

# VMware vRealize Orchestrator 8.6.2 Release Notes

vRealize Orchestrator 8.6.2

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# Introduction

# 1

vRealize Orchestrator 8.6.2 | 18 JAN 2022

Check for additions and updates to these release notes.

# Release Versions

# 2

VMware vRealize Orchestrator 8.6.2 | 18 January 2022

- vRealize Orchestrator 8.6.2 Appliance build 19108182
- VRealize Orchestrator 8.6.2 Update Repository build 19108182

Updates made to this document:

Date	Description of update	Type
01/18/2022	Initial publishing.	
03/02/2022	Added link to KB workaround used to resolve upgrade failure related to the log4j vulnerabilities.	

## IMPORTANT

### Log4J vulnerabilities

The Apache Log4j utility is now updated to version 2.17 to resolve CVE-2021-44228 and CVE-2021-45046. For more information on these vulnerabilities and their impact on VMware products, please see [VMSA-2021-0028](#).

### Upgrade failure after performing steps in KB 87120

Performing the instructions used to address the CVE-2021-44228 and CVE-2021-45046 log4j vulnerabilities described in KB 87120 can cause upgrade failures for vRealize Automation and vRealize Orchestrator 8.6.2 or earlier. For a workaround, see [KB 87794](#).

# What's New in vRealize Orchestrator 8.6.2

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- **The vRealize Log Insight content pack for vRealize Orchestrator v8.3+ is now available.**

The VMware vRealize Orchestrator content pack compliments the vSphere content pack and provides a consolidated summary of log events across all vRealize Orchestrator components in the environment. The vRealize Orchestrator content pack for Log Insight provides you with important information across all components of your vRealize Orchestrator 8.3+ environment.

The content pack enables:

- Proactive monitoring of your vRealize Orchestrator 8.3+ environment.
- Server overview dashboards.
- Authorization related details.
- Configuration and content audit dashboards.
- Workflow related dashboards that include information on failures, logs, and statistics.
- Metrics dashboards that include REST API logs and JVM log details.
- Request-based tracing across vRealize Orchestrator 8.x services using trace IDs.
- Troubleshooting and assistance during root-cause analysis.

The vRealize Log Insight content pack can be found in the [VMware Marketplace](#).

**NOTE:** This version of the content pack is now available and is designed specifically for vRealize Orchestrator 8.3 and above. It is not compatible with earlier versions of vRealize Orchestrator.

- **Plug-in API compatibility updates for VUM (VMware vSphere Update Manager) plug-in (update to latest vSphere APIs).**

In previous versions, the VUM plug-in supported only the vSphere 6.5 API. Now the VUM plug-in is updated to support vSphere versions 6.7, 7.0, 7.0 U1, and 7.0 U2 (with backwards compatibility to 6.0 on vCenter 6.7). With the VUM plug-in, you can perform the following tasks:

- Upgrade and patch ESXi hosts.
- Install and update third-party software on hosts.

- Upgrade virtual machine hardware and VMware Tools.

The array of SDK objects in the plug-in is changed to be a multi value picker. However, the action used in vRealize Automation forms is not supported by vRealize Orchestrator.

For more information on the VUM plug-in, see [Using the vRealize Orchestrator Plug-In for VMware vSphere Update Manager](#).

- **Changes to cluster health and synchronization status monitoring.**

In previous releases of vRealize Orchestrator, you could monitor the health and synchronization status of your cluster from the **Orchestrator Cluster Management** and **Validate Configuration** pages of the Control Center. You can no longer use these pages to monitor the status of your cluster.

The new recommended approach for monitoring the health and synchronization status of your cluster is to log in to the vRealize Orchestrator Client and navigate to the **System** tab of the dashboard. Alternatively, if the vRealize Orchestrator Client is unavailable, you can also check the status of your cluster by running the `kubectl get pods -n prelude` command from the vRealize Orchestrator Appliance command line.

# Deploying the vRealize Orchestrator Appliance

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The vRealize Orchestrator Appliance is a VMware Photon OS-based appliance distributed as an OVA file. It is prebuilt and preconfigured with an internal PostgreSQL database, and it can be deployed with vCenter Server 6.0 or later.

The vRealize Orchestrator Appliance is a fast, easy to use, and more affordable way to integrate the VMware cloud stack, including vRealize Automation and vCenter Server, with your IT processes and environment.

For instructions about deploying the vRealize Orchestrator Appliance, see [Download and Deploy the vRealize Orchestrator Appliance](#).

For information about configuring the vRealize Orchestrator Appliance server, see [Configuring a Standalone vRealize Orchestrator Server](#).



# Upgrading and Migrating vRealize Orchestrator

# 5

You can upgrade a standalone or clustered vRealize Orchestrator 8.x deployment to the latest product version by using a mounted ISO image.

For more information about upgrading the vRealize Orchestrator Appliance, see [Upgrading vRealize Orchestrator](#).

You can migrate a standalone vRealize Orchestrator instance authenticated with vSphere or vRealize Automation to vRealize Orchestrator 8.6.2. Product versions of vRealize Orchestrator 7.x supported for migration include versions 7.3 to 7.6. The migration of clustered vRealize Orchestrator 7.x deployments is not supported.

For more information about migrating the vRealize Orchestrator Appliance, see [Migrating vRealize Orchestrator](#).

# Plug-ins Installed with vRealize Orchestrator 8.6.2

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The following plug-ins are installed by default with vRealize Orchestrator 8.6.2:

- vRealize Orchestrator vCenter Server Plug-In 7.0.0
- vRealize Orchestrator Mail Plug-In 8.0.1
- vRealize Orchestrator SQL Plug-In 1.1.9
- vRealize Orchestrator SSH Plug-In 7.3.0
- vRealize Orchestrator SOAP Plug-In 2.0.6
- vRealize Orchestrator HTTP-REST Plug-In 2.4.1
- vRealize Orchestrator Plug-In for Microsoft Active Directory 3.0.11
- vRealize Orchestrator AMQP Plug-In 1.0.6
- vRealize Orchestrator SNMP Plug-In 1.0.3
- vRealize Orchestrator PowerShell Plug-In 1.0.20
- vRealize Orchestrator Multi-Node Plug-In 8.6.2
- vRealize Orchestrator Dynamic Types 1.3.6
- vRealize Orchestrator vCloud Suite API (vAPI) Plug-In 7.5.2
- VMware vSphere Update Manager Plug-in 7.0.0

# Earlier Releases of vRealize Orchestrator

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Features and issues from earlier releases of vRealize Orchestrator are described in the release notes for each release. To review release notes for earlier releases of vRealize Orchestrator, click one of the following links:

- [vRealize Orchestrator 8.6.1](#)
- [vRealize Orchestrator 8.6](#)
- [vRealize Orchestrator 8.5.1](#)
- [vRealize Orchestrator 8.5](#)
- [vRealize Orchestrator 8.4.2](#)
- [vRealize Orchestrator 8.4.1](#)
- [vRealize Orchestrator 8.4](#)
- [vRealize Orchestrator 8.3](#)
- [vRealize Orchestrator 8.2 Patch 1](#)
- [vRealize Orchestrator 8.2](#)
- [vRealize Orchestrator 8.1 Patch 3](#)
- [vRealize Orchestrator 8.1 Patch 2](#)
- [vRealize Orchestrator 8.1 Patch 1](#)
- [vRealize Orchestrator 8.1](#)
- [vRealize Orchestrator 8.0.1](#)
- [vRealize Orchestrator 8.0](#)
- [vRealize Orchestrator 7.6.0](#)
- [vRealize Orchestrator 7.5.0](#)
- [vRealize Orchestrator 7.4.0](#)

# Resolved Issues

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- **The API Explorer incorrectly displays array types.**

Scripting object methods, which return array types, are displayed as returning simple non-array types. This issue can be encountered, for example, in the `getRESTAuthentications` method used by the `RESTAuthenticationManager` object included in the REST plug-in. In this example case, the method returns a `String` array but is displayed as a simple `String`. The same issue is encountered for method parameters of the array type. For example, the `createAuthentication` method of the same scripting object has a parameter named `params`. The parameter is a `String` array, but the API Explorer displays it as a simple `String`. The issue is also encountered in properties and attributes. For example, `RESTAuthentication#rawAuthProperties` is a `String` array but it is also displayed as a simple `String`. This issue can also be encountered in plug-ins other than the REST plug-in.

- **Unable to move a workflow to another folder.**

Changing the current folder of a workflow from the editor view in the vRealize Orchestrator Client leads to a merge conflict when attempting to save the workflow.

- **The `ResourceElement#reload()` scripting API does not reload the actual content from the database.**

vRealize Orchestrator provides a `ResourceElement#reload()` scripting API that allows scripting content authors to retrieve the latest version of the resource element content from the database in cases where the content of the resource element is updated independently. This can include scenarios, such as the content being updated by another workflow or action running in parallel with the current object. This issue causes the scripting API to keep the old content instead of retrieving the updated content, which can cause various errors in any inventory objects that use the specific resource element.

- **In vRealize Automation, the `vro-agent` container is unable to create a dump file for the second time if the file already exists.**

When a dump file is created it cannot be overwritten when needed.

- **Users cannot browse the vRealize Orchestrator inventory tree if the domain name contains the `api` string.**

When the domain name contains the `api` string, users receive an error when they try to browse the inventory tree. This issue is caused by request being made to a broken URL.

- **After upgrading from vRealize Orchestrator 8.4.0 to vRealize Orchestrator 8.5.1, you are unable to load the vRealize Orchestrator Client when you are logged in as a non-default tenant, but you can log in as a default tenant.**

A subtenant is unable to use the embedded vRealize Orchestrator Client in vRealize Automation even if the client is registered as an integration for that specific vRealize Automation tenant. When attempting to log in to the vRealize Orchestrator Client, subtenants receive the following error message: `O, Unknown error.`

- **Changes to the status codes from the Content Service.**

For the REST API workflow service you expect the `409` code but receive a `202 ACCEPTED:null` code instead. The following API changes are applied to the Content Service:

Service name	Content Service
API version	All versions
External or Internal facing API	External
Change description	Changes to the API status code.
Changes between the current release and previous releases	The success code is changed from 200 to 202.

# Known Issues

## 9

- **Action code for actions set as external sources does not update properly.**

The script content of actions set as external sources within workflow input forms is cached for one minute after the last form evaluation which is performed when the input form was opened for the last time.

If an action is updated and the form is opened with the one minute timeframe, the cached script is performed and the effect of the updated script is not displayed in the input form.

**Workaround:** Wait for a period of one or two minutes after the last opening of the input form so the updated action script can be performed.

- **The VMware Update Manager (VUM) plug-in has compatibility issues with vCenter 7.0 U3.**

The **Export compliance report** workflow is not usable because of a VUM plug-in backend security issue in vCenter 7.0.3 (builds 18700403 and 18778458).

No workaround.

- **The interaction form for resuming a failed workflow does not display fields for all defined variables when one of the variables is of the Properties type. Inputs for variables coming after the variable of the Properties type will be hidden. The input fields of the Properties type are not populated.**

The variable type was not interpreted for the **Properties** type which causes issues during form rendering. The type is now used while generating the input form.

No workaround.

- **Local changes are not available after duplicating and deleting a workflow.**

You duplicate a workflow and then delete it. In the **Git History** page, there is no local change for the deleted workflow.

No workaround.

- **Pushing commits to a protected Git branch fails.**

If the configured Git branch is protected, the push operation fails consistently, but the message that appears indicates that the push is successful.

**Workaround:** The decision was taken not to fix this issue in the current or upcoming releases of vRealize Orchestrator. This known issue entry is going to be deleted from the release notes for the next release.

- **The following error message is displayed above the workflow input form when using the RUN AGAIN functionality to start a new workflow run: Some data cannot be retrieved. If the problem persists, contact your system administrator.;.**

The value of an input field of the simple array type of non object types such as **Array/number** or **Array/string** is wrongly evaluated and passed to an external source action that is used to populate the value of another input form field.

**Workaround:** Use the **RUN** workflow functionality instead of **RUN AGAIN**.

# Previously Known Issues

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This section contains previously known issues (known issues remaining from earlier releases of vRealize Orchestrator that still exist in the product).

- Adding values to vCenter Server data object properties of the **Array** type is not possible.

When vRealize Orchestrator runs scripts, the vCenter Server plug-in converts JavaScript arrays to Java arrays of a fixed size. As a result, you cannot add new values to vCenter Server data objects that take arrays as property values. You can create an object that takes an array as a property if you instantiate that object by passing it a pre-filled array. However, after you instantiate the object, you cannot add values to the array.

For example, the following code does not work:

```
var spec = new VcVirtualMachineConfigSpec();
spec.deviceChange = [];
spec.deviceChange[0] = new VcVirtualDeviceConfigSpec();
System.log(spec.deviceChange[0]);
```

In the above code, vRealize Orchestrator converts the empty **spec.deviceChange** JavaScript array into the fixed-size Java array **VirtualDeviceConfigSpec[]** before it calls **setDeviceChange()**. When calling **spec.deviceChange[0] = new VcVirtualDeviceConfigSpec()**, vRealize Orchestrator calls **getDeviceChange()** and the array remains a fixed, empty Java array. Calling **spec.deviceChange.add()** results in the same behavior.

**Workaround:** Declare the array as a local variable:

```
var spec = new VcVirtualMachineConfigSpec();
var deviceSpec = [];
deviceSpec[0] = new VcVirtualDeviceConfigSpec();
spec.deviceChange = deviceSpec;
System.log(spec.deviceChange[0]);
```

- The **RESTOperation ID** does not initialize properly if the **REST** host instance is created by using a **Swagger spec**.

In the HTTP-REST plug-in, when the **REST** host instance is created by a **Swagger spec**, the **RESTOperation ID** does not initialize properly and the **getOperation** method of the **RESTHost** object does not work.



No workaround.

- **The Storage VSAN workflows of the vCenter Server plug-in do not support adding Solid-State Drive (SSD) disks to an ESXi host.**

The **Add disks to disk group** and **Remove disks from disk groups** workflows do not support adding SSD disks as capacity disks to ESXi hosts.

No workaround.

- **Problems handling non-ASCII characters in certain contexts.**

Using non-ASCII characters in input parameters results in incorrect behavior in the following situations:

- If you run the **SCP put** or **SCP get** workflows from the SSH folder on a file with a name that contains non-ASCII characters, the workflow runs but the name of the resulting file on the destination machine is unreadable.
- If you try to insert non-ASCII characters into variable names, the characters do not appear. This issue occurs for workflow variables and action variables.

No workaround.

- **The SSH plug-in encounters firewall connectivity issues.**

The SSH plug-in cannot connect to a Cisco Adaptive Security Appliance (ASA) firewall.

**Workaround:** The SSH plug-in for vRealize Orchestrator 7.1 does not support connectivity to a Cisco Adaptive Security Appliance (ASA) firewall.

- **If you experience issues connecting to a SOAP or a REST host, or importing a certificate, you might have to explicitly enable certain versions of SSL or TLS.**

For information about this issue, see [the Java Secure Socket Extension \(JSSE\) Reference Guide](#).

**Workaround:** For information about explicitly enabling SSLv3 and TLSv1 for outgoing HTTPS connections, see [How to enable TLSv1.1 and TLSv1.2 for outgoing HTTPS connections in vRO 6.0.x \(KB 2144316\)](#).

- **The SOAP plug-in cannot connect through an authenticated proxy server.**

When attempting to run the **Add a SOAP host** workflow, you encounter an issue with the proxy server authentication.

**Workaround:** When running the workflow, use a proxy server that does not require authentication.

- **The vRealize Orchestrator authentication configuration might become invalid if the authentication provider certificate changes or regenerates.**

When the SSL certificate of the vRealize Automation or vSphere instance that is configured as the authentication provider in Control Center is changed or regenerated, the vRealize Orchestrator authentication configuration becomes invalid, and the vRealize Orchestrator server cannot start.

**Workaround:** Import the new authentication provider certificate:

- a Log in to Control Center as **root**.
  - b Click **Certificates**.
  - c Click the **Import on the Trusted Certificates** tab.
  - d Load the SSL certificate from a URL or a file.
  - e Click **Import**.
- **During the installation of a plug-in in the vRealize Orchestrator Control Center, an error message appears.**

When you install a plug-in from the **Manage Plug-Ins** page in Control Center, the following error message appears: **Plug-in 'name\_of\_the\_plug-in' (plug-in\_file\_name) is not compatible with the current platform version. Supported platform versions are 'names\_of\_the\_supported\_versions'.** Clicking on the 'Install' button will install it anyway.

**Workaround:** You can safely ignore this error and proceed with the installation of the plug-in.