Contents

CONTACTING VEEAM SOFTWARE.................................................................................................................. 4

VEEAM MANAGEMENT PACK FOR VMWARE OVERVIEW ............................................................................. 5
  Key Features of Veeam MP for VMware .................................................................................................. 5
  Pro-active and Intelligent Alerting .......................................................................................................... 5
  Advanced Visualizations .......................................................................................................................... 6
  Reporting and Optimization Tools ......................................................................................................... 7

VEEAM MP FOR VMWARE COLLECTION ARCHITECTURE ......................................................................... 8
  Architecture Diagram ............................................................................................................................ 9
  Veeam VMware Collector ....................................................................................................................... 10
  Connecting to VMware Systems .......................................................................................................... 11
  Additional Components ........................................................................................................................ 11

SCALABILITY CONSIDERATIONS ............................................................................................................... 12
  Determining Number of Collectors Required ....................................................................................... 12
  Storage Requirements for Ops Mgr Database ......................................................................................... 13
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 technical concern, suggestion or question, please visit our Customer Center Portal at www.veeam.com/support.html to open a case, search our knowledge base, reference documentation, manage your license or obtain the latest product release.

Company Contacts

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

Online Support

If you have any questions about Veeam products, you can use the following resources:

- Full documentation set: www.veeam.com/documentation-guides-datasheets.html
- Community forum at forums.veeam.com
Veeam Management Pack for VMware Overview

Veeam Management Pack for System Center (Veeam MP for System Center) provides integration, monitoring, advanced reporting, and detailed topology features for virtualized systems, their hosts, the associated network and storage fabric.

Veeam MP for System Center allows you to integrate your virtual environment into multiple System Center components, including Microsoft System Center Operations Manager, Orchestrator, Virtual Machine Manager and Service Manager.

This guide contains a high-level overview of features and architecture options of Veeam Management Pack for VMware (Veeam MP for VMware), a part of the Veeam MP for System Center solution.

This guide assumes that you have a good understanding of Microsoft System Center Operations Manager and VMware vSphere.

Key Features of Veeam MP for VMware

This section provides a list of main Veeam MP for VMware features. For more information on Veeam MP for VMware capabilities, see the Operations Guide.

Pro-active and Intelligent Alerting

Veeam MP for VMware comes with a number of smart analysis monitors that produce relevant and useful alerts, and provide real-time analytics calculated for your specific environment. The detailed built-in knowledge base help front-line operators speed up root-cause analysis.

The following example shows the Veeam VMware: Virtual Machine Storage Latency Analysis raised for a VM that is experiencing storage latency issues. The monitor provides information on the datastore used to store the VM files, and displays virtual disks with the highest read and write latency values.
The following example shows the Veeam VMware: Virtual Machine Snapshot Usage Analysis monitor raised for a VM whose snapshots are either outdated or too large. The monitor tracks the age and size of VM snapshots, and contains dynamically generated message to help you identify the root cause of storage performance issues.

Advanced Visualizations

Unique dashboard views such as Heatmap and Traffic Lights give IT teams visibility of both “hotspots” and “dead zones” in the virtual environment.

The following example shows the Heatmap – VM Snapshot Finder dashboard that displays data on used storage space and snapshot age for virtual machines.

The following example shows the Top Datastores dashboard that uses the Traffic Lights feature to display storage status and identify datastores with performance issues.
Reporting and Optimization Tools

Veeam MP for VMware includes a large set of out-of-box reports that use such features as right-sizing, trending, forecasting and modeling. These reports allow you to analyze and optimize resource allocation in your vSphere environment, avoid possible performance issues and ensure the environment stays in a healthy state.

The following example shows the Virtual Machines: Right-sizing — VMs Undersized for Memory and CPU report that helps you detect virtual machines with less allocated vRAM or vCPU resources than required.

Virtual Machines: Right-sizing - VMs Undersized for Memory and CPU

NOTE:

All the reporting features of the Veeam MP for VMware are available only in the Enterprise Plus Edition. For more information on the Veeam MP for System Center licensing, see FAQs on Veeam Management Pack for System Center.
Veeam MP for VMware Collection

Architecture

The Veeam MP for VMware solution utilizes the following components (for detailed requirements, refer to the Installation Guide):

**Ops Mgr components**

- Ops Mgr Server
  - Microsoft System Center Operations Manager 2019
  - Microsoft System Center Operations Manager 1807
  - Microsoft System Center Operations Manager 1801
  - Microsoft System Center Operations Manager 2016
  - Microsoft System Center Operations Manager 2012 R2
  - Microsoft System Center Operations Manager 2012 SP1

**VMware components**

- ESXi 4.x, 5.x, 6.x
- vCenter Server 4.x, 5.x, 6.x

**Veeam Management Pack for VMware components**

- Veeam VMware Collector (Collector) — gathers topology, event and performance data from VMware systems.
- Veeam Virtualization Extensions Service (VE Service) — is used for centralized configuration of Collectors, failover and load balancing control, and license distribution.
- Veeam Virtualization Extensions UI (Veeam UI) — is a web-based (IIS) UI used to configure the VE Service and managed Collectors.
- Veeam Management Packs (Veeam MPs) — provide rich and flexible capabilities for VMware management, natively integrated with System Center Operations Manager. Advanced monitors, dashboards and reports are included out-of-box.
Architecture Diagram

You can install the Veeam MP for VMware solution using different installation scenarios. This guide describes only one of them. In this scenario, the Veeam MP for VMware installable back-end components are:

- VE Service
- Veeam UI
- One active Collector
- One standby Collector

NOTE:

You must install the VE Service on an Operations Manager Management Server. You can install the Veeam UI and Collector(s) together with the VE Service or on separate machines.

Large environments may require several Collectors. In this case, you can use the Collector Auto-Deployment feature. This feature automatically deploys Collectors on all Management Servers in an Ops Mgr resource pool.

For more information on Veeam MP for VMware installation scenarios, see the Installation Guide.
Veeam VMware Collector

The Collector server is a Windows-based physical or virtual machine on which the Veeam VMware Collector component is installed. The Collector agentlessly gathers data from VMware systems, and re-publishes the data to the Operations Manager.

Before you install the Collector, make sure the machine where the Veeam VMware Collector component will be deployed meets the following system requirements:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| Hardware      | **CPU**: minimum 4 cores processor. Using faster multi-core processors improves data processing performance.  
**Memory**: 4 GB RAM (minimum). For maximum scalability and performance, 6GB RAM is recommended.  
**Hard disk space**: minimum 2GB is required for .NET Framework installation, binaries and logfiles. |
| OS            |  
• Microsoft Windows Server 2019  
• Microsoft Windows Server 2016  
• Microsoft Windows Server 2012 R2  
• Microsoft Windows Server 2012  
• Microsoft Windows Server 2008 R2 SP1  
Both 32-bit and 64-bit versions of the operating systems are supported. |

**NOTES:**

1. One Collector server can process data for 500–1000 virtual machines. If you need to monitor larger VMware environments, first check scalability considerations provided in section *Determining Number of Collectors Required.*
2. To achieve best performance and scalability, install the Veeam VMware Collector component on an Ops Mgr Management Server.
Connecting to VMware Systems

This section briefly describes connections between Collector servers and VMware servers. For more information, see the Installation Guide, section Security Considerations.

Connection to vCenter Server

It is recommended to implement a connection for each vCenter Server Appliance, vCenter Server on Windows and standalone vSphere host in the Veeam UI.

Direct Connection to vSphere Host

Direct connections to standalone vSphere hosts are also supported.

Additional Components

To obtain additional monitoring data, deploy the following components:

- **VMware Tools** — in guest OSes of all vSphere virtual machines (if the virtualized OS supports it).
- **Ops Mgr Agent** — in guest OSes of all vSphere virtual machines (if the virtualized OS supports it).

Veeam MP for VMware does not require an Ops Mgr agent to be installed inside the VM guest OS. However, if present, Veeam MP for VMware leverages the agent-gathered data for use in reports and dashboards.
Scalability Considerations

When you plan the Veeam MP for VMware deployment, scalability is a key consideration. Each Collector delivers data from hundreds of VMs and the related vSphere hosts, storage and network fabric, and can monitor a large VMware environment.

However, a situation when you monitor too many objects could overload the Ops Mgr Monitoring Service with the published data, and thus cause instability and monitoring outage.

Before you deploy Veeam MP for VMware, review the following sections that will help you estimate the number of Collectors required to meet your scalability needs.

Determining Number of Collectors Required

To estimate the number of Collectors required for your infrastructure, it is highly recommended to use the Veeam MP for VMware Sizing Calculator available as a part of the Veeam MP Resource Kit included in the Veeam MP ISO image. For more information on the Veeam MP for VMware Sizing Calculator, see the Veeam MP Resource Kit Guide.
Additional HA Considerations

To provide failover capability, in addition to the recommendation generated by the Sizing Calculator, you will need:

- One additional unloaded inactive Collector that acts as a warm standby server
- OR-
- Sufficient headroom for the existing Collectors to accumulate monitoring jobs of any failed Collector

Storage Requirements for Ops Mgr Database

To estimate the storage footprint of Veeam MP in the Ops Mgr databases, use the Veeam MP for VMware Sizing Calculator available as a part of the Veeam MP Resource Kit included in the Veeam MP ISO image. For more information on the Veeam MP for VMware Sizing Calculator, see the Veeam MP Resource Kit Guide.

For more information on how to deploy Veeam MP for VMware components in your environment, see the Installation Guide.