

vRealize Operations Manager 6.3.1 Release Notes

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VMware vRealize Operations Manager Appliance 6.3.1 | 01 June 2017 | Build 5571308

VMware vRealize Operations Manager 6.3.1 for Windows and Linux | 01 June 2017 | Build 5571309

VMware vRealize Operations Manager 6.3.1 PAK Updates for Windows, Linux and Appliance | 01 June 2017 | Build 5571307

Check frequently for additions and updates to these release notes.

What's in the Release Notes?

The release notes cover the following topics:

- What's New?
- System Requirements
- Installing and Updating vRealize Operations Manager
- Known Issues from Previous Releases

What's New?

This patch release resolves an issue with the re-index function in vRealize Operations 6.3 that might prevent clusters from coming online.

System Requirements

Review this section before you install or update vRealize Operations Manager.

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, which includes the number and type of adapters installed, the use of HA (High 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 Manager with the following installation formats:

- VMware virtual appliance

- RHEL and Windows installation packages

If you are deploying a vRealize Operations Manager 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 Manager virtual appliance must be deployed on hosts that ESX/ESXi 5.1 U3 or later managed by VMware vCenter Server 5.1 Update 3 or later.

Note: Although the Microsoft Windows-based installation option and our Microsoft Windows-based Remote Collector option are fully supported in vRealize Operations Manager 6.3.1, we are deprecating their support. Future availability of these options is not guaranteed.

For new deployments, we recommend the use of our Virtual Appliance option. The announcement of the End-of-Availability (EOA) for these Windows-based options will come at a later release.

Linux and Windows Requirements

You can install and upgrade the standalone version of vRealize Operations Manager on the following operating systems:

- Red Hat Enterprise Linux (RHEL) 6.5, 6.6, and 6.7.
- Windows Server 2012 R2
- Windows Server 2008 R2 Service Pack 1 (SP1)
Windows Server 2008 R2 Service Pack 1 (SP1) configurations also require the updates found in the following Microsoft Knowledge Base articles:
 - <http://support.microsoft.com/kb/2577795>
 - <http://support.microsoft.com/kb/2538243>

Applying License Keys

In addition to the existing per operating system instance (OSI) licensing, vRealize Operations Standard edition is also available on a per processor (CPU) basis. Licensing for other editions of vRealize Operations is unchanged and continues to be available on a per OSI metric.

vRealize Operations Manager 6.3.1 allows customers to install multiple Advanced and Enterprise editions in the same vRealize Operations Manager deployment. This enhancement lets customers deploy single choice and suite licenses together. License counting for individual license keys is handled through licensing groups. You can mix editions or licensing models in one of the following ways:

- 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 cannot deploy a vRealize Operations Standard edition license with either an Advanced or Enterprise license in the same deployment.

A license key assigned to a vRealize Operations Manager instance only counts towards virtual machines that are powered on. In order to be compliant, you need enough licenses to cover average powered-on VMs over trailing 365 days.

Compliance Alerts

To ensure compliance of your vSphere 6.0 and 5.5 objects, vRealize Operations Manager 6.3.1 includes compliance alerts for [VMware vSphere Hardening Guide versions 6.0 and 5.5](#). These hardening guide alerts are now based on object type.

Solutions Support

In addition to the VMware solutions (vSphere, Endpoint Operations Management, and vRealize Log Insight), see the [compatibility table](#) in the Solution Exchange marketplace for many more solutions.

Each of these solutions works with Virtual Appliance Single Node, Virtual Appliance Multiple Node, RHEL Single Node, RHEL Multiple Node, Windows Single Node, and Windows Multiple Node configurations.

VMware Product Compatibility

This vRealize Operations Manager release has been certified as compatible with the following VMware products:

- VMware vSphere 5.1 U3, 5.5 U3, and 6.0 U2
- vRealize Hyperic 5.8.5 and later
- vRealize Infrastructure Navigator 5.8.5 and later

Browser Support

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

- Google Chrome: Version 51 and 52
- Mozilla Firefox: Version 47 and 48
- Microsoft Internet Explorer: Version 11

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Installing and Updating vRealize Operations Manager

The vRealize Operations Manager Information Center has detailed information about installation and software updates.

You can also download the following guides for guidance about installing and updating vRealize Operations Manager:

- vRealize Operations Manager vApp Deployment and Configuration Guide provides guidance for a vRealize Operations Manager virtual appliance.
- vRealize Operations Manager Installation and Configuration Guide for Linux and Windows provides guidance for vRealize Operations Manager on Red Hat Enterprise Linux or Windows.

Note: Under Known Issues, see the Installation and Update section for issues related to installing vRealize Operations Manager or updating the software. Some issues may require a workaround before you begin the installation or update process.

Updating the Endpoint Operations Management Agent

You must update Endpoint Operations agents to version 6.3 before you update vRealize Operations Manager to version 6.3.1. There is no backward compatibility for previous versions of Endpoint Operations Management agents and vRealize Operations Manager 6.3.1 only works with version 6.3 of Endpoint Operations agents.

Separate processes are required for updating vRealize Operations Manager and for updating the Endpoint Operations Management agent.

Before you can update an Endpoint Operations Management agent, you must satisfy various prerequisites. A specific process must be followed to ensure a successful update. The necessary information is documented in these KBs: [KB 2146446](#) and [KB 2146447](#).

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Known Issues From Previous Releases

- Installation and Update Issues
- General Issues
- Cluster Management Issues
- User Interface Issues
- Endpoint Operations Management Agent Issues

Installation and Upgrade Issues

- **vRealize Operations Manager calculates workloads for data center and custom data center objects differently from cluster objects, basing on provisioned capacity instead of entitlement**
Entitlement is the HA capacity of a cluster. vRealize Operations Manager suggests workload placements across clusters based on the entitlement provisioned to each cluster, which depends on whether HA is enabled or disabled on the cluster.
 - When HA is disabled, the entitlement is equal to the hardware provisioned capacity of the cluster. The workload is equal to $(\text{Demand} + \text{Overhead}) \div (\text{Provisioned Capacity})$.
 - When HA is enabled, the entitlement is equal to the sum of the cluster overhead and the currently computed HA capacity, minus

the HA reservation. The workload is equal to (Demand + Overhead) ÷ (Entitlement).

Although the workload calculations for cluster objects are based on entitlement, the workload calculations for data center and custom data center objects are based on provisioned capacity. As a result, the workloads for data center and custom data center objects are not calculated correctly when HA is enabled, and do not match the workload calculations for cluster objects.

Workaround: N/A.

- **Pre-installation checker fails while reinstalling vRealize Operations on the RHEL machine**

The pre-installation checker fails when you try to uninstall and reinstall vRealize Operations on the same RHEL machine with a single size cluster.

Workaround: To reinstall after uninstalling vRealize Operations, manually delete the `"/etc/profile.d/vcops.sh"` file and then restart the terminal.

- **Some object alerts not enabled after upgrading to vRealize Operations Manager 6.3.**

After users upgrade to version 6.3 from an earlier version that had vSphere Hardening Guide alerts enabled, users will not see alerts related to distributed port groups, distributed virtual switches, or vCenter objects as these alerts are not enabled by default on upgrade.

Workaround: Choose one of the following:

- Enable hardening guide alerts from the adapter configuration.
- Go to the policy library, edit the active policy to enable alerts for these three objects.

- **vRealize Operations Manager alerts trigger when the Management Pack for vCenter Configuration Manager (VCM) is integrated**

When the Management Pack for VCM is installed and the vSphere Hardening Guide alerts are enabled for 5.5 or 6.0 objects, some of the native compliance alerts inadvertently trigger in vRealize Operations Manager. The compliance score for a selected object displays the violated native compliance rules in the Compliance tab, which results in an incorrect compliance badge score.

Workaround: Disable the native compliance alerts with these steps:

1. To see the native compliance alerts that are enabled in the policy, click **Content > Alerts**.
2. Click **Administration > Policies > Policy Library**.
3. Edit the policy applied to the objects and disable the native compliance alerts.

- **Watchdog might restart Tomcat**

If there are multiple agents registered to a master node directly, then Watchdog might restart Tomcat whenever there is a need, where UI runs on it. There is, however, no such implication on the product or the cluster.

Workaround: Register agents to remote collector or a load balancer instead of to a Master node.

- **Underscore in hostname will stop gemfire locator from starting**
When you enable JMX management, Gemfire locator on a master node does not start on a 16-node setup.

Workaround: Do not include an underscore in the hostname of any cluster node.

- **vSphere client not displaying badges**

After an upgrade, the vSphere Web client might not display Health, Risk, and Efficiency badges for a machine that vRealize Operations Manager is monitoring. If that happens, use the Solutions page in vRealize Operations Manager to re-register vRealize Operations Manager with your vCenter Server:

0. In vRealize Operations Manager, click **Administration** and click **Solutions**.
1. In the top pane, click the **VMware vSphere** solution, and click **Configure**.
2. To re-register, in the top pane, click the required **vCenter Adapter**. The adapter settings are displayed.
3. Click **Manage Registrations**, enter the vCenter username and password, and click **Register**.

- **The update process fails if node rebooted or active processes killed**
If a customer reboots a node or kills some active processes during a software update, the update process continues to show that the update is still underway even though it has failed.

- **IPv6 unavailable for DHCP**

If a customer selects the "Prefer IPv6 for DHCP if available" check box when trying to deploy a vRealize Operation Manager Virtual Appliance environment and no DHCP server is available, the deployment may fail.

Workaround: None.

- **Non-ASCII Windows user account cannot install**

Installation of vRealize Operations Manager on Windows fails if the logged in user has an account name that contains non-ASCII characters.

Workaround: Before installing on Windows, log in with an account name that only contains ASCII characters.

- **Removal of directories might affect upgrade**

In some cases, users have manually removed vRealize Operations Manager directories, such as directories where logs are stored. For example:

```
/storage/log/vcops/log/vcopscli  
/storage/log/vcops/log/dbcli  
/storage/log/vcops/log/opscli
```

The upgrade process requires vRealize Operations Manager directories to exist. If the directories are missing, the upgrade might fail by preventing vRealize Operations Manager services from starting, or in other unpredictable ways.

Workaround: Do not manually remove vRealize Operations Manager directories.

- **It might be unclear that an update has failed**
If a customer reboots a node or kills some active processes during a software update, the update process continues to show that the update is still underway even though it has failed.
- **Non-ASCII Windows user account cannot install**
Installation of vRealize Operations Manager on Windows fails if the logged in user has an account name that contains non-ASCII characters.
Workaround: None. Before installing on Windows, log in with an account name that only contains ASCII characters.
- **Residual files prevent reinstallation on RHEL and Windows**
After you uninstall vRealize Operations Manager from Red Hat Enterprise Linux (RHEL) or Windows, files such as logs might not be completely removed. If residual files exist, reinstallation might fail.
Workaround: Before reinstalling, manually remove residual files and directories from the vRealize Operations Manager install and data directories. The following are the default directories:

```
RHEL
Install  /usr/lib
Data    /data
Windows
Install  C:\vmware\vrealize-operations
Data    C:\data
```

- **RHEL uninstallation does not fully remove user accounts**
After you uninstall vRealize Operations Manager from Red Hat Enterprise Linux (RHEL), vRealize Operations Manager admin and postgres users still appear in the `/etc/passwd` file.
Workaround: None. You may manually remove the users from the file if desired.

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General Issues

- **Maintenance schedule missing after upgrading to version 6.3**
After you update your previous version of vRealize Operations Manager from 6.2.0a to this version, any maintenance schedules that you created before the upgrade and applied to specific objects, do not appear in the user interface. This change in behaviour is by design and is not backward compatible with previous versions.
- **The vCenter Solution for Endpoint Operations installation fails when the vRealize Operations Manager inventory has objects discovered by previous versions of the vCenter Solution for Endpoint Operations**
If you have any object collected from earlier version of the vCenter Solution for Endpoint Operations, then ensure that the objects are removed before you install or upgrade to the latest version of the vCenter Solution for Endpoint Operations.
Workaround:
 1. Stop the collection of all objects or resources that are discovered by the earlier vCenter Solution for Endpoint Operations.

2. Delete all the stopped objects.
3. Install the latest vCenter Solution for Endpoint Operations.

Note: By removing the objects, you will lose historical data from the vCenter Solution for Endpoint Operations and vCenter application objects history.

- **Generated reports may be blank**
If you log in to vRealize Operations Manager with vCenter Server credentials and generate a report, the generated report is always blank.
Workaround: None.
- **Inefficient LDAP queries from vRealize Operations Manager cause performance issues on a domain controller**
When importing users from deeply nested user groups into vRealize Operations Manager, you may experience performance issues. This is caused by the excess load placed on the authorization source when querying users from the nested user group.
Workaround: Set the `enableNestedGroupSearch` property in the `auth.properties` file to false. Note that while this is set to false, you will only be able to import users who are directly part of that group, but will not be able to import users from LDAP nested groups.
- **Endpoint Operations Management does not support IPv6**
Endpoint Operations Management does not support IPv6
Workaround: N/A.
- **VVOL datastores are masked**
If a VM, host, cluster, datacenter, or vCenter Server object with VVOL datastores is selected, an incorrect datastore count appears on the Environment Objects Map or the Troubleshooting All Metrics page. And if a VM is deployed on a VVOL datastore, raw or derived metrics may be missing.
Workaround: None. The VVOL datastores are masked because vRealize Operations Manager does not yet implement the VVOL datastore metrics. However, the VVOL datastores are included in the count.
- **Rebalance Container action continues to recommend the same rebalance plan after failure**
When a Rebalance Container action fails, and vCenter Server indicates that the operation is not allowed in the current state, the rebalance container action recommends the same rebalance plan.
Workaround: Correct the problem in your environment, then attempt to run the Rebalance Container action again.
- **Maintenance schedules no longer assigned after upgrade**
Maintenance schedules are disassociated from a policy after an upgrade from version 6.0 to later versions.
Workaround: Update the policy manually after an upgrade. For more information about managing policies, see *Managing and Administering Policies for vRealize Operations Manager*.
- **Host Maintenance mode behavior has changed in vRealize Operations Manager 6.x.**
Now when a vCenter host is in Maintenance mode, the system does not disable the data collection icons from the host. Instead, in vRealize Operations Manager 6.x, maintenance is governed by policies and associated with custom groups.

Workaround: You can create a custom group for hosts that are in maintenance mode and apply whatever policy you want for them, including stop collection of all metrics.

- **Application pool data for our Internet Information Services (IIS) Solution not available for Windows 2008, 32-bit Servers**

One of the performance counters that the Internet Information Services (IIS) Solution uses to fetch application pool data is not available in Windows 2008 32-bit (IIS Version 7.0). This works fine in Windows 2008 R2.

Workaround: Upgrade to Windows 2008 R2, before installing the IIS Solution.

- **Deploying virtual machines to a failover host is not allowed**

After you configure a failover host in a cluster and select the failover host in the navigation tree, then go to **Analysis > Capacity Remaining**, create a custom profile for virtual machines, and enable the custom profile for all policies, you can view the number of virtual machines that will fit on the host.

Although the custom profile indicates that a number of virtual machines will fit on the host, you cannot power-on virtual machines deployed in failover hosts.

Workaround: None

- **Symptom set details cannot be retrieved for some alerts**

When an alert triggers based on a set of population-based symptom sets, and one or more symptom set could not be evaluated due to lack of enough resources to evaluate the population condition, an error occurs. The error message indicates that the complete symptom set details for that alert cannot be retrieved for that particular symptom set. This error only occurs on population-based alerts and only if enough resources were not available to evaluate the condition.

Workaround: None

- **Alert Details summary links below the top link do not link to objects**

When you view the alert details for an alert that has received symptoms from many objects, such as an alert on a host that has symptoms from virtual machine child objects, and then you expand the drop-down arrow for the alert cause, you can see the list of symptoms. Because the alert is generated with symptoms received from many objects, you see a list of links to those objects with relevant symptom descriptions. The links to the objects located below the first object do not work. This problem is relevant for all browsers, except for Internet Explorer.

Workaround: Manually find the object you need. For example, use the global search text box in the top toolbar to search for the object.

- **Virtual Machines will not Power On, even though vRealize Operations Manager reports capacity remaining**

In cases where one virtual machine is larger than the others in the cluster, the size discrepancy from this single virtual machine can result in vRealize Operations Manager reporting that there is capacity and time remaining, yet Admission control in vSphere will not allow the virtual machines to be powered on.

Workaround: Determine the slot size and then increase the buffer threshold using policies. See [KB 2033248](#) for more information about

this issue and how to manually calculate the slot size.

- **Workload placement might fail if the ESXi host version is missing**
If vCenter Server fails to provide the ESXi host version number to the vCenter Server properties collector in the vCenter Adapter, a compatibility problem occurs, which can cause the Rebalance Container action and the workload placement to fail. This failure might persist until the vCenter Adapter establishes a new connection to the vCenter Server instance.
Workaround: Restart the vCenter adapter instance. In the vSphere Web Client, view the summary and version information for the ESXi host machines.
- **Launch in Context cannot be removed after deleting vRealize Log Insight server**
If vRealize Log Insight is integrated with vRealize Operations Manager, it appears as a Launch in Context selection. If the vRealize Log Insight server is deleted, the selection still appears. There is no button to remove the selection.
Workaround: Select **Administration > Inventory Explorer** and delete the listed vRealize Log Insight objects. For detailed instructions, see [KB 2126679](#).
- **Some symptoms for metrics are not canceled for objects in an unknown or no-data-received state**
When vRealize Operations Manager stops collecting new values for a metric, vRealize Operations Manager cancels symptoms when the last collected value of a metric becomes stale. In some cases, a symptom is not canceled. For example:
 - When an adapter is stopped, vRealize Operations Manager stops processing its objects, including the cancelation of stale symptoms.
 - When a vCenter Server instance is deleted and the adapter instance is not deleted, vRealize Operations Manager stops processing its objects, including the cancelation of stale symptoms.

vRealize Operations Manager cancels stale symptoms for metrics, but does not cancel symptoms for properties or events, such as faults.

Workaround: None

- **The configuration for the content pack for Log Insight is overwritten**
When you change the configuration details in the `loginsight-agent` file or from the user interface of vRealize Operations Manager, the configuration for the content pack for Log Insight is modified or overwritten. The ports from 9000 to 514 might be reset and the protocol changes to `syslog` instead of `cfapi`.
Workaround: Disable the remote logging option from the vRealize Operations Manager user interface before you modify the `loginsight-agent` file. Do not save the changes again from the user interface when you use the content pack for Log Insight.
- **The Text Display widget cannot display some Web sites in HTML mode**

If a Text Display widget is configured with the View Mode set to HTML, then the URL should use HTTPS protocol. The functionality of the Text Display widget with Web sites that use HTTP depends on the individual settings of the Web sites.

Workaround: None

- **Projects and workload placement do not acknowledge disk I/O and network I/O**

Projects do not impact disk I/O and network I/O metrics. The placement plan might include placing virtual machines on hosts with high disk I/O or network I/O workload, or datastores with high disk I/O workload.

Workaround: None

- **When you do a rebalance on a container with hosts of different capacities, the balance might not be achieved in terms of usage and demand percent**

When you do a rebalance on a container, host candidates with larger absolute available capacity is considered first to place virtual machines. As a result, when hosts are of different capacities, balance may not be achieved in terms of usage and demand percent.

Workaround: None

- **The Network Share plug-in cannot work with path that contains non-ASCII characters**

If the path in your Network Share plug-in contains non-ASCII characters the connection might fail.

Workaround: None

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Cluster Management Issues

- **Cannot remove a previous master node**

In the administration interface, after an HA replica node takes over and becomes the new master node, you cannot remove the previous, offline master node from the cluster. In addition, the previous node continues to be listed as a master node.

Workaround: To refresh the display and enable removal of the node, refresh the browser.

- **Cannot add nodes that are on earlier version than cluster**

Once you have updated a cluster to vRealize Operations Manager 6.2.1 or later, you cannot add a node that is on an earlier release version.

Workaround: None.

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User Interface Issues

- **Cannot retrieve Alerts related to removed objects**

You cannot retrieve alert data for historical purposes after you have removed the object that caused an alert.

For example, if you're working with a configuration that contains a master node, a data node, and a remote collector node, and the remote collector goes offline, you will receive an alert that the collector is offline. This is expected behavior.

However, if you remove the inaccessible node and then try to access the alert again, you will receive an error similar to the following, "Error retrieving the complete symptom set details for alert."

Workaround: None.

- **The filter menus in Policies workspace step Collect Metrics and Properties do not work correctly**

When you deselect an option from the State, KPI, or DT drop-down menus, the filter hides all attributes no matter of their settings.

Workaround: Save and reopen the policy.

- **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 data of the widget.

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

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Endpoint Operations Management Agent Issues

- **Endpoint Operations Management solution plug-ins appear following an unsuccessful solution installation**

When you attempt to install an Endpoint Operations Management solution in vRealize Operations Manager, and the installation fails, plug-ins related to the solution might appear in the **Content > Plug-ins** page of vRealize Operations Manager, even though the solution is not installed and does not appear on the **Administration > Solutions** page.

Workaround: Run the solution installation again.

- **Blank password not accepted for Postgres user**

The embedded Postgres database for a vCenter Server appliance is shipped without a default password for the `postgres` user. If you do not set the password in the `vcdb.properties` file, you are unable to log in as the Postgres user because the Endpoint Operations Management agent will not allow you to log in with a blank password. You might experience this problem if you are trying to monitor the Postgres database after importing the Endpoint Operations Management Adapter.

Workaround: Use the Postgres DB credentials stored in `/etc/vmware-vpx/vcdb.properties` for the Virtual Appliance and `C:\ProgramData\VMware\vCenterServer\cfg\vmware-vpx\vcdb.properties` for Windows. It is not necessary to enter the default (blank) Postgres password.

- **vRealize Operations Manager Monitoring a Large-Scale Environment is not Performing as Expected**

If you have a large scale vRealize Operations Manager monitored environment, you may experience one or more of the following issues:

- The user interface is responding slowly
- Metrics are slow to be displayed

Workaround: Determine the areas of the environment in which the latency is greater than 20 milliseconds and install a remote collector in

those areas.

- **Roll back of Windows Endpoint Operations Management agent service upgrade does not roll back JRE**
If you upgrade a Windows Endpoint Operations Management agent service to version 6.2 and the upgrade fails, the upgrade rolls back to version 6.1. However, the JRE that was upgraded as part of the upgrade process does not roll back to its earlier version.
Workaround: Restart the agent service. The earlier version of the JRE is invoked.