvement Program (CEIP), VMware collects technical information about our customer's use of such products for the purposes given in the following section, such as to improve VMware products and services, and advise our customers on how best to deploy and use our products and services. The data collected through this Customer Experience Improvement Program (CEIP) is separate from the configuration, performance, usage, and consumption data that we collect and use to facilitate delivery of our products and services (such as tracking entitlements, providing infrastructure-related support, monitoring the performance, integrity and stability of the infrastructure, and preventing or addressing service or technical issues) Operational Data).

For additional information regarding the CEIP, see the Trust & Assurance Center at <https://www.vmware.com/solutions/trustvmware/ceip>.

By configuring your VMware products to participate in the Skyline service, each product is enabled to send product usage data to the Skyline services as part of the Customer Experience Improvement Program. You may add, remove, or modify your product configurations at any time. For detailed instructions, see [Knowledge Base \(KB\) article 74676](#).

Participation in the Customer Experience Improvement Program (CEIP) Enhanced participation level can be discontinued for a Skyline Collector at any time by deregistering the Skyline Collector. See [DeRegister Skyline Collector](#) within the [Skyline Advisor User Guide](#) for details.