



# vRealize Operations 8.5 Release Notes

VMware vRealize Operations 8.5 | 2021 | Build 18255622

VMware vRealize Operations Upgrade PAK from 7.5 to 8.5 | 2021 | Build 18255620

**Note:** *This upgrade .pak file includes the OS upgrade files from SUSE to Photon and the vApp upgrade files.*

VMware vRealize Operations Upgrade PAK from 8.0.x, 8.1.x, 8.2, and 8.3 to 8.5 | 2021 | Build 18255614

**Note:** *This upgrade .pak file includes the OS upgrade files from Photon to Photon and the vApp upgrade files.*

VMware vRealize Operations Upgrade PAK from 8.4 to 8.5 | 2021 | Build 18255614

**Note:** *This upgrade .pak file includes the OS upgrade files from Photon to Photon, the vApp upgrade files, and Cloud Appliance upgrade files.*

VMware vRealize Operations 8.5 Pre-Upgrade Assessment Tool | 2021 | Build 18176777

VMware vRealize Operations Cloud Appliance 8.5 | 2021 | Build 18255621

VMware vRealize Operations Certificate Renewal PAK 8.5 | 2021 | Build 18250886

Check frequently for additions and updates to these release notes.

## What's New

### Product Enhancements

vRealize Operations 8.5 delivers new and enhanced capabilities for self-driving operations to help customers optimize, plan, and scale VMware Cloud, which includes on-premises private cloud or VMware SDDC in multiple public clouds such as VMware Cloud on AWS, Azure VMware Solution (AVS), and Google Cloud VMware Engine (GCVE), while at the same time unifying multi-cloud monitoring, and supporting AWS, Azure Cloud, and Google Cloud platforms. Powered by artificial intelligence (AI), this release will provide a unified operations platform, deliver continuous performance optimization, efficient capacity and cost management, proactive planning, app-aware intelligent remediation, and integrated compliance.

### Features and Capabilities

- This release is a minor release and addresses security updates and bug fixes.

## Documentation

vRealize Operations 8.5 is a minor release addressing security updates and bug fixes. For feature details, please refer to the [vRealize Operations 8.4 documentation](#).

## Metrics and Properties Modifications

The following KB article describes all the metrics and properties that have been modified in vRealize Operations 8.5:

[Metrics added in vRealize Operations 8.5](#)

## Instanced Metrics

Instanced metrics are disabled by default after deploying or upgrading to vRealize Operations 8.2 or later, and after importing a policy from older versions. To re-enable instanced metrics in vRealize Operations 8.2 or later, see [KB 81119](#).

## System Requirements

Review this section before you install or update vRealize Operations.

## Sizing and Scaling

The CPU, memory, and disk requirements that meet the needs of a particular environment depend on the number and type of objects in your environment and data collected. This includes the number and type of adapters installed, the use of HA (High Availability) and CA (Continuous Availability), the duration of data retention, and the quantity of specific data points of interest. VMware updates [Knowledge Base article 2093783](#) with the most current information about sizing and scaling. The Knowledge Base article includes overall maximums and spreadsheet calculations that provide a recommendation based on the number of objects and metrics you expect to monitor.

## Deployment Formats

You can deploy vRealize Operations 8.5 with VMware virtual appliance.

If you are deploying a vRealize Operations virtual appliance, use a VMware vSphere Client to connect to a VMware vCenter Server, and deploy the virtual appliance through the vCenter Server instance. The vRealize Operations virtual appliance must be deployed on hosts that are:

- ESX/ESXi 6.5 Update 1 or later and managed by VMware vCenter Server 6.5 or later.
- If you have vRealize Operations virtual appliance deployed on ESXi 6.0 or older hosts, you must first upgrade vCenter Server and ESXi to version 6.5 Update 1 or later, and then upgrade to vRealize Operations 8.5.

## Hardware Versions

The minimum hardware version required for vRealize Operations 8.x releases is version 11. If your vRealize Operations virtual appliance had a hardware version earlier than 11, you must first

upgrade to hardware version 11 on vRealize Operations virtual appliance and then upgrade to vRealize Operations 8.5.

## Cipher Suites and Protocols

For information about cipher suite lists and relevant protocols, see [Cipher Suites and Protocols](#).

## VMware vRealize Operations Certificate Renewal PAK File

The VMware vRealize Operations Certificate Renewal PAK file must be applied on vRealize Operations 8.5 if the internal certificate is going to expire soon. The internal certificate in vRealize Operations 8.5 is generated during initial deployment. Currently, upgrading to later versions of vRealize Operations does not upgrade the internal certificate. See [KB 71018](#).

## Basic Authentication

Basic authentication using the REST API is deprecated and disabled in vRealize Operations 8.5 fresh deployments by default. Instances that have been upgraded to vRealize Operations 8.5, will inherit the same properties before the upgrade. It is recommended that you use token-based authentication instead. If you still need to enable or disable basic authentication, see [KB 77271](#).

## Applying License Keys

**IMPORTANT: A new license key is required for upgrading vRealize Operations 7.0 and later versions. All license keys except vRealize Operations for Horizon, vSOM Enterprise Plus and its add-ons are invalidated. The product will work in evaluation mode until a new valid license key, which can be obtained from the MyVMware portal, is installed. After you log in to the user interface of vRealize Operations, if you see that you are using an evaluation license, consider applying for a new license before the end of the 60-day evaluation period.**

For more details on entitlements of vRealize Operations editions, see the edition comparison table from the following link: <https://www.vmware.com/products/vrealize-operations.html>.

## SDDC Compliance

To ensure compliance of your vSphere, VMware Cloud on AWS, and vSAN 7.0, 6.7, and 6.5 objects, and also NSX-T 2.3, 2.4, and 2.5, and NSX-V 6.3.x and 6.4.x objects, vRealize Operations 8.5 includes compliance alerts for [VMware vSphere Security Configuration Guide versions 6.7 Update 1 and 6.5](#). These security configuration guide alerts are based on the corresponding object types. Some of the alerts and symptoms are available only for backward compatibility with older versions of vSphere, even though the current release supports the latest vSphere Security Configuration Guide 6.7 Update 1.

**Note:** Compliance rules will work on vSphere 7.0 objects as well. However, those rules are based on vSphere Security Configuration Guide 6.7 Update 1.

## Solutions Support

In addition to the VMware solutions (vSphere, Endpoint Operations Management, and vRealize

Log Insight), see the [VMware Marketplace](#) for many more solutions. These solutions work with Virtual Appliance single or multiple nodes.

## VMware Product Compatibility

**Note:** The [VMware Product Interoperability Matrix](#) provides details about the compatibility of vRealize Operations with VMware products.

**Note:** For FIPS mode compatibility details, see the footnotes in the interoperability matrix. The product will not work in FIPS mode if there are footnotes that state that it will not work in FIPS mode.

## Browser Support

This vRealize Operations release supports all current Web browsers, although only the following browsers were tested with this release:

- Google Chrome: Versions 87 and 89
- Mozilla Firefox: Version 86 and 87
- Microsoft Edge: Versions 88 and 89
- Safari: Versions 13 and 14

**Note:** Support for Internet Explorer has been dropped from vRealize Operations 8.4 onwards.

## Installing and Upgrading vRealize Operations

**Upgrading to vRealize Operations 8.5, resets out-of-the-box content as part of the software upgrade process even if the Reset Default Content button is unchecked during the upgrade. This implies that the user modifications made to default content such as alert definitions, symptom definitions, recommendations, policies, views, dashboards, widgets, and reports are overwritten. You need to clone or backup the content before you upgrade to vRealize Operations 8.5.**

**Note:** There are three different upgrade .pak files to upgrade to vRealize Operations 8.5:

- To upgrade from vRealize Operations 7.5 to vRealize Operations 8.5, you must download and apply the **vRealize Operations Manager - Virtual Appliance upgrade for 7.5**.pak file.
- To upgrade from vRealize Operations 8.0, 8.0.1, 8.1, 8.1.1, 8.2, or 8.3 to 8.5 you must download and apply the **vRealize Operations Manager - Virtual Appliance upgrade for 8.0.x, 8.1.x, 8.2 and 8.3**.pak file.
- To upgrade from vRealize Operations 8.4 to 8.5, you must download and apply the **vRealize Operations Manager - Virtual Appliance upgrade for 8.4**.pak file

**Note:** While upgrading to vRealize Operations 8.5, the expected size of the root partition for Photon OS is 20 GB. For information about this requirement, see [KB 75298](#).

It is always recommended to run the Pre-Upgrade Assessment tool before an upgrade. A pre-upgrade assessment report that is generated will provide you with the recommended replacements. This tool provides you with an impact analysis following the reduction of metrics in

various versions of the product. For more details on using the Pre-Upgrade Assessment Tool, see [KB 84286](#).

Refer to the [vRealize Operations Upgrade Center](#) that has information about upgrading vRealize Operations. Refer to the [VMware Lifecycle Product Matrix](#) for information about supported versions of vRealize Operations.

The [vRealize Operations Information Center](#) has detailed information about [installation](#) and [software updates](#).

Refer to the [vRealize Operations vApp Deployment and Configuration Guide](#) that provides guidance for a vRealize Operations virtual appliance, before you install or update vRealize Operations.

Deploy vSphere with Operations Management (any edition) and vRealize Operations Standard together in one deployment.

Deploy vCloud Suite/vRealize Suite Standard, Advanced, or Enterprise and vRealize Operations Advanced or Enterprise edition together in one deployment.

**Note:** You can also install vRealize Operations by using vRealize Suite Lifecycle Manager. For more information, see the [vRealize Suite Lifecycle Manager Installation, Upgrade, and Management Guide](#). vRealize Suite Lifecycle Manager 8.4.1 Product Support Pack 2 supports the installation of vRealize Operations 8.5. For more information, see [VMware vRealize Suite Lifecycle Manager 8.4.1 Release Notes](#).

## Upgrading End Point Operations Management Agents

After upgrading from vRealize Operations 8.1.1 or older versions to vRealize Operations 8.5, it is necessary to upgrade End Point Operations Management agents using the 8.2 agents.

As End Point Operations Management agent builds for 8.5 are the same as 8.2, you can download the End Point Operations Management agents from the [vRealize Operations 8.2 Download page](#). To upgrade End Point Operations Management agents from the vRealize Operations administration user interface, see [Upgrade the End Point Operations Management Agent](#). To upgrade individual agents, see [KB 2137709](#).

If you are upgrading from vRealize Operations 8.2, 8.3, or 8.4 to 8.5, you do not need to upgrade the End Point Operations Management agents.

## Active Directory Authentication Sources

Logging in to vRealize Operations with a short name will be successful only if the user name's domain suffix matches the domain name specified in the **Base DN** option. Otherwise, the full user name with the domain suffix is required during login. For more information, see [KB 68131](#).

## Resolved Issues

For a complete list of resolved issues, see [KB 87036](#).

- When an SDDC instance on VMware Cloud on AWS has both i3 and i3en hosts, component expenses are biased towards i3en hosts**  
 When an SDDC instance on VMware Cloud on AWS has both i3 and i3en hosts, component expenses for i3 hosts are considered for per hour rate calculation at the region level. This results in clusters with i3en hosts costing slightly higher and clusters with i3 hosts costing slightly lesser.
- Reset does not work for VMware Cloud Foundation clouds**  
 Reset does not work for VMware Cloud Foundation clouds from the Administration > Configuration > Cost Settings > Cloud Providers page.
- Incorrect summary value of the Server Hardware HCI cost driver**  
 After you save the cost from the HCI page, the summary for HCI in the Summary page does not match the summary in the HCI page and is incorrect.
- Data is not collected for all the Azure objects**  
 Data is not collected for regions that do not have any objects. However sometimes, objects such as Virtual Machine(s), Storage Accounts, virtual NICs, and so on, will not receive data for a while, but will come back to a collecting state automatically.

## Known Issues

The known issues are grouped as follows.

- [Installation and Upgrade Issues](#)
- [General Issues](#)
- [User Interface Issues](#)

### Installation and Upgrade Issues

- An error occurs if you modify flags while deploying cloud proxy in vCloud Director**  
 An error occurs if you modify the 'Remote Collector' and 'IPv6' flags that may appear while deploying cloud proxy in vCloud Director.

**Workaround:** Do not modify the 'Remote Collector' and 'IPv6' flags that may appear when you deploy cloud proxy.

- The Take Node(s) Offline wizard appears when you try to bring an offline RC node online**

When you try to bring an RC node back online after having just taken it offline, the **Take Node(s) Offline** wizard appears when you click the **Take Node Offline/Online** button, instead of the **Take Node(s) Online** wizard as expected.

**Workaround:** If the node state still displays as **Running** or the status is still **Online** after having taken it offline, wait a few moments and then manually refresh the data in the view

from the top menu to get the latest state of the node. After the correct state is displayed which is **Not Running**, the **Take Node Offline/Online** button will work as expected.

- **Installation of a management pack fails on a newly added node**

After you upgrade to vRealize Operations 8.5, installation of a management pack fails on a newly added node.

**Workaround:** Upgrade management packs to their latest version and then add a new node.

- **Upgrade to vRealize Operations 8.5 fails for instances with Wavefront configuration**

If you use vRealize Operations 7.5 and earlier versions with Wavefront configured, you cannot upgrade to vRealize Operations 8.5 as upgrade fails.

**Workaround:** None

- **Upgrade might fail if any of the nodes are running on VMs with US/Pacific-New timezone**

PostgreSQL database systems no longer support the US/Pacific-New timezone, which was just an alias for America/Los\_Angeles timezone. If any of the vRealize Operations nodes are running on VMs with US/Pacific-New timezone, upgrade might fail.

**Workaround:** Change VM timezones from US/Pacific-New to America/Los\_Angeles, and then upgrade.

## General Issues

- **GET/PUT call on Server Hardware HCI results in an incorrect summary (total cost)**

The GET/PUT call on the Server Hardware HCI using the new internal `suite-apis/suite-api/internal/costdrivers/servergroups`, results in an incorrect summary (total cost).

**Workaround:** None

- **If you change the vRealize Operations web certificate, some adapter instances may stop collection**

Some adapter instances might stop collection after an update of the web certificate via API or from the vRealize Operations admin user interface.

**Workaround:** Stop and start the impacted adapters.

- **Sorting by name in a view, results in unexpected behavior**

When you edit a view and sort by name, the number of virtual machines displayed is more than what is configured.

**Workaround:** None

- **Concurrent activation or deactivation of plugins during application monitoring using suite-api does not work**

During application monitoring using suite-api, when you activate or deactivate plugins concurrently, plugin activation or deactivation does not work. An exception is logged in the `ucpapi.log` file.

**Workaround:** Provide a gap of one second between each thread during activation or deactivation of the plugins using suite-api.

- **When you get an application instance's configuration status using a Rest-API call, a wrong status is returned when the same configuration was installed or uninstalled previously**

If you installed or uninstalled an application instance and then uninstalled or installed it respectively, the API returns "SUBMITTING" when you try to get the application instance install or uninstall configuration status using "GET /api/applications/agents/services/{taskId}/status".

**Workaround:** While getting the application instance configuration status using the "GET /api/applications/agents/services/{taskId}/status" API, ensure that you use the latest performed task ID. The result of calls with older IDs is undefined.

- **Previewing a view works incorrectly**

When you try to preview a view that was not opened recently, the preview is not displayed.

**Workaround:** Click on **Sample Data** and then anywhere on the screen to view the preview. Refresh your browser tab afterwards, so that the workaround is applicable to other views from the left pane, which do not have a specified preview source.

- **When you upgrade from vRealize Operations 8.1 to 8.5, the Cassandra application service is displayed as Java Application in the Services Discovered/Configured column of the Manage Agents tab**

During application monitoring, after you upgrade from vRealize Operations 8.1 to 8.5, the Cassandra application service is displayed as Java Application in the Services Discovered/Configured column of the Manage Agents tab. This happens if the Cassandra application service is configured for monitoring in vRealize Operations 8.1, using the vRealize Application Remote Collector generic Java plugin.

**Workaround:** Deactivate the Java plugin before you upgrade the vRealize Application Remote Collector agent on the VM. After upgrading the vRealize Application Remote Collector agent, the Cassandra plugin will be discovered and can then be activated.

- **System language settings affects service discovery**

Service discovery might not work if the system language is different from English. For languages different from English, network connection state values might be different from constants defined in standard RFCs.

**Workaround:** None

- **Reconfigure the Project Price widget if the vRealize Automation 8.x integration is deactivated and then reactivated**

There is data missing in the **Project Price** widget of the **Cloud Automation Project Price Overview** dashboard when you deactivate and then reactivate an existing vRealize Automation 8.x integration.

**Workaround:** Reconfigure the **Project Price** widget by completing the following steps:

1. After you deactivate and then reactivate the vRealize Automation 8.x integration,

navigate to **Dashboards > vRealize Automation 8.x > Cloud Automation Project Price Overview** dashboard.

2. Edit the **Project Price** widget.
3. Navigate to the **Input data** section.
4. Select the '+' (**Add Object**) button and select the CAS World object from **vRealize Automation Adapter 8.x > CAS World**.
5. Click **OK**.
6. Navigate to the **Output data** in the same widget configuration mode. Search for and select the CAS Project Price View object from the list.
7. Save the widget.

- **HTTP Post Adapter is deprecated in vRealize Operations 7.0 and above**

Re-enabling the HTTP Post Adapter can open vRealize Operations to security flaws.

**Workaround:** Complete the steps in [KB 60328](#).

- **While monitoring applications, you cannot activate a plugin with the same fields till the plugin configuration is deleted**

An error message is displayed in the user interface of vRealize Operations that states the following: 'Failed to update resource: Resource with same key already exists'.

**Workaround:** Manually delete the existing plugin configuration and then continue with the activation of the plugin. If the problem persists, delete the corresponding resource from the inventory.

- **Upgrade from vRealize Operations 7.5 to 8.5 results in a change in the license cost driver**

When you upgrade from vRealize Operations 7.5 to 8.5, there is a change in the license cost driver between the **Summary** page and the **License Cost Driver** page.

**Workaround:** You can set the cost with the old value, which is \$365, in the **License Cost Driver** page.

- **The compliance score for a user with limited object visibility is the same as for a user with complete object visibility**

The compliance score is calculated for objects that are not visible (not assigned) to the current user.

**Workaround:** Complete the following steps:

1. Create a custom group with objects visible (assigned) to the user.
2. For that group, apply a policy in which the needed set of compliance alert definitions is enabled.  
If that set is enabled only in one active policy (the one that is applied to the custom group), the compliance benchmark based on those alert definitions will display the correct score.

- **Collection for the Management Pack for Microsoft Azure fails when the network connection times out**

When the Management Pack for Microsoft Azure sends a request to the Azure portal and

the portal takes a longer time to read the request than the Azure SDK timeout value, collection for the adapter instance fails. Collection resumes when the network timeout issue is resolved, or the Azure portal can read the request.

**Workaround:** None

- **Objects such as images and icons related to the Management Pack for SDDC Health, Management Pack for OpenStack, and Management Pack for SRM are not displayed**

After you upgrade vRealize Operations, if you scale a vRealize Operations cluster with the Management Pack for OpenStack 5.0, or Management Pack for SRM 8.1, or Management Pack for SDDC Health 5.0 installed and add another vRealize Operations node, some objects such as images and icons related to the management packs are missing.

**Workaround:** Users with an instance of the Management Pack for OpenStack, or Management Pack for SRM, or Management Pack for SDDC Health must uninstall the management packs, before upgrading vRealize Operations.

- **Alerts from the vSAN adapter that correspond to vSAN health check tests are not canceled if the test is removed from the vSAN Health Service.**

vRealize Operations cannot detect and cancel deleted alerts.

**Workaround:** Manually cancel the alert from the user interface of vRealize Operations.

- **Generated reports may be blank**

If you log in to vRealize Operations with vCenter Server credentials and generate a report, the generated report is always blank.

**Workaround:** None

- **Despite deleting ucp-adapter instance certificates, users can run actions**

If users delete ucp-adapter instance certificates, they can still run actions such as, start and stop an agent, configure remote checks, and so on.

**Workaround:** None

## User Interface Issues

- **The Last Year option in the date picker is not intuitive**

The Last Year option in the date picker indicates that the time range starts from the end of the previous month and goes back a year. It does not indicate a time range that spans one year from the current date or the whole previous year.

**Workaround:** None

- **A PDF report file might not include all data from a widget that has a scrollbar**

When you generate a report that contains a custom dashboard with a widget that has a scrollbar, the downloaded PDF file might not include all the data in the widget.

**Workaround:** Increase the height of the widget in the dashboard to fit all the data.

