Release Notes

The Release Notes document provides last-minute information about Veeam Management Pack for System Center, including relevant information on technical support, documentation, online resources, etc.

The current version of Veeam Management Pack is available from December 5, 2014.

MP versions in the MP_7.0.0.1914_R2 package

Common MPs

<table>
<thead>
<tr>
<th>MP Name</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam Widget Library</td>
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<td>Veeam Report Library</td>
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Veeam MP for VMware management packs

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- New in 7.0 R2 Release
- New in 7.0 GA Release
- Resolved Issues in 7.0 R2 Release
- Resolved Issues in 7.0 GA Release
- Known Issues and Limitations
- Changes to Rules and Monitors
- System Requirements
- Contacting Veeam Software
New in 7.0 R2 Release

The following features and enhancements were introduced in Veeam MP 7.0 R2 for System Center.

**Veeam VMware High-Granularity management pack**

In Veeam Management Pack 7.0 R2, VMware performance metrics that were not directly used in dashboards, reports or monitors were moved to the Veeam VMware High-Granularity MP. This MP is not installed by default and can be considered optional. It is available in the Veeam MP Resource Kit.

This change was introduced to improve Ops Mgr overall performance and reduce impact of the Veeam MP. The required database space for Veeam MP in the Ops Mgr operational database can be reduced by 50% or more in some configurations.

The performance collection rules in the Veeam VMware High-Granularity MP are required only for advanced performance analysis of the VMware vSphere environment. It is only recommended to import this MP for detailed performance analysis of specific issues on given Cluster(s), Host(s) or VM(s), as the additional granular metric collection can significantly increase the footprint of Veeam MP in the Ops Mgr databases.

For more information on the Veeam VMware High-Granularity MP, see the Resource Kit Guide.

**Topology views optimized and new diagram dashboards added**

Veeam MP 7.0 for System Center built a very detailed and deep VMware and/or Hyper-V topology which extended from clusters, through the physical host servers, to the virtual machines, and even included the Ops Mgr agents running inside the virtual machines (if present). In large environments, the depth of this topology could be an issue for Ops Mgr to maintain and could cause SQL performance issues (specifically in the `RecursiveMembership` table), including problems with insertion/update of discovery data.

In Veeam Management Pack 7.0 R2, the relationship between a VM and the Ops Mgr Agent (Windows Computer object), was replaced by discovering a relationship between a VM and the specific Veeam MP object “Ops Mgr Agent in VM” which is discovered inside each Windows OS. Because this object (unlike Windows Computer object) does not have any child topology objects, the overall Veeam topology depth and total number of contained objects is greatly reduced, which addresses the SQL performance issue.

Supporting the new topology method, two new diagrammatic dashboards were introduced — **Apps on this VM**, and **Host for this VM**. These are available in the **Tasks** pane of the Ops Mgr console in context of a **Virtual Machine** object or an **Ops Mgr Agent in VM** object, allowing app-to-metal and metal-to-app views.

To see how this update influenced Veeam MP topology diagram views, see the Veeam MP for VMware Operations Guide and Veeam MP for Hyper-V User Guide.

**New Right-Sizing report leveraging Ops Mgr agent data**

Veeam Management Pack 7.0 R2 introduces a new report **Virtual Machines. Right-Sizing – VMs Undersized for Memory and CPU (Ops Mgr agent data)** report.

This report helps you to detect virtual machines that have less allocated vRAM or vCPU resources than they require. The report will only support VMs that run Ops Mgr agents inside the virtualized OS (for VMs without agents, use the Undersized VMs report that was present in previous releases).

The new report analyzes historical data on % Memory Used and % Processor Time performance metric values collected by the Ops Mgr agent running in the guest OS. These metrics gathered inside the guest OS provide better recommendations for right-sizing (especially in terms of memory usage).

For more information on the **Virtual Machines. Right-Sizing – VMs Undersized for Memory and CPU (Ops Mgr agent data)** report, see Veeam MP for VMware Operations Guide.
**Support for Ops Mgr 2012 R2 UR4 and Ops Mgr 2012 SP1 UR8**

Veeam MP for System Center now supports Update Rollup 4 for System Center 2012 R2 Operations Manager and Update Rollup 8 for System Center 2012 SP1 Operations Manager.

**Non-English locales supported for Windows Server Hyper-V**

Veeam MP for Hyper-V now supports localized versions of Windows Server Hyper-V and Hyper-V servers with Chinese, Dutch, French, German, Spanish and Swedish locales.

**New Hyper-V heatmap dashboards added**

Veeam MP for Hyper-V includes two new heatmap dashboards grouped by Host instead of by CSV:

- **Heatmap - VM Storage and Checkpoints (by Host)** dashboard shows allocated storage space and snapshot age for virtual machines grouped by Host. This allows viewing of VMs which run only on host local storage.

- **Heatmap - VM Storage and Power (by Host)** dashboard shows used storage space and the state of virtual machines grouped by Host. This allows viewing of VMs which run only on host local storage.

Also new are a **Local Storage Topology** diagram and a **Hyper-V Local Storage** state dashboard.

All above new dashboards are available in the view folder Veeam for Hyper-V \ Storage.

**Support for Veeam Backup & Replication 8.0**

MP for Veeam Backup & Replication now supports Veeam Backup & Replication v8.0.
New in 7.0 GA Release

The following features and enhancements were introduced in Veeam MP 7.0 GA for System Center (released July 2014).

Support for Microsoft Hyper-V


Veeam Hyper-V MP provides health and performance alerting, sophisticated reporting analysis and unique dashboards for Microsoft Hyper-V virtual environments — integrated into the single-console view of System Center Operations Manager.

Veeam Backup & Replication monitoring and reporting for Hyper-V

Advanced monitoring, reporting and capacity planning for Veeam Backup & Replication is now available for both VMware vSphere and Microsoft Hyper-V. You can monitor the entire Veeam Backup & Replication infrastructure, including proxy servers, repository servers, WAN accelerators, backup jobs, and more.

New dashboards and customizable widgets

Version 7 provides a set of in-context dashboards and a unique library of customizable widgets:

- Heatmap widgets for at-a-glance visualization of performance metrics
- Capacity planning widgets for resource utilization forecasting
- Traffic light widgets for visualising objects’ health status

Capacity planning for hybrid cloud environments

New Veeam Capacity Planning for Hybrid Clouds reports estimate resources required to implement your virtual infrastructure in the cloud. The reports analyze your on-premises workloads and calculate cloud hosting services needed to run these workloads in the VMware vCloud Hybrid or Windows Azure cloud.

Veeam Capacity Planning for Hybrid Clouds reports can be run for both the VMware vSphere or Microsoft Hyper-V infrastructure.

Host Security Profile Change Tracking report

Veeam MP for VMware includes a new Host Security Profile Change Tracking report. The report captures changes to host security settings, such as firewall ports and enabled or disabled services. From each reported change, you can drill down to events that detail who made the change and when the change occurred.

vSphere VM Configuration Assessment Report

MP for Veeam Backup & Replication includes new VM Configuration Assessment Report for VMware vSphere environments.

The report assesses whether VMs within the virtual environment are ready for backup with Veeam Backup & Replication. It analyzes VM configuration and identifies VMs that cannot be properly backed up due to known configuration limitations.

Collector auto-deployment

In Veeam MP 7, the Veeam Collector deployment can be completely automated.

Veeam VMware Collectors can be automatically installed on servers in an Ops Mgr Management Server Resource Pool (chosen during Veeam MP setup). This significantly simplifies installation and allows fast deployment in the largest enterprise environments.
Changes in licensing


The *Enterprise Edition* provides real-time monitoring and alerting for both Hyper-V and vSphere. The full-featured *Enterprise Plus Edition* adds advanced reporting and analysis, capacity-planning and more advanced tools for strategic IT decision-making.

For difference between the editions, see *Veeam Management Pack for System Center Editions Comparison*.

**Support for Ops Mgr 2007 R2 discontinued**

In Veeam MP 7, support for System Center 2007 Operations Manager R2 is discontinued.

Supported platforms are System Center 2012 Operations Manager SP1 and System Center 2012 Operations Manager R2.
Resolved Issues in 7.0 R2 Release

This section lists issues that were resolved in Veeam MP 7.0 R2 for System Center.

Veeam MP for VMware

Ops Mgr SP1 UR2 web console unexpected error

System.Reflection.ReflectionTypeLoadException: [ReflectionTypeLoad_LoadFailed]

After you installed or upgraded to Veeam MP 7.0, the Ops Mgr 2012 SP1 UR2 web console was unable to load and showed an unexpected error. In Veeam MP 7.0 R2, the issue was resolved.

Duplicated warning alerts caused by loss or degradation of datastore storage path redundancy

A loss or degraded redundancy on storage paths connected to a datastore produced a storage connectivity issue event with the ‘Warning’ severity. This event caused both the ‘Veeam VMware: Host HBA Path Status’ monitor and the ‘Veeam VMware: vSphere Host Storage Warning’ rule to trigger duplicate alerts. In Veeam MP 7.0 R2, the issue was resolved; now only the monitor is triggered.

Duplicated warning alerts caused by loss or degradation of network link redundancy

A loss or degraded redundancy on network links to a virtual switch produced a network connectivity issue event with the ‘Warning’ severity. This event caused both the ‘Veeam VMware: Network connectivity problem on VSwitch’ monitor and the ‘Veeam VMware: vSphere Host Network Warning’ rule to trigger duplicate alerts. In Veeam MP 7.0 R2, the issue was resolved; now only the monitor is triggered.

Top Noisy vSphere Rules and Monitors report shows external data

When you generated the Top Noisy vSphere Rules and Monitors report, the report output contained not only Veeam MP statistics, but also data gathered for rules and monitors from management packs other than Veeam MP. In Veeam MP 7.0 R2, the issue was resolved; however, the report may still show information on other MPs if the specified reporting period precedes the upgrade.

Note: If you want to include other MPs in the report, use the base Veeam Alert Statistics Report from the Veeam Report Library. The Veeam Alert Statistics Report has a multi-select option that allows you to choose management packs.
**Veeam MP for Hyper-V**

### Issue with Hyper-V Reports in MP builds 7.0.0.1911 and 7.0.0.1913

The following Hyper-V reports show no performance data:

- Performance Forecast for Hyper-V Clusters
- Performance Forecast for Hyper-V Storage
- Host Failure Modelling
- What-If VM Deployment Planning (model existing VMs)
- What-If VM Deployment Planning (manual resource entry)
- Virtual Machines. Right-sizing — VMs Oversized for Memory and CPU
- Virtual Machines. Right-sizing — VMs Undersized for Memory and CPU

The 'Virtual Machines. Idle VMs' report shows no data for the % Memory Pressure metric.

The following Hyper-V report fails with error “An item with the same key has already been added”.

- Configuration Tracking and Alert Correlation

**Cause:**

This is a known issue in the following builds of these Veeam MPs:

<table>
<thead>
<tr>
<th>MP Name</th>
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<tbody>
<tr>
<td>Veeam Hyper-V Analysis Reports</td>
<td>7.0.0.1911</td>
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<td>Veeam Hyper-V Views</td>
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<tr>
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</tbody>
</table>

**Solution:**

The issue is resolved in the following Veeam MP builds:

<table>
<thead>
<tr>
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<tbody>
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</table>

The updated MPs are available in the latest MP 7.0 R2 download ISO or as a patch (zip file containing all 7.0 R2 MPs) from the patch download page.

### SCVMM on Management Server not discovered

In version 7, Veeam MP did not support configurations where SCVMM was installed on the same machine as the Ops Mgr Management Server, as SCVMM-specific topology objects could not be discovered. In Veeam MP 7.0 R2, the issue was resolved.

### Traffic Lights widgets show no data

After you performed an upgrade to Update Rollup 3 for Microsoft System Center 2012 R2 Operations Manager, Hyper-V Traffic Light widgets were empty for metrics whose name ended with “%”. In Veeam MP 7.0 R2, the issue was resolved by renaming the following metrics:

<table>
<thead>
<tr>
<th>Target</th>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host</td>
<td>Memory Used %</td>
<td>% Memory Used</td>
</tr>
<tr>
<td></td>
<td>Average Pressure %</td>
<td>% Memory Pressure</td>
</tr>
<tr>
<td>Cluster</td>
<td>Memory Used %</td>
<td>% Memory Used</td>
</tr>
<tr>
<td></td>
<td>CPU Used %</td>
<td>% CPU Used</td>
</tr>
</tbody>
</table>
MP for Veeam Backup & Replication

VM Checkpoint Analysis monitor triggered for 8.0 replicas

Veeam Backup & Replication 8.0 uses a new method for creating VM replicas: for every replicated VM, a full replica and a chain of checkpoints is produced. The ‘Veeam Hyper-V: VM Checkpoint Analysis’ monitor was not designed to be triggered for checkpoints produced during replica creation. For this reason, the Veeam Hyper-V Required Overrides MP in the 7.0.0.1914 build includes an override that allows you to disable the ‘Veeam HyperV: VM Checkpoint Analysis’ monitor for the Veeam Backup and Replication replica VMs (Hyper-V) group.

Renamed backup repositories not discovered

In version 7, MP for Veeam Backup & Replication was not able to discover backup repositories which have been renamed or connected under a different name in Veeam Backup & Replication console. In Veeam MP 7.0 R2, the issue was resolved.

Resolved Issues in 7.0 GA Release

This section lists issues that were resolved in Veeam MP 7.0 for System Center.

Veeam MP for VMware

CPU Co-stop for VMs calculation changes

The CPU Co-stop metric could show incorrect values for VMs with multiple vCPUs. In Veeam MP, these values were lower than the values reported by vCenter Server.

In version 7, calculation of the CPU Co-stop metric was changed. After upgrade, you may note increased CPU Co-stop values for virtual machines.

System Manufacturer property not populated for vSphere hosts

In some cases, the Collector did not gather the System Manufacturer property via CIM XML for ESXi 5.0 and 5.1 hosts. In version 7, the issue was resolved.

Web UI showing doubled number of hosts during vCenter connection failover

While vCenter connection was in the failover state, the Veeam Virtualization Extensions UI showed a doubled number of VMware hosts for the affected vCenter Server. This number included hosts managed by the vCenter Server and the new direct connections to the same hosts created as part of the vCenter failover process. In version 7, the issue was resolved.

Failure to connect to Virtualization Extensions when starting Collector service

During the Collector server boot, before the Virtualization Extensions Service was started, the Collector service might fail to start with the following error: ‘Failed to connect to Virtualization Extensions’.

The issue was caused by the short date format specified in the regional settings of the Collector server. Previous versions of Veeam VMware Collector did not support the short date format with 2 digits for the year (that is, ‘YY or yy’). Some locale settings might have this short date format by default, for example French (Belgium) locale, several Indian locales, Belarusian locale, Luxembourg and some others. Version 7 supports the short date format, which resolves the issue.
Repository Connection Status monitor not working for Linux backup repositories

In version 6.5, the ‘Veeam Backup: Repository Connection Status’ monitor did not work for Linux repositories. In version 7, the issue was resolved.
Known Issues and Limitations in 7.0 R2 Release

This section lists issues known in Veeam MP 7.0 R2 for System Center.

Veeam MP for VMware

Veeam VMware Collector unable to retrieve host statistics via CIM

If the time on a Veeam Collector is not synchronized with the time on monitored ESX(i) hosts, the Collector will be unable to gather hardware data from the hosts via CIM.

To learn how to verify time synchronization across an ESX/ESXi host environment, see the VMware KB article.

Some performance report metrics not displayed after upgrade

In Veeam Management Pack 7.0 R2, some performance collection rules were removed from the default Veeam VMware Monitoring MP and added to the optional Veeam VMware High-Granularity MP. As a result, after you upgrade to Veeam MP 7.0 R2, Veeam VMware Performance History Reports will display historical performance statistics for certain high-granularity metrics up until the upgrade date only.

This behavior is expected and by design.

For the full list of metrics moved to the Veeam VMware High-Granularity MP see the Veeam MP for System Center Resource Kit Guide.

‘VMwareCluster.totalvMotions’ performance metric values not collected

VMware Collectors do not collect VMwareCluster.totalvMotions metric values. This causes the _vMotions performance view (located under the vSphere Cluster > Performance Views > vm node of the Veeam for VMware tree) and the vSphere Clusters. Number of Virtual Machine report to show zero VMwareCluster.totalvMotions metric values for all clusters.

This is a known issue that will be addressed in the next release.

Veeam VMware Collector Auto-Deployment MP has a lower build number than other Veeam MPs

The Veeam VMware Collector Auto-Deployment MP has build number 7.0.0.1862 whereas other Veeam MPs have build 7.0.0.1914. This is expected as the Auto-deployment MP was not modified for the R2 release.

Unexpected behavior of vSphere HA virtual machine monitoring error

The ‘Veeam VMware: vSphere HA virtual machine monitoring Alarm’ monitor resolves when you acknowledge the alarm in the vSphere Client, not when you manually clear it.
Veeam MP for Hyper-V

False alerts from ‘Veeam Hyper-V VM Checkpoint Age’ monitor

There is a known Microsoft Hyper-V bug that causes VM snapshots to be timestamped as 01/01/1601 after a host reboot. This can cause the metric Hyper-V VM Checkpoints/AgeHours to be incorrect which will cause the Veeam Hyper-V: VM Checkpoint Analysis monitor to fire an alert stating incorrect snapshot age.

For more details on the issue, see the Microsoft Windows Server Forum.

Empty Guest OS and Guest DNS name properties

Veeam Management Pack 7.0 R2 for Hyper-V contains an issue which prevents the guest OS and guest DNS name properties from being collected.

For more details on the issue, see the Veeam KB article.

MP for Veeam Backup & Replication

Protected VMs report shows no data

The Protected VMs report shows all VMs as unprotected though backup data has been collected successfully. This is a known report limitation since the same vCenter servers have to be both connected to Veeam Backup & Replication console and displayed in the Veeam UI under the same unique address (it is recommended to use FQDN in both cases).

To resolve the issue, remove the connection to the vCenter server in the Veeam UI and add it again with the same name as it appears in the Veeam Backup & Replication console.

‘_Total Instance’ value of ‘CPU Used %’ metric for Veeam backup proxy exceeds 100%

The Veeam Backup Proxy CPU Used % rule collects the performance metric CPU Used % as a total of average CPU usage for all processes running on the Veeam backup proxy server. When the backup proxy is overloaded, the _Total instance may be reported to be higher than 100%.
Known Issues and Limitations in 7.0 GA Release

This section lists issues known in Veeam MP 7.0 GA for System Center.

All Platforms

How to import Veeam MP in System Center 2012 R2 Service Manager

When importing Veeam MP libraries into System Center 2012 R2 Service Manager (SCSM), in order to configure SCSM – SCOM synchronisation, you should import the following Veeam Library MPs:

- Veeam.Virt.Extensions.VMware.BaseDiscovery.mpb
- Veeam.Virt.Extensions.VMware.Library.mp
- Veeam.Virt.Extensions.HyperV.Library.mpb

All above MPs can be found in the Veeam MP ISO, in the `SCOM 2012 MPs` folder.

Additionally, the following two Microsoft MPs are a required dependency — these MPs can be found on the Operations Manager 2012 R2 DVD, in the `Management Packs` folder:

- Microsoft.SystemCenter.2007.mp
- Microsoft.SystemCenter.DataWarehouse.Library.mp

Note that import of the Veeam MPs using the SCSM console import GUI may fail with an error concerning dependencies. There is no known workaround for this. In this case, use Service Manager Shell powershell interface and the `Import-SCSMManagementPack` cmdlet as follows:

```
```

Non-default collation settings for SQL cause Data Warehouse errors after import of Veeam MP

If you are using a non-default SQL Collation that is not supported by OpsMgr, after installation of Veeam MP you may receive errors, such as: ‘Cannot resolve the collation conflict between ‘SQL collation’, ‘SQL_Latin1_General_CP1_CI_AS’ and ‘Latin1_General_CI_AS’ in the equal to operation’.

This is not a Veeam MP issue, although it is exposed by the reporting features in Veeam MP. The root cause is an unsupported configuration for the OpsMgr Data Warehouse DB.

To avoid this issue, make sure that the supported collation is specified for OpsMgr and Data Warehouse databases when installing OpsMgr. For existing installations it may be required to port/reinstall OpsMgr to use a supported SQL collation configuration.

For a list of collations supported by Ops Mgr, see:

- Ops Mgr 2012 SP1 system requirements at technet.microsoft.com/en-us/library/dn249696.aspx
**Veeam UI plugin does not appear in vSphere Web Client**

When you integrate Veeam UI directly into the VMware vSphere client by registering the UI as a plugin with the vCenter server, the plugin does not appear in the VI Client UI.

**During initial discovery Ops Mgr shows GUIDs instead of datastore names**

Under certain circumstances, when the environment has multiple Veeam Collectors, and datastore discovery on the Collector that runs the datastore monitoring job is delayed, then Ops Mgr may show datastore GUIDs instead of datastore names.

This issue will be resolved automatically within 4-24 hours when discoveries from all Collectors have completed. Alternatively, you can manually re-launch the discovery process and initiate a topology rebuild. To do so, in the Virtualization Extensions Web UI go to the **Veeam Collectors** tab and click the **Rebuild Full Topology** link.

**Empty property values for Veeam link to vCenter or vSphere Host object**

After upgrade from Veeam MP 6.x, the **Veeam link to vCenter or vSphere Host** object in the topology may have properties with empty names.

This issue does not affect any product functionality. Although property names are not displayed in Ops Mgr, the values are actually collected and available. To fix the issue, remove the Veeam Management Packs and import them again.

**Tracking audit events in drill-down for Host Security Profile report**

Due to differences in the methods Ops Mgr uses to store events versus the methods used to store object properties, the **Host Security Profile** report may not display all expected audit events when you drill down to a specific change. This can occur due to synchronization issues around discovery and update of the Host Security Profile object (which happens once daily) and the storing of associated security change events (which happens in real-time).

To view all host security profile audit events, click the **Total number of changes** link under the host name. This link will always display all security events captured in the reporting period.

**Host security profile firewall rule limited to 255 characters**

If the length of a host security profile firewall rule is greater than 255 characters (i.e. contains too many ports and/or allowed IP addresses), Ops Mgr will trim the collected value to 255 characters when saving the Host Security Profile object to the Data Warehouse.

**Alerts for inactive direct-to-host connections remain after vCenter connection failback**

After the vCenter Connection Failover feature has performed failback (removing direct-host connections and returning to using a vCenter connection), alerts that were triggered for failed direct-to-host connections may be shown as unresolved in the Ops Mgr console for up to one hour, even if the host connection in vCenter is restored.

This is due to the one hour schedule for rediscovery of the connection configuration for the Veeam Extensions Service. Any alerts for direct-host connections will disappear when the direct-host connections are removed from Ops Mgr on the next discovery cycle. The discovery interval for the Veeam Virtualization Extensions Service connection topology can be modified by overriding the discovery rule **Veeam Virtualization Extensions for System Center Topology discovery**.

**vCenter Connection Failover does not work if any managed host is in Lockdown mode**

If Lockdown mode is enabled for any host managed by vCenter Server, there is no way to connect to the ESXi(i) host directly. As a result, the Virtualization Extensions Service will not be able to create direct-to-host connections during vCenter Connection Failover.
Datastore monitoring disabled for direct-to-host connections

Datastore monitoring for direct-to-host connections is disabled by default, due to possible issue with the vCenter Connection Failover feature. When a vCenter failover occurs connections are automatically created direct to all hosts. When using directly-connected hosts there are limitations in the host API, which reports shared datastores as multiple duplicate datastores for every host connection. The performance metrics for such datastores are inaccurate, as individual hosts are not aware of other host activities on shared storage. This duplication of datastores can also cause the monitoring load on Collectors and the OpsMgr system to increase significantly. For these reasons datastore monitoring is automatically disabled by default for direct-host connections and it is not recommended to enable it when using the vCenter Connection Failover feature.

If monitoring of direct-to-host connections and their attached datastores is a requirement (for example for remote office/branch office situations, where hosts are not part of a vCenter) then datastore monitoring can be enabled by using the advanced MonitorDatastoresForDirectHost setting in the Veeam Virtualization Extensions UI. This setting can be applied to a separate monitoring group in the Web UI which holds only direct-to-host connections, allowing flexibility to use both direct-to-host and vCenter connection methods in one environment. For more information, see the Operations Guide, vCenter Connection Failover section.

Direct-to-host connections do not use CIM for hardware monitoring

Due to connection stability issues when connecting direct to hosts, the CIM method of gathering hardware data is now disabled by default and the vSphere API is used instead. This setting can be changed using the MonitorCIMForDirectHosts advanced setting in the Veeam Extensions UI (default false). However for connection stability it is not recommended to change this setting.

Controlling vCenter connection failover during planned vCenter maintenance

If you plan to perform maintenance on the vCenter Server, however Veeam failover to direct-host connections is not desired, it is recommended to set the Veeam link to vCenter or vSphere Host object in maintenance mode. This will prevent the Veeam VMware: Connection lost to VMware vCenter server monitor from triggering the failover script. For details on putting vSphere objects in the maintenance mode in OpsMgr, refer to the Operations Guide, Maintenance Mode Synchronization section.

Alternatively, if you wish to pro-actively trigger the Veeam failover to direct-host connections before the vCenter actually goes offline, you can manually force the failover using the in-context ‘Force failover to to direct-Host connections’ task to enable monitoring via direct-to-host connections. Then you can set the Veeam link to vCenter or vSphere Host object in maintenance mode which will prevent unwanted failback.

Account unable to access the Veeam Virtualization Extensions Service during vCenter Failover

For the vCenter Failover feature to function, a powershell script must run in context of the Ops Mgr Agent Action account which will reconfigure the monitoring targets using the Veeam powershell interface (VE Shell). If the default Action Account for the Ops Mgr agent on the Veeam Virtualization Extensions Service machine does not have access to the Veeam VEShell (PowerShell interface), you may see the following error: ‘[User ID] account unable to access the Veeam Virtualization Extensions Service’. The error can occur for any Agent Action account that cannot access Veeam VEShell, including LocalSystem.

To fix the issue, the account specified as default Agent Action Account should be added to the Veeam Virtualization Extensions Users local group on the server running the Veeam Virtualization Extensions Service. Please keep in mind that the vCenter connection failover feature will not work if you use Local System as the default Agent Action Account, that is why adding Local System to the group is not desired. In this case, change the Agent Action Account to be a domain user account, and add this account to the local group. Note that this account should also be an Administrator of the local server.

The account may also be unable to access the Veeam Virtualization Extensions Service during failover because you have the Enterprise license edition. Only Enterprise Plus edition supports vCenter connection failover.
VMs rediscovered with different IDs after vCenter Connection Failover

When vCenter Connection Failover occurs, VMs will be re-discovered with a new ID, as the vSphere API used when connecting direct to hosts does not provide the same ID as a vCenter connection. This will result in VMs being re-discovered effectively as ‘new’ VMs in Ops Mgr terms. Note however that the display name for such VMs in Ops Mgr will be the same — only the underlying Operations Manager ID will be different. This will be transparent for normal monitoring situations, but some gaps may be visible in historical reporting once vCenter is restored and failback has occurred.

vCenter Connection Failover will utilize all Collectors in a monitoring group

When Virtualization Extensions Service fails over to direct-to-host connections, the direct-to-host collection jobs are ‘load-balanced’ among all Collectors in the monitoring group. Collectors which were Inactive may become loaded with host Monitoring Jobs, and hosts may be monitored by different Collectors than were used for the vCenter connection.

Web UI suffers degraded performance with very high number of direct-host connections

If the Virtualization Extensions Service manages direct connections for more than 300 vSphere hosts, the Veeam Virtualization Extensions UI application may suffer degraded performance. As a result, the Web UI may become unresponsive, or operations may be performed with delays. If the Virtualization Extensions Service manages more than 500 vSphere hosts, you may observe problems and errors with representation of the VMware Servers connections hierarchy in the Web UI.

If you work with a large number of direct-connected vSphere hosts (for example if the vCenter Connection Failover feature has been triggered), it is strongly recommended to use the Veeam VEShell interface for configuring and managing the Veeam Virtualization Extensions Service since VEShell does not experience the same performance problems as the Web UI. For details on the available powershell commandlets for managing the Veeam Virtualization Extensions Service, see the Veeam VEShell Reference.

Health Service recommended configuration monitor stays in warning state after recovery action

After Veeam MP for VMware is installed, the Veeam VMware Collector: Health Service recommended configuration monitor runs a recovery action — a script that adjusts registry configuration settings for the Ops Mgr Health Service on Collector servers. After the script is performed, the Health Service (Microsoft Monitoring Agent Service) is restarted. Note that automatic restart only occurs when the Collector is installed on a server with Ops Mgr Agent – not an Ops Mgr Management Server.

In some cases, the script may fail to restart the Health Service (Microsoft Monitoring Agent); as a result, the monitor will stay in the Warning state. To resolve the issue, restart the Microsoft Monitoring Agent service manually.

Veeam Collector may skip events from directly-connected ESX(i) host after reboot

The vSphere API has a known issue when connecting directly to an ESX(i) host that the Event ID counter is reset when the host is rebooted. The Veeam Collector uses this Event ID to internally track and filter events for delivery to Ops Mgr, and the reset of this counter causes the event filtering to fail and events may be skipped.

If direct-host connections are used (for example during the vCenter Failover feature), then the following procedure should be followed if a host is rebooted.

1. Stop Veeam VMware Collector service where the rebooted host is monitored.
2. Locate the sidebar.xml file in the Data folder of the Veeam Collector installation directory.
3. Locate the `<field name='eventTracker' type='System.Collections.Hashtable'>` tag in the file.
4. Inside the tag, locate and delete the single line for the rebooted host server (this line will hold host name and a cached event ID counter, for example ‘esx-prod2:3299999’)
5. Start Veeam VMware Collector service.
OpsMgr Shell Module or Snap-in not found

On OpsMgr Management Server, the Maintenance Mode synchronization script may fail with the following error: ‘MaintenanceMode.ps1 : OpsMgr Shell Module or Snap-in not found.’

To resolve the issue, install PowerShell 3.0 and reboot. If this does not resolve the issue, install the Operations Console on the Management Server.

Alerting on unconnected NICs for vSphere hosts

If a vSphere host NIC is not connected to any vSwitch or Distributed vSwitch, Veeam MP for VMware will not monitor its state. Monitoring will only start when NIC is added to a switch.

Same datastore under different vCenter Servers or Datacenters is recognized as 2 objects

If the same datastore is connected to different Datacenters within one vCenter Server or if the same datastore is connected to different vCenter Servers, it is recognized as two datastore objects in Operations Manager. Note that VMware do not recommend this configuration. Veeam MP for VMware treats such datastore as two separate datastores with completely different sets of properties and metrics. Although some metrics are the same (for example, size or free space), most performance counters will be different.

Datastore Unknown files analysis issues

The following issues related to unknown files analysis are known to exist:

- Running the Scan Datastore for Unknown Files task against inactive datastores can cause task failure.
- For datastores with no registered VMs, the UnknownFilesGB metric value is returned as ‘0’.
- During VM migration process, there can be two copies of VM files while the VM is registered on one host only. The host where the VM is not registered might report VM files as garbage files. This will result in the UnknownFilesGB metric showing inaccurate value and the Veeam VMware: Datastore Unknown Files Analysis alerts triggered for affected datastores.

Sporadic error: unable to find Veeam VMware Event log

During the normal Veeam MP for VMware discovery process, some vSphere objects may be temporarily unmanaged and their management will reside on an Operations Manager Management Server. When trying to run Veeam workflows for such objects, the Management Server will attempt to open the Veeam VMware Event log. If there is no Veeam VMware Collector installed on the MS, the following error will be observed: ‘The Windows Event Log Provider is still unable to open the Veeam VMware Event log on computer ‘<OpsMgr Manager Server Name>’.’

When the Veeam MP discovery process is finished, all vSphere objects will have been ‘claimed’ for management by a Collector and the errors on the MS should no longer appear.

Clearing console cache after upgrade

After upgrade to the new version, it is strongly recommended that you perform Clear Cache for the OpsMgr console in order to correctly load all new Veeam MP views. For more details, see the Veeam MP for VMware Installation Guide.

Moving monitoring jobs during upgrade

It is recommended not to move monitoring jobs between Collectors of different versions (for example, during upgrade), as this can cause unstable behavior.

Login using Windows credentials not supported when Veeam UI is on a separate server

When the Veeam Virtualization Extensions Service and Veeam Virtualization Extensions UI are installed on different machines, login to the UI using Windows credentials fails with the error: ‘System.UnauthorizedAccessException: Attempted to perform an unauthorized operation.’

This is because Microsoft IIS does not pass authentication data across the two machines.
You can access the UI by re-entering valid account credentials (a member of the Veeam Virtualization Extensions Users group).

**vCenter Server No Access permission restrictions not supported**

Partially-restricted vCenter permissions for the VMware connection account are not supported — that is, excluding vSphere hosts/clusters/VMs from monitoring by having ‘No Access’ permission in vCenter for those specific objects is not supported. The VMware connection account must have minimum read-only access to the entire vCenter VI-tree.

To remove hosts/clusters from monitoring, use the Veeam Virtualization Extensions UI, VMware Servers tab, and clear the check boxes for the clusters or hosts that should not be monitored.

To remove specific virtual machines from monitoring, use overrides on the Veeam MP discovery rules. For details, see section Discovery Filtering in the Veeam MP for VMware Operations Guide.

**5-minute interval required in vCenter Statistics settings**

The default 5-minute setting in vCenter for statistics collection (VI Client - Administration – Statistics) should not be changed. This interval is required for Veeam MP for VMware data collection.

**UAC blocks PLINK command for remote ESX COS partition collection**

User Account Control will block the PLINK executable used when the option to collect COS partition usage from ESX hosts is configured. UAC should be disabled on Collector(s) to allow PLINK to run.

**IP v6 impacts Syslog processing time on the Collector**

If IP v6 is enabled on Collectors, processing of Syslog messages can be very slow due to issues with resolving vSphere host name in IP v6 environment.
Veeam MP for Hyper-V

**High memory usage causes Health Service restarts**

Veeam MP includes a large library of rules and monitors for comprehensive Hyper-V infrastructure monitoring. As a downside, the Ops Mgr agent on the host has to process a large number of workflows, which could cause high numbers for used handles and private bytes for the *Monitoring Host* process.

When the handle or private bytes counters reach their thresholds, the Ops Mgr agent will be automatically restarted by a default Microsoft monitor. If restarts are too frequent (for example every hour or less), it is recommended to increase threshold values for the following monitors:

- Health Service Handle Count Threshold
- Health Service Private Bytes Threshold
- Monitoring Host Handle Count Threshold
- Monitoring Host Private Bytes Threshold

The handle count threshold can be increased up to 40000 handles, the private bytes threshold can be increased to 1610612736 bytes (1.5 GB). For troubleshooting details, see the *Veeam MP for Hyper-V User Guide*.

**Hyper-V Integration Services are required for full-featured monitoring**

Some data will be missing if a Hyper-V VM does not have Integration Services installed. For example, the *Veeam HyperV: VM Power State* monitor will not be able to display power state correctly. As recommended by Microsoft, Hyper-V Integration Services should be installed in all VMs where the guest OS supports it.

**Integration Services monitor may generate errors for an unresponsive VM**

A heavily loaded virtual machine may not be able to respond in a timely manner. In this case, the *Veeam HyperV: VM Integration Services Status* monitor script will write errors to the Ops Mgr log.

**Renamed VMs should be rebooted**

After a VM is renamed, it should be restarted to ensure that Hyper-V can correctly report VM name and its metric values. Additionally, some performance metrics for the VM will not be fed into the Ops Mgr until the VM is rebooted.

**Error Count metric shows high values for SCSI disc attached to a VM**

When the Hyper-V host does not correctly process a command that the guest OS sent to the SCSI device, it will increase the *Error Count* metric value although the command is valid and not necessarily an error. This is a known issue for Hyper-V environment.

**VMs are temporarily represented with GUIDs instead of VM names**

Hyper-V VMs are discovered by several rules — these rules target Hyper-V host resources and cluster resources. In some cases, the cluster resources discovery can run prior to the main Hyper-V host resources discovery. As a result, VM objects may be temporarily represented with IDs (VM GUIDs) instead of VM names. When all discovery is completed, the issue will be resolved.

**GUIDs shown for VMs residing on offline storage**

Under some circumstances, VMs can be removed from Hyper-V Manager inventory while the storage remains offline (for example, the storage became inaccessible for a long term).

When Veeam MP discovers such offline volumes, it identifies remaining VMs and shows VM GUIDs in Ops Mgr. To resolve the issue, bring the storage volume online, clean VM files completely and initialize re-discovery on the volume.
Inaccurate performance statistics for VMs with the same name
If two or more VMs on a Hyper-V host have the same VM name, the Hyper-V Task Manager may show inaccurate performance statistics data for such VMs. This is because Microsoft performance metric logging makes it impossible to map metrics when VMs have the same name.

VMs with static memory report zero memory usage
For VMs with static memory, Hyper-V will not send memory usage data to the PerfMon classes. As a result, such VMs will have zero memory usage in Ops Mgr.

Ops Mgr reports problems with unloading workflows when all VMs on a host stopped
When all VMs on a Hyper-V host are stopped, events 10103 will be written to the Ops Mgr event log on the Hyper-V host:

‘In PerfDataSource, could not resolve counter instance [CounterName]. Module will not be unloaded. One or more workflows were affected by this.’

When all VMs are stopped, Hyper-V server unloads all PerfMon classes, and Ops Mgr PerfMon module cannot access data.

Host local disks and volumes are only discovered when they host VMs
Local disks and volumes on Hyper-V hosts will be discovered only if there are VMs on these volumes. This discovery behavior is by design.

SMB Storage and NFS Storage not supported
The current Veeam Hyper-V MP version supports Local Storage and Cluster Shared Volumes only. SMB Shares and NFS Shares are not supported. Additional storage monitoring is planned for a future update.

VM pass-through disks not included in total VM storage metric
The size of the pass-through disks is not taken into account when the Used Storage metric value for a VM is calculated.

Virtual Machines. Idle VMs report does not show Down Time data
The Virtual Machine. Idle VMs report output tables show ‘n/a’ values in the Down Time (%) column.

Traffic lights and Top N dashboard widgets populate after 4 hours
After installation or upgrade, Traffic Light and Top N dashboard widgets will show no data until performance statistics are aggregated in the Ops Mgr data warehouse. In general, the initial aggregation takes about 4 hours. This behavior is by design.

VM Used Storage property mismatch for VMs and volumes with multiple mount paths
If a VM is migrated from a volume that has several mount paths, the Used Storage property for the VM may be reported incorrectly. For the volume that has multiple mount paths, Veeam Hyper-V MP is able to collect only the last path value. This value may differ from the path value stored in the VM properties. For this reason, the relations between the VM, CSV and Host Disk may be displayed incorrectly.

Used Storage GB reported as zero for unavailable CSV
If a Clustered Shared Volume is unavailable (failed status), the Used Storage GB metric will be reported as zero.

Unauthorized Access exception in Management Server log
If the Run As account configured for the Veeam Hyper-V MP VMM Connection Account (Read-only) profile does not have sufficient permissions, ‘Unauthorized Access’ exceptions will be written to the event log on the Management Server.
In the Ops Mgr agent event log on the SCVMM server, you will see an exception similar to this: ‘Cannot connect to SDK. Check Veeam Hyper-V MP VMM Connection Account (Read-only) Profile. It must contain account with sufficient access rights.’

The issue will be resolved as soon as you configure the Veeam Hyper-V MP VMM Connection Account. For details, see Appendix A in the Veeam MP for Hyper-V User Guide.

MP for Veeam Backup & Replication

Limitations of VM Configuration Assessment Report
The current version of the VM Configuration Assessment report cannot detect VMs with the following potential issues:

- VMs with Raw Device Mapping in the physical mode
- VMs with disks engaged in SCSI bus sharing (such SCSI disks cannot be backed up from the virtualization level)
- VMs with Independent disks (such SCSI disks cannot be backed up from the virtualization level)
- VMware linked clones (file structure of such VMs is incompatible with Veeam Backup & Replication)

VM Configuration Assessment Report may show false-positive result for vmdk file size test
If a VM has a large volume (more than 2TB), but the volume is distributed among several VMDK files, the VM Configuration Assessment Report may incorrectly report this volume as having a potential backup issue.

VM Configuration Assessment Report may not show problematic 2TB disk in vmdk file size test
In some cases, the VM Configuration Assessment Report may not indicate a potential issue for large vmdk files, although Veeam Backup & Replication will not be able to back up these files. This behavior is observed when a 2TB vmdk disk resides on VMFS version 4 or earlier, and the VM is registered in vSphere hosts 5.5 or later.

Job sessions that failed before VMs enumeration are excluded from Veeam Backup Reports
If a backup or replication job fails before initiating the VM backup routine, there is no way to get the precise list of VMs that the job should process. Such failed sessions cannot be associated with any VMs and are excluded from from Veeam Backup Reports.

Restore Operator Activity report does not list all types of restore operations
Veeam Backup & Replication does not have audit for all types of restores that users can perform. Because of that, certain types of restore operations, such as restores from SAN snapshots and U-AIR wizard-driven restores will not be visible in the Restore Operator Activity report.

State of re-initialized monitors for all backup jobs is Green
When a Veeam Backup server goes down, the WMI namespace on this server cannot be accessed. As a result, Veeam MP for Backup discovery will groom all backup jobs managed by this server. When the server is back online, Ops Mgr will rediscover jobs for this server and re-initialize monitors for the jobs.

The state of re-initialized monitors for the backup jobs will be Green even if the jobs previously finished with errors or warnings.
**Changes to Rules and Monitors**

This section lists changes that were made to Veeam MP for VMware rules and monitors in the 7.0 GA release.

**New event monitors**

The following table lists new monitors that track vCenter Server events.

<table>
<thead>
<tr>
<th>Monitor/Alert Name</th>
<th>Target</th>
<th>Parent Monitor</th>
<th>Event(s)</th>
<th>Generates Alert</th>
</tr>
</thead>
</table>
| Veeam VMware: License Error Alarm | vCenter | Configuration | **RED status:** License Error Alarm (to red)  
**YELLOW Status:** License Error Alarm (to yellow)  
**GREEN (clear) Status:** License Error Alarm (to green) | Yes |
| Veeam VMware: Health status changed Alarm | vCenter | Availability | **RED status:** Health status changed Alarm (to red)  
**YELLOW Status:** Health status changed Alarm (to yellow)  
**GREEN (clear) Status:** Health status changed Alarm (to green) | Yes |
| Veeam VMware: Datastore is in multiple datacenters Alarm | Datastore Cluster | Configuration | **RED status:** Datastore is in multiple datacenters Alarm (to red)  
**YELLOW Status:** Datastore is in multiple datacenters Alarm (to yellow)  
**GREEN (clear) Status:** Datastore is in multiple datacenters Alarm (to green) | Yes |
| Veeam VMware: Datastore Compliance Alarm | Datstote | Configuration | **RED status:** Datastore Compliance Alarm (to red)  
**YELLOW Status:** Datastore Compliance Alarm (to yellow)  
**GREEN (clear) Status:** Datastore Compliance Alarm (to green)  
**GREY Status (do nothing):** Datastore Compliance Alarm (from grey to grey) | Yes |
| Veeam VMware: Datastore Capability Alarm | Datastore | Configuration | **RED status:** Datastore Capability Alarm (to red)  
**YELLOW Status:** Datastore Capability Alarm (to yellow)  
**GREEN (clear) Status:** Datastore Capability Alarm (to green) | Yes |
<table>
<thead>
<tr>
<th>Monitor/Alert Name</th>
<th>Target</th>
<th>Parent Monitor</th>
<th>Event(s)</th>
<th>Generates Alert</th>
</tr>
</thead>
</table>
| Veeam VMware: Exit standby error Alarm | vSphere Host | Availability | **RED status:** Exit standby error (to red)  
|                    |                   |                | **YELLOW Status:** Exit standby error (to yellow)  
|                    |                   |                | **GREEN (clear) Status:** Exit standby error (to green)  | Yes             |
| Veeam VMware: Host connection and power state Alarm | vSphere Host | Availability | **RED status:** Host connection and power state failure (to red)  
|                    |                   |                | **YELLOW Status:** Host connection and power state failure (to yellow)  
|                    |                   |                | **GREEN (clear) Status:** Host connection and power state alarm to green | Yes             |
| Veeam VMware: Host error Alarm | vSphere Host | Availability | **RED status:** Host error (to red)  
|                    |                   |                | **YELLOW Status:** Host error (to yellow)  
|                    |                   |                | **GREEN (clear) Status:** Host error (to green) | Yes             |
| Veeam VMware: vShield endpoint host status Alarm | vSphere Host | Configuration | **RED status:** vShield endpoint host status Alarm (to red)  
|                    |                   |                | **YELLOW Status:** vShield endpoint host status Alarm (to yellow)  
|                    |                   |                | **GREEN (clear) Status:** vShield endpoint host status Alarm (to green) | Yes             |
| Veeam VMware: Migration Error Alarm | VM | Availability | **RED status:** Migration Error Alarm (to red)  
|                    |                   |                | **YELLOW Status:** Migration Error Alarm (to yellow)  
|                    |                   |                | **GREEN (clear) Status:** Migration Error Alarm (to green) | Yes             |
| Veeam VMware: Virtual Machine Error Alarm | VM | Availability | **RED status:** Virtual Machine Error Alarm (to red)  
|                    |                   |                | **YELLOW Status:** Virtual Machine Error Alarm (to yellow)  
|                    |                   |                | **GREEN (clear) Status:** Virtual Machine Error Alarm (to green) | Yes             |
| Veeam VMware: vShield VirtualMachine Alarm | VM | Availability | **RED status:** vShield VirtualMachine Alarm (to red)  
<p>|                    |                   |                | <strong>YELLOW Status:</strong> vShield VirtualMachine Alarm (to yellow) | Yes             |</p>
<table>
<thead>
<tr>
<th>Monitor/Alert Name</th>
<th>Target</th>
<th>Parent Monitor</th>
<th>Event(s)</th>
<th>Generates Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam VMware: vShield Endpoint SVM status Alarm</td>
<td>VM</td>
<td>Availability</td>
<td>GREEN (clear) Status: vShield VirtualMachine Alarm (to green)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RED status: vShield Endpoint SVM status Alarm (to red)</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>GREEN (clear) Status: vShield Endpoint SVM status Alarm (to green)</td>
<td></td>
</tr>
<tr>
<td>Veeam VMware: Virtual Machine Error Alarm</td>
<td>VM</td>
<td>Availability</td>
<td>RED status: Virtual Machine Error Alarm (to red)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GREEN (clear) Status: Virtual Machine Error Alarm (to green)</td>
<td></td>
</tr>
</tbody>
</table>

**Removed event rules**

The following table lists rules that were removed.

<table>
<thead>
<tr>
<th>Rule Name</th>
<th>vCenter Event ID(s)</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam VMware: A VMotion license has expired</td>
<td>VMotionLicenseExpiredEvent</td>
<td>Error</td>
</tr>
<tr>
<td>Veeam VMware: Datastore cluster has one or more datastores shared across multiple datacenters</td>
<td>com.vmware.vc.sdrs.DatastoreInMultipleDatacentersEvent</td>
<td>Warning</td>
</tr>
<tr>
<td>Veeam VMware: Datastore cluster is connected to unsupported hosts</td>
<td>com.vmware.vc.sdrs.StorageDrsNotSupportedHostConnectedToPodEvent</td>
<td>Warning</td>
</tr>
<tr>
<td>Veeam VMware: Host License Expired</td>
<td>HostLicenseExpiredEvent</td>
<td>Error</td>
</tr>
<tr>
<td>Veeam VMware: License compliance alert</td>
<td>LicenseNonComplianceEvent</td>
<td>Error</td>
</tr>
<tr>
<td>Veeam VMware: License Expired</td>
<td>LicenseExpiredEvent</td>
<td>Error</td>
</tr>
<tr>
<td>Veeam VMware: License server status</td>
<td>LicenseServerUnavailableEvent</td>
<td>Error</td>
</tr>
<tr>
<td>Veeam VMware: The current license usage exceeds the license capacity</td>
<td>com.vmware.license.LicenseCapacityExceededEvent</td>
<td>Warning</td>
</tr>
<tr>
<td>Veeam VMware: Unsupported Host Connected to Datastore</td>
<td>com.vmware.vc.sioc.NotSupportedHostConnectedToDatastoreEvent</td>
<td>Warning</td>
</tr>
<tr>
<td>Veeam VMware: vCenter Server license has expired</td>
<td>ServerLicenseExpiredEvent</td>
<td>Error</td>
</tr>
</tbody>
</table>
**Excluded vCenter events**

The following table lists vCenter events that were excluded by default for event rules. If required you can override the rules to include the events back in the monitoring scope.

<table>
<thead>
<tr>
<th>Rule Name</th>
<th>Excluded Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam VMware: vSphere Cluster Error</td>
<td>DasHostFailedEvent, com.vmware.vc.HA.DasHostFailedEvent, MigrationErrorEvent, MigrationHostErrorEvent</td>
</tr>
<tr>
<td>Veeam VMware: vSphere Host Error</td>
<td>ExitStandbyModeFailedEvent, GeneralHostErrorEvent, DnsExitStandbyModeFailedEvent</td>
</tr>
<tr>
<td>Veeam VMware: vSphere Host Network Error</td>
<td>HostNoHAEnabledPortGroupsEvent</td>
</tr>
<tr>
<td>Veeam VMware: vSphere Host Network Warning</td>
<td>vprob.net.migrate.bindtovmk</td>
</tr>
<tr>
<td>Veeam VMware: vSphere Host Warning</td>
<td>GeneralHostWarningEvent</td>
</tr>
<tr>
<td>Veeam VMware: Virtual Machine Warning</td>
<td>com.vmware.vc.ha.VmRestartedByHAEvent, GeneralVmWarningEvent, VmDasBeingResetEvent, VmDasBeingResetWithScreenshotEvent, VmNoCompatibleHostForSecondaryEvent, VmFailoverFailed, VmOrphanedEvent</td>
</tr>
</tbody>
</table>

**Other changes**

The following table lists rules whose severity level was changed.

<table>
<thead>
<tr>
<th>Rule Name</th>
<th>vCenter Event ID(s)</th>
<th>Old Severity Level</th>
<th>New Severity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam VMware: Host does not comply with profile</td>
<td>HostNonCompliantEvent</td>
<td>Error</td>
<td>Warning</td>
</tr>
<tr>
<td>Veeam VMware: Host DVS configuration is out of sync</td>
<td>OutOfSyncDvsHost</td>
<td>Error</td>
<td>Warning</td>
</tr>
</tbody>
</table>
The following table lists event monitors whose default alerting settings were changed:

<table>
<thead>
<tr>
<th>Monitor Name</th>
<th>Generates Alert (Old Value)</th>
<th>Generates Alert (New Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam VMware: Insufficient vSphere HA Failover Resources Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: Cannot find vSphere HA master agent Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: Storage DRS Not Supported On Host Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: SRM Consistency Group Violation Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: Thin-provisioned volume capacity exceeded Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: Pre-4.1 host connected to SIOC-enabled datastore Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: Unmanaged workflow detected on SIOC-enabled datastore Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: vSphere HA Host Status Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Veeam VMware: vCenter License Capacity Monitoring Alarm</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Event settings for the ‘Veeam VMware: VM storage Compliance Alarm monitor’ were changed as follows:

<table>
<thead>
<tr>
<th>Monitor/Alert Name</th>
<th>Target</th>
<th>Parent Monitor</th>
<th>Event(s)</th>
<th>Generates Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeam VMware: VM storage Compliance Alarm</td>
<td>VM</td>
<td>Configuration</td>
<td>RED status: VM storage compliance Alarm (to red)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>YELLOW Status: VM storage compliance Alarm (to yellow)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GREEN (clear) Status: VM storage compliance Alarm (to green)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GREY Status (do nothing): VM storage compliance Alarm (from grey to grey)</td>
<td></td>
</tr>
</tbody>
</table>
## System Requirements

This section describes hardware and software requirements for Veeam MP for System Center.

**Note**

1. Only English (US) Windows OS is fully QA tested for Veeam components. However Veeam will support customers using any other-language OS, to reproduce problems and establish if root cause is a language-related issue.
2. Installation of the Veeam MP for VMware components on a Domain Controller is not supported.
3. Safe mode is not supported for Veeam MP services operation.

### Microsoft System Center Operations Manager

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| **Ops Mgr**   | • Microsoft System Center 2012 R2 Operations Manager  
                 • Microsoft System Center 2012 SP1 Operations Manager  
                 **Note**: Make sure that the latest available updates for System Center Operations Manager are installed. |
| **Hardware**  | **Hard disk space**: variable storage size (Ops Mgr database)  
                 **Note**: see the Veeam MP for VMware Sizing Calculator available as a part of Veeam MP Resource Kit. |
| **Additional Software** | Ops Mgr Reporting server and Data Warehouse (optional; required for reporting).  
                             **Important**: Veeam MP for VMware reporting only supports Microsoft SQL Server 2008 SP3, SQL Server 2008 R2 SP2 and SQL Server 2012 SP1 Reporting Services. |

### Veeam Virtualization Extensions Service

**Note**

Veeam Virtualization Extensions Service must be installed on an **Ops Mgr Management Server**.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| **Hardware**  | • **Hard disk space**: minimum 2GB — required for .NET Framework installation, binaries and logfiles.  
                 • **Memory and Processor**: processor architecture must be x64.  
                 **Note**: the Virtualization Extensions Service does not perform heavy-load data processing. The minimum hardware requirement for an Operations Manager management server will support the Virtualization Extensions Service with no significant additional load generated. |
| **OS**        | • Windows Server 2012 R2  
                 • Windows Server 2012 or Windows Server 2012 Core Installation  
                 • Windows Server 2008 R2 SP1 |
| **Additional Software** | • Operations Manager Management Server  
                             • Windows Remote Management must be enabled for the management server  
                             • Microsoft .NET Framework 4.0 or later  
                             • Windows PowerShell 2.0 or later — required for Veeam Virtualization Extensions Shell |
### Veeam Virtualization Extensions UI

The Veeam Virtualization Extensions Web UI is an IIS-based web application that allows authorized users to access the Veeam Virtualization Extensions Service. The Web UI can be installed together with the Veeam Virtualization Extensions Service or on a separate machine.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td><strong>Hard disk space:</strong> minimum 2GB — required for .NET Framework installation, binaries and logfiles.</td>
</tr>
</tbody>
</table>
| OS                 | • Microsoft Windows Server 2012 R2  
                     • Microsoft Windows Server 2012  
                     • Microsoft Windows Server 2008 R2 SP1  
**Note:** All current operating system security updates and patches must be installed. |
| Additional Software| • Microsoft Internet Information Services 7.0 or later (IIS with required features is installed as part of Veeam Virtualization Extensions UI installation)  
                     • Microsoft .NET Framework 4.0 or later  
                     • Internet Explorer 8 or later  
                     • Mozilla Firefox 23.0.1 or later |
| Not Supported      | Installing the Veeam Virtualization Extensions UI on a vCenter Server is NOT supported due to conflicts between the IIS requirement for Veeam Virtualization Extensions UI and the embedded web server used by vCenter Server. |
Veeam MP for VMware

This section includes requirements specific for Veeam VMware MP.

**VMware Infrastructure**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESX Host</td>
<td>• ESX 4.x</td>
</tr>
<tr>
<td></td>
<td>• ESXi 4.x, 5.x</td>
</tr>
<tr>
<td>Software</td>
<td>• vCenter Server 4.x, 5.x</td>
</tr>
</tbody>
</table>

**Veeam VMware Collector**

Veeam Collector server is a computer that will host Ops Mgr agent or Management Server and the Veeam Collector. Depending on the size of the VMware infrastructure and the monitoring requirements (for example, high-availability), more than one Collector server may be required. See the Deployment Guide for details.

The Collector component may be installed on a standard Ops Mgr Agent in Proxy mode. However maximum scalability and performance will be obtained by installing the Veeam Collector on an Ops Mgr Management Server. Depending on the size of the monitored VMware environment, Management Server(s) dedicated to the Collector role may be required.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td><strong>Memory</strong>: 4GB minimum.</td>
</tr>
<tr>
<td></td>
<td>To achieve maximum scalability and performance, x64 OS with 6GB RAM is recommended.</td>
</tr>
<tr>
<td></td>
<td><strong>Hard disk space</strong>: 2GB minimum—required for .NET Framework installation, binaries and logfiles.</td>
</tr>
<tr>
<td></td>
<td><strong>Processor</strong>: 2 x 2GHz minimum.</td>
</tr>
<tr>
<td>OS</td>
<td>• Microsoft Windows Server 2012 R2</td>
</tr>
<tr>
<td></td>
<td>• Microsoft Windows Server 2012</td>
</tr>
<tr>
<td></td>
<td>• Microsoft Windows Server 2008 R2 SP1</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: All current operating system security updates and patches must be installed.</td>
</tr>
<tr>
<td>Additional Software</td>
<td>Microsoft .NET Framework 4.0 or later</td>
</tr>
</tbody>
</table>
Veeam MP for Hyper-V

This section includes requirements specific for Veeam Hyper-V MP.

**Microsoft Hyper-V Infrastructure**

The Veeam Hyper-V MP supports the following Hyper-V infrastructure components:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| **Hosts**            | • Windows Server Hyper-V 2012 R2  
                      | • Windows Server Hyper-V 2012  
                      | **Note:**  
                      | • Windows Server Hyper-V 2008 is not supported.  
                      | • System Center Virtual Machine Manager is NOT a requirement.                                                                                  |
| **Additional Software** | Ops Mgr agents must be installed on every Hyper-V host.  
                          | For system requirements for Ops Mgr agents, please refer to the Ops Mgr documentation.                                                         |

**MP for Veeam Backup & Replication**

**Veeam Backup & Replication**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version</strong></td>
<td>Veeam Backup &amp; Replication 7.0 Patch 2 (and later)</td>
</tr>
</tbody>
</table>
| **Editions**         | • Veeam Backup & Replication Standard  
                      | • Veeam Backup & Replication Enterprise  
                      | • Veeam Backup & Replication Enterprise Plus  
                      | **Note:** Monitoring and reporting for Veeam Backup Free Edition is not supported.                                                            |
| **Additional Software** | Ops Mgr agent must be installed on Veeam backup servers, Veeam Backup Enterprise Manager server, backup proxies, backup repositories, WAN accelerators.  
                          | **Note:** For system requirements for Ops Mgr agents, refer to the Ops Mgr documentation.                                                   |
Contacting Veeam Software

At Veeam Software we value the feedback from our customers. It is important not only to help you quickly with your technical issues, but it is our mission to listen to your input, and build products that incorporate your suggestions.

Customer Support

Should you have a product issue, suggestion or question, please visit our Customer Center Portal at cp.veeam.com to open a case, search our knowledge base, reference documentation, manage your license or obtain the latest product release.

Online Support

If you have any questions about the Veeam Management Pack for System Center, you may use the following resources:

- Resources: www.veeam.com/management-pack-system-center-resources.html
- Online documentation: www.veeam.com/documentation-guides-datasheets.html
- Community forum: forums.veeam.com

Company Contacts

For the most up to date information about company contacts and offices location, please visit www.veeam.com/contacts.html.