veeam

Veeam ONE

Version 12

Quick Start Guide

May, 2023

> **NOTE**
>
> Read the End User Software License Agreement before using the accompanying software programs. Using any part of the software indicates that you accept the terms of the End User Software License Agreement.

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Contacting Veeam Software

At Veeam Software we value 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, visit the Veeam Customer Support Portal 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 office locations, visit the Veeam Contacts Webpage.

Online Support

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

- Full documentation set: veeam.com/documentation-guides-datasheets.html

- Veeam R&D Forums: forums.veeam.com

About This Guide

This guide will help you become familiar with Veeam ONE and evaluate its capabilities. It explains the primary features of Veeam ONE and introduces the most popular scenarios of utilizing these features. By walking through these scenarios, you can start using the product, regardless of your previous experience with the product.

About Veeam ONE

Veeam ONE is a comprehensive solution for monitoring virtual and data protection environments. It constantly collects, analyzes and visually represents information about objects in your infrastructure. By these means Veeam ONE allows you to be aware of all processes in your infrastructure and prevent dangerous conditions (for example, data loss, shortage of resources, and so on).

Veeam ONE offers the following capabilities:

- **Real-time monitoring of virtual infrastructure on every level**. You can access performance data of each infrastructure element through charts, tables and lists.

- **Backup infrastructure monitoring**. You can examine performance of backup infrastructure components, review status of jobs and determine potential issues.

- **Notifications about important events, conditions or states**. You can set default alarms, configure custom alarms, and receive notifications by email or SNMP traps.

- **Categorization of virtual infrastructure**. You can create groups of VMs based on single and multiple parameters, or import a whole categorization model.

- **Systematization and visualization of the collected data**. You can review dashboards and generate reports that contain default or custom sets of parameters and charts.

Veeam ONE enables real-time monitoring, business documentation and management reporting for Veeam Backup & Replication, Veeam Backup for Microsoft 365, VMware vSphere, VMware vCloud Director and Microsoft Hyper-V.

Veeam ONE incorporates the following software components:

Veeam ONE Client is used for monitoring the virtual environment, Veeam Backup & Replication and Veeam Backup for Microsoft 365 infrastructure. In Veeam ONE Client, you can manage, view and interact with alarms and monitoring data, analyze the performance of virtual and backup infrastructure components, track the efficiency of data protection operations, troubleshoot issues, group your virtual infrastructure and administer monitoring settings.

Veeam ONE Web Client provides a set of dashboards and reports that allow you to verify configuration issues, optimize resource allocation and utilization, track implemented changes, plan capacity growth and track whether mission-critical VMs are properly protected in the virtualized datacenter.

Veeam ONE Client and Veeam ONE Web Client are installed with one setup and provide a single cohesive solution.

Deployment

This section briefly describes the core components of Veeam ONE, deployment types, prerequisites and installation process of Veeam ONE.

Core Components

Veeam ONE architecture includes the following structural components:

- **Veeam ONE Server**

  Veeam ONE Server is responsible for collecting data from connected servers and storing this data into the database. As part of Veeam ONE Server, the following components are installed: Veeam ONE Monitoring Service, Veeam ONE Reporting Service, Veeam ONE Error Reporting Service and Veeam ONE Web API.

- **Veeam ONE Web Services**

  Veeam ONE Web Services enable access to Veeam ONE web server and handle rendering of reports.

- **Veeam ONE Client**

  Veeam ONE Client is a client part for Veeam ONE Server. Veeam ONE Client communicates with the Veeam ONE Server installed locally or remotely.

- **Veeam ONE Database**

  Veeam ONE Database stores all information about infrastructure, settings, events, and other historical and configuration data. The database is hosted on a Microsoft SQL Server.

- **Veeam ONE Agent**

  Veeam ONE Agent handles basic issues on Veeam Backup & Replication server when alarms trigger.

Deployment Types

There are two Veeam ONE deployment scenarios:

- **All-in-one**. All the architectural components are installed on a single machine. Such deployment is recommended for small- and medium-scale infrastructures as it can handle low data loads.

  This guide will use typical deployment for walking through the example scenarios.

- **Custom**. Architectural components are installed on different machines. Users access data by using Veeam ONE Client. Such deployment is recommended for large-scale infrastructures.

  This guide will not cover custom deployment. For more information, see section Custom Deployment of the Veeam ONE Deployment Guide.

Prerequisites

Before you proceed to Veeam ONE installation, make sure that:

- Your machine where you plan to install Veeam ONE meets the system requirements. For more information, see section System Requirements of the Veeam ONE Deployment Guide.

- You have local Administrator permissions on this machine.

Installing Veeam ONE

To install Veeam ONE:

1. Download the Veeam ONE installation image file at https://www.veeam.com/downloads.html and mount it to the machine.

2. Run the `Setup.exe` file from the installation image.

3. On the splash window, click **Install**. The **Veeam ONE Setup** wizard will open.
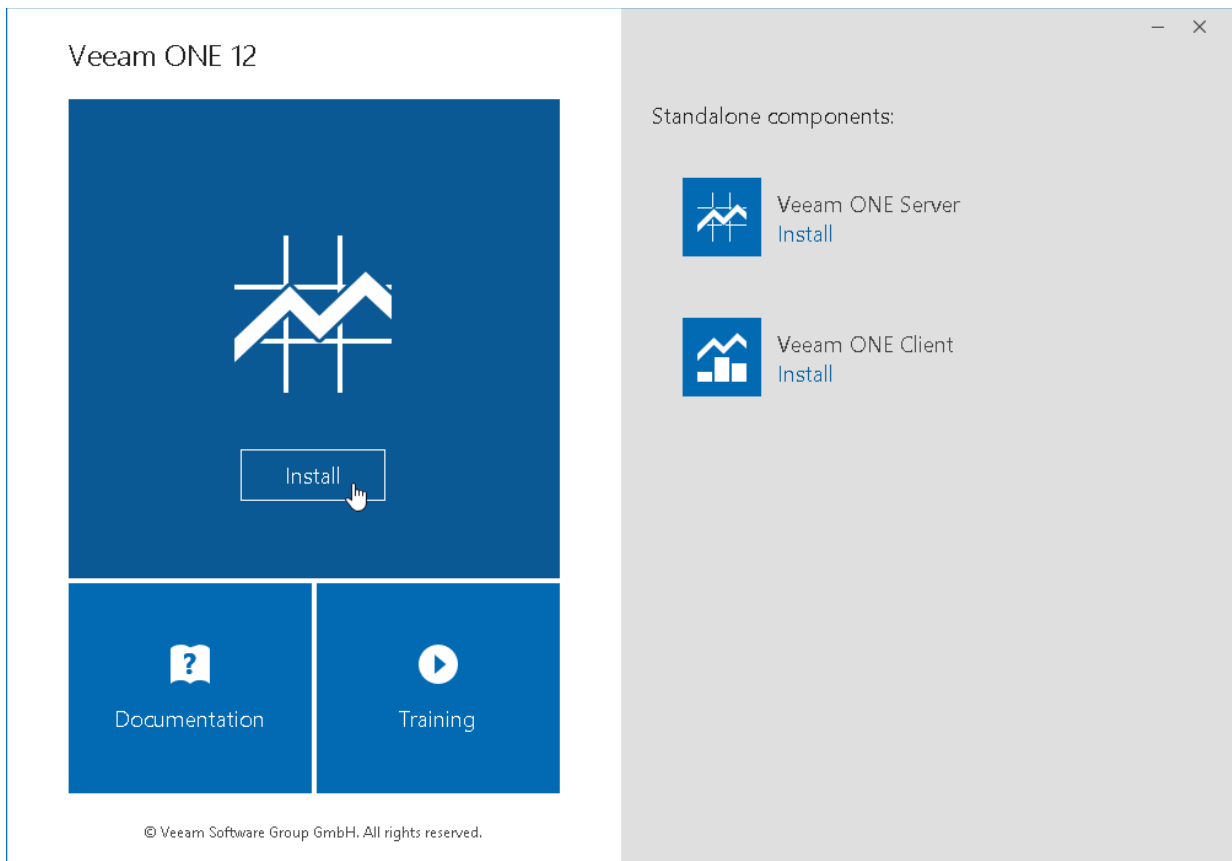
4. At the **License Agreements** step of the wizard, read and accept Veeam license agreement, licensing policy, 3rd party components and required software license agreements. You will not be able to continue installation until you accept license agreements.

   To read the terms of the license agreements, click **View**.

5. At the **Deployment Scenario** step of the wizard, select **All-in-one**.

6. At the **System Configuration Check** step of the wizard, click **Install** to install missing software components and enable missing features, if any.
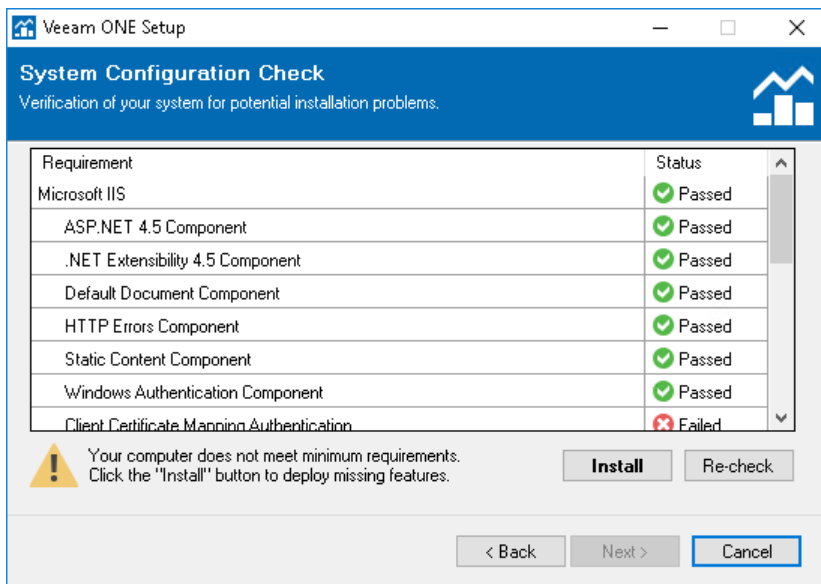

7. At the **Installation Path** step of the wizard, choose the directory where all the infrastructure components will be installed.
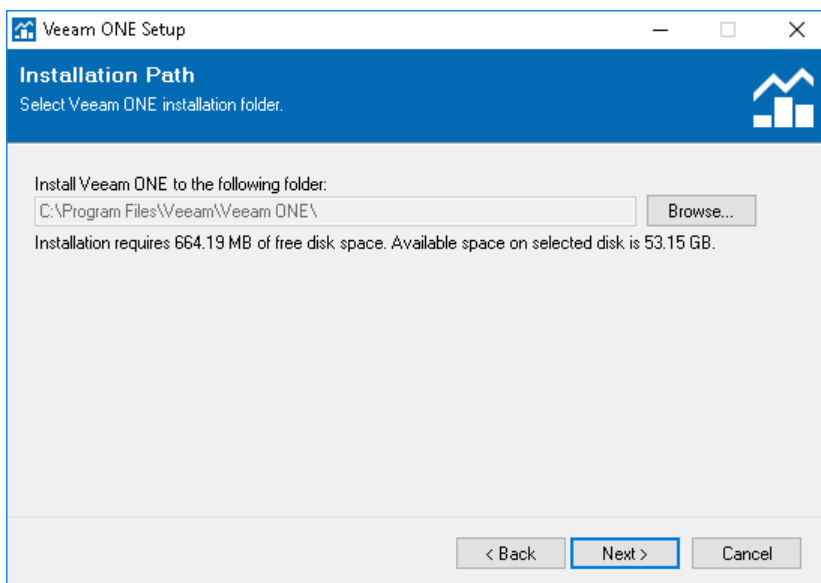
8. At the **Service Account** step of the wizard, specify credentials of the local administrator account in the `DOMAIN\USERNAME` format.
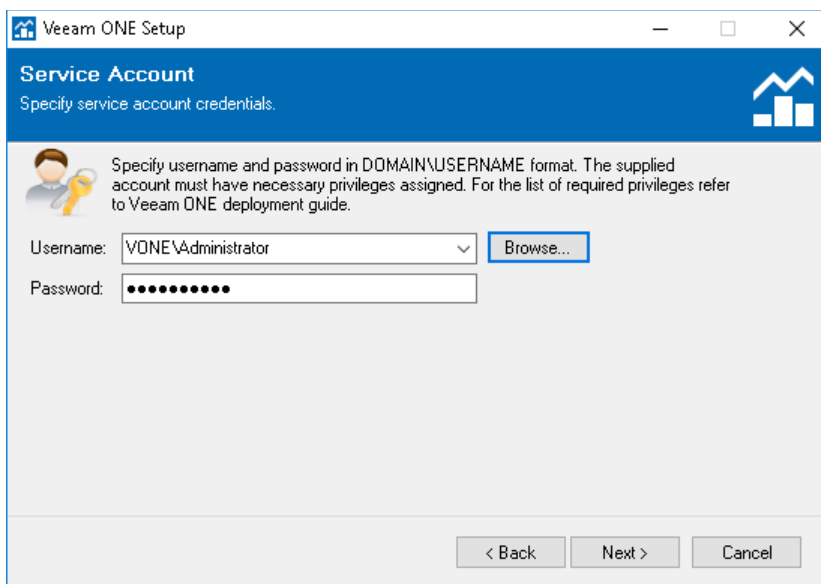

9. At the **SQL Server Instance** step of the wizard, select **Install new instance of SQL Server**. The setup will install Microsoft SQL Server 2016 Express locally.

10. At the **Operation Mode** step of the wizard, select **Licensed mode** and specify the path to purchased license or trial key.
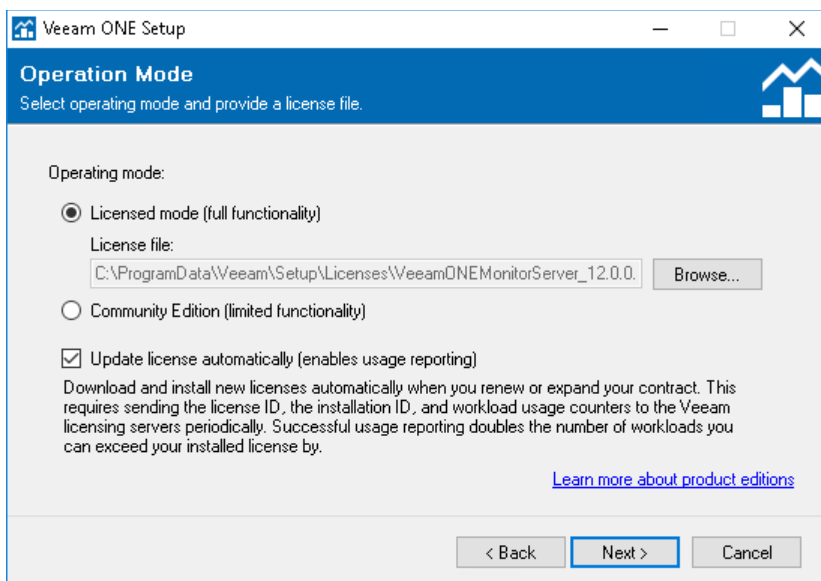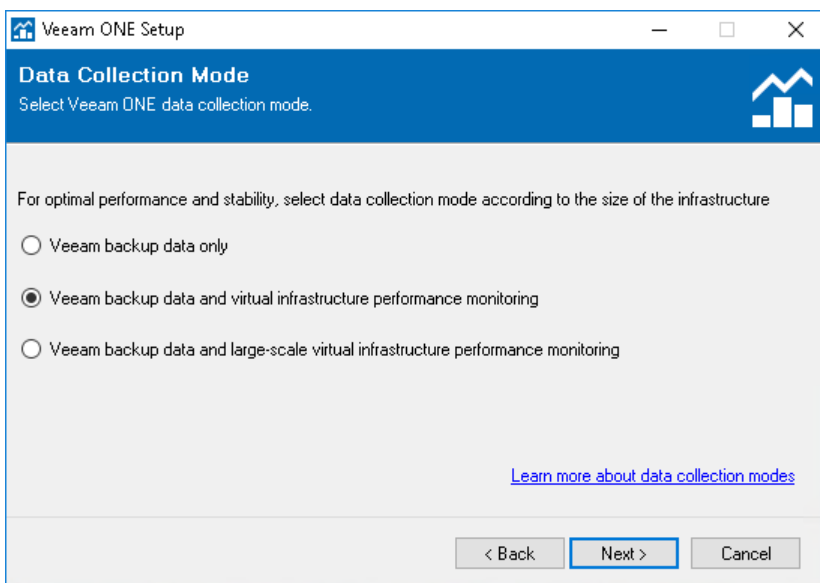

11. At the **Connection Configuration** step of the wizard, leave the default values.

12. At the **Performance Data Caching** step of the wizard, choose a directory where the performance cache must be located.
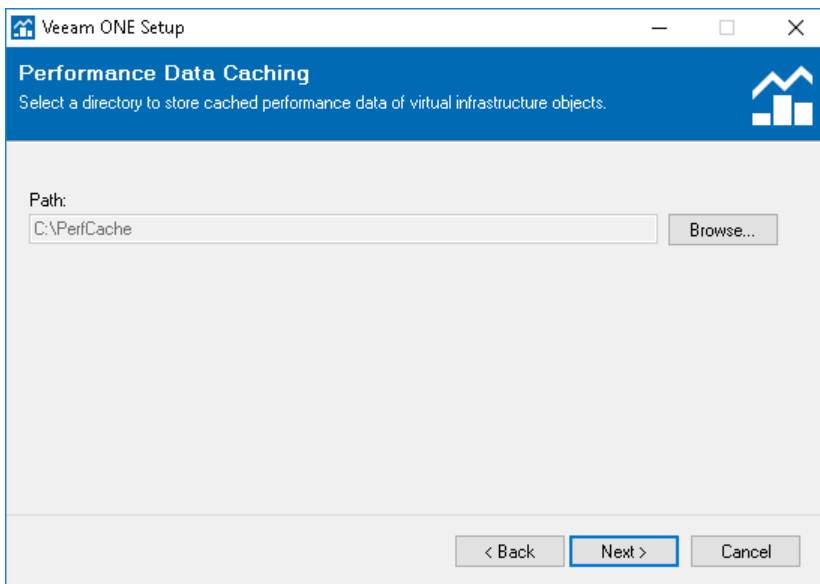
13. At the **Data Collection Mode** step of the wizard, select **Veeam backup data and virtual infrastructure performance monitoring**.

14. At the **Ready to Install** step of the wizard, click **Install** to begin the installation. When the installation completes, click **Finish** to close the wizard.

More Information

For more information about the typical installation scenario, see section All-in-One Installation of the Veeam ONE Deployment Guide.

Accessing Veeam ONE Client

To access Veeam ONE Client:

1. Log on to the machine where Veeam ONE Client is installed.

2. In the **Microsoft Windows Programs** menu, select **Veeam ONE Client**.

3. In the authentication window, type credentials for the user account to connect to Veeam ONE Client. To connect using account under which you are logged on to the machine, select the **Use Windows session credentials** check box.

4. Click **Connect**.

TIP:

To open online help, press [F1] in any Veeam ONE wizard or window.

Virtual Infrastructure Monitoring

To collect information, you can connect the following types of servers to Veeam ONE:

- VMware vSphere

- VMware vCloud Director

- Microsoft Hyper-V

In this guide, we will focus on VMware vSphere infrastructure. For information on how to connect other types of servers, see section Connecting Servers of the Veeam ONE Deployment Guide.

This section includes the following example scenarios:

1. Connecting VMware vSphere Servers

2. Reviewing Host Memory Usage

3. Reviewing VM Processes

Connecting VMware vSphere Servers

Before you begin, make sure that:

- Your VMware vSphere platform is supported. For more information, see section Supported Virtualization Platforms of the Veeam ONE Deployment Guide.

- All necessary ports are open. For more information, see section Ports of the Veeam ONE Deployment Guide.

- The account used to connect vCenter Server has the required permissions. For more information, see section Connection to Virtualization Servers of the Veeam ONE Deployment Guide.
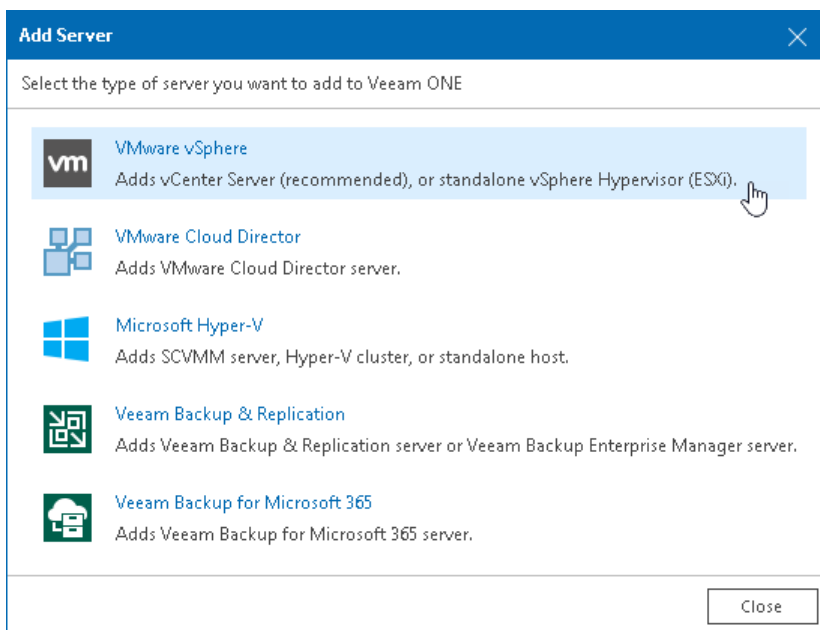
To connect a VMware vSphere server:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. In the main menu, click **Add Server**.
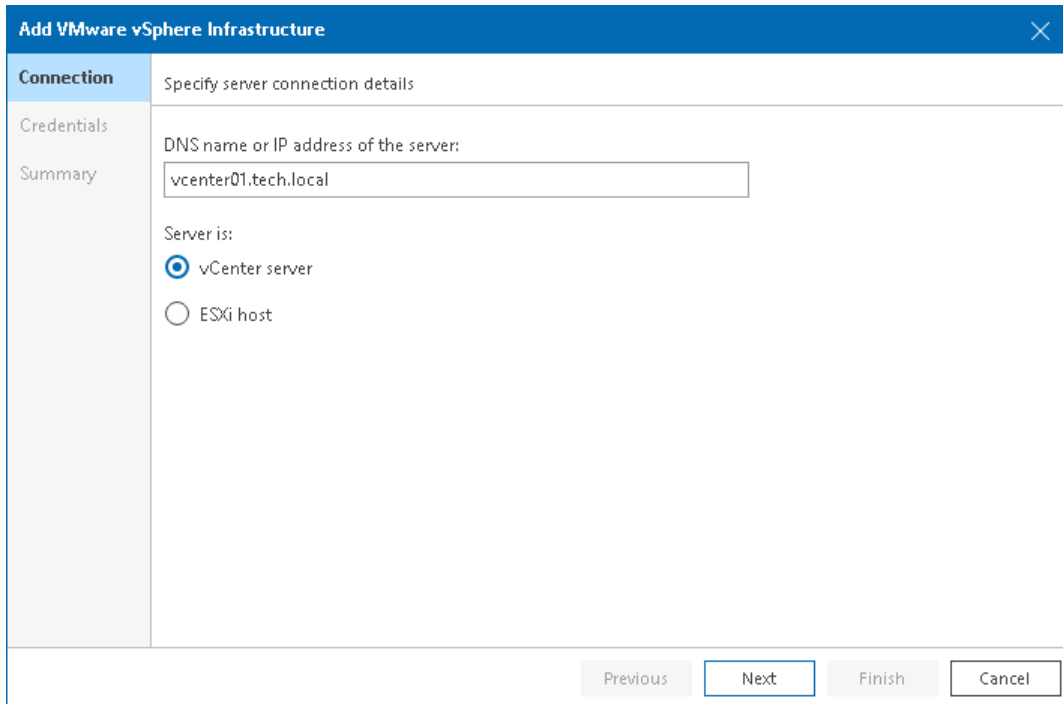
   The **Add Server** wizard will open.

3. At the first step of the wizard, select **VMware vSphere**.

4. At the **Connection** step of the wizard:

   a. Specify DNS name or IP address of the server which you want to connect to Veeam ONE.

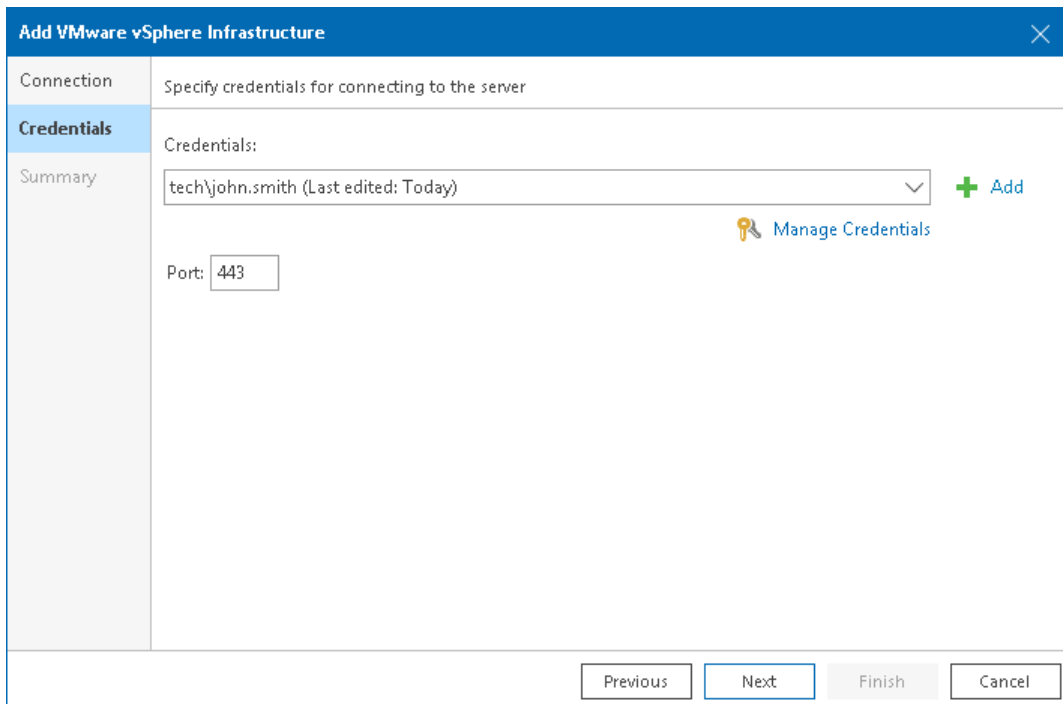b. Select whether the server is a **vCenter server** or an **ESXi host**.

5. At the **Credentials** step of the wizard:

   a. Click **Add**.

   b. In the **Add Credentials** window, specify credentials of the user account for connecting to the server in the `DOMAIN\USERNAME` format.

   c. Change the port number if required. By default, port `443` is used for communication with VMware vSphere servers.

6. At the **Summary** step of the wizard, review the connection details and click **Finish**.

Reviewing Host Memory Usage

The **Memory Usage** is a predefined view of the **Memory** performance chart. Performance charts are diagrams that show historical statistics of key performance counters. The **Memory** chart displays historical statistics of memory utilization.

To access the **Memory Usage** view of the **Memory** chart:

1. Open Veeam ONE Client.

    For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Virtual Infrastructure**.

3. In the inventory pane, select the host that you connected to Veeam ONE in the Connecting VMware vSphere Servers section.

4. Open the **Performance** tab.

The **Memory** view includes the following elements:

*   **Axes**

    The horizontal axis represents the time period which you select in the **Period** field. The vertical axes are two scales of measurement units: gigabytes and percents.

*   **Graphs**

    Each graph visualizes specific memory usage counter:

    o **Memory Active** — sum of all active memory metrics for all powered-on VMs plus vSphere services on the host.

    o **Memory Consumed** — amount of physical memory used on the host.

    o **Memory Pressure** — potential memory demand.

    o **Memory Usage** — memory used by running VMs.

- **Legend**

    The chart legend describes details about counters displayed in the chart. The details include key color, object name, list of counters and units of measurement, the latest, minimum, average, and maximum counter values.
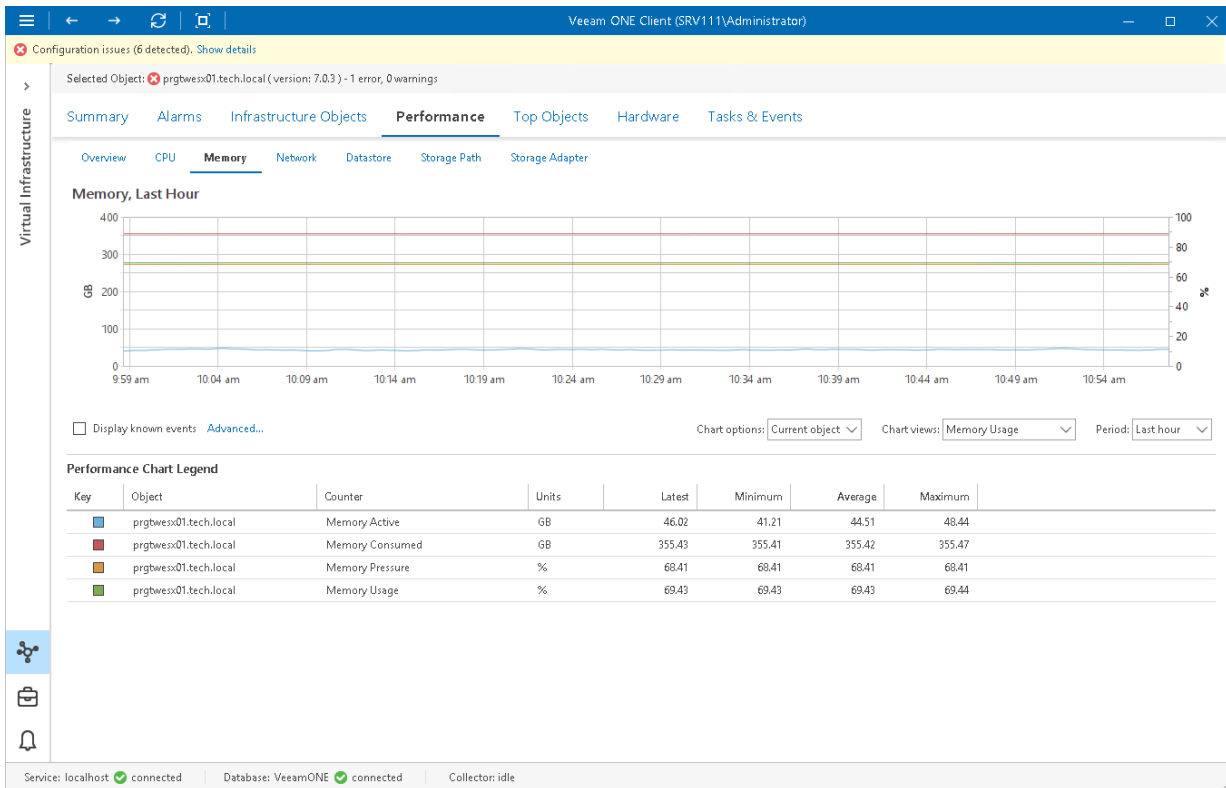
Reviewing VM Processes

You can view and control processes and services that are currently running inside a virtual machine.

Before viewing in-guest processes, check the following prerequisites:

- Make sure that VMware Tools are installed on the machines you plan to monitor.

- For Windows-based machines, make sure that the Remote Registry Service is started.

- For Unix-based machines, make sure that the SSH Server is started.

To view the list of processes:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Virtual Infrastructure**.

3. In the inventory pane, select the necessary VM.

4. On the **Guest OS** tab, navigate to **Processes**.

5. Provide OS authentication credentials to access the list of running processes.
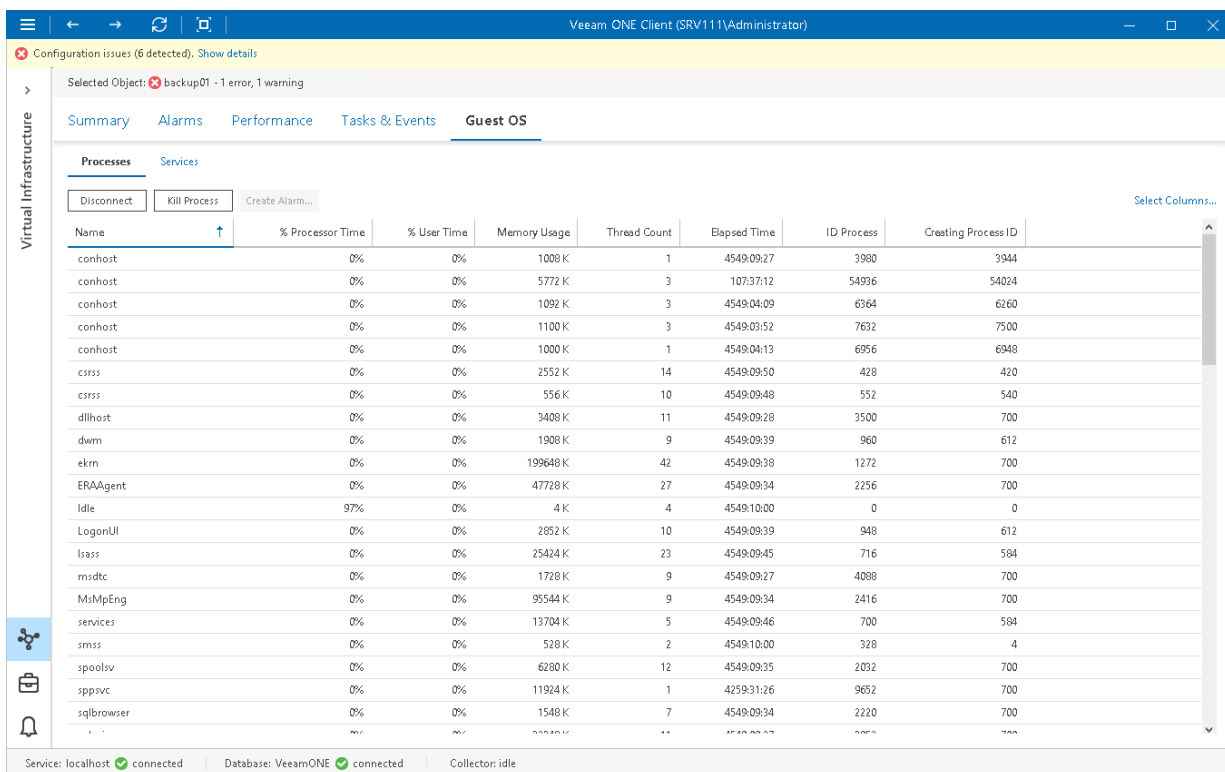
You can end unwanted processes running on the VM. To do that, select it in the list and click the **Kill Process** button. Alternatively, you can right-click a necessary process and select **Kill Process** from the shortcut menu.

On the **Processes** tab, column headers show process counters. You can add or remove counters to monitor running processes. To do that:

1. In the upper right corner of the **Processes** dashboard, click the **Select Columns** link.

2. In the **Select Columns** window:

   o Select the check boxes next to the counters you want to display.

   o Clear the check boxes next to the counters you do not want to display.
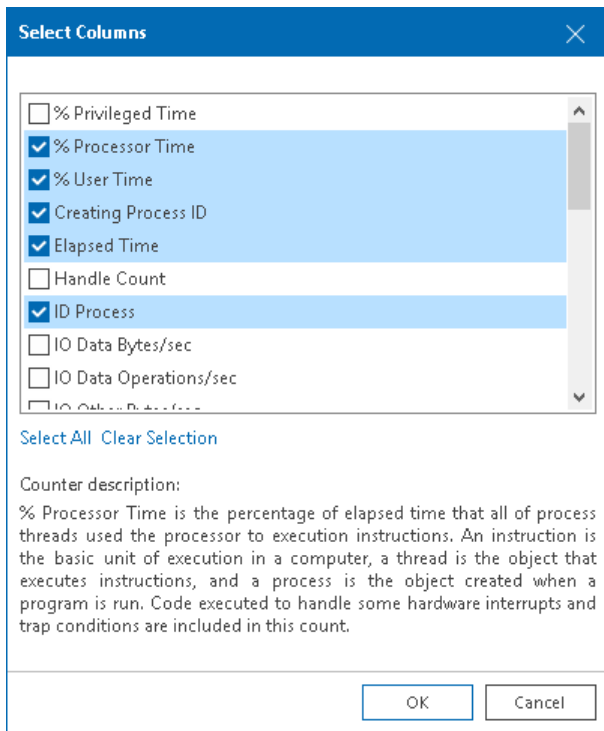
Data Protection Monitoring

Veeam ONE offers advanced functionality for monitoring Veeam Backup & Replication infrastructure and data protection operations in the managed environment:

- **Backup infrastructure state monitoring**

  You can quickly access backup infrastructure configuration and performance data.

- **Alarm management**

  You can use alarms to instantaneously react to potentially dangerous situations with ongoing data protection and take immediate actions to eliminate the risk of data loss.

- **Job status tracking**

  You can track the status of your jobs to get up-to-date information and address problems with jobs as soon as they appear.

- **Performance charts**

  You can track performance parameters of various backup infrastructure components to diagnose problems and identify bottlenecks.

- **List of events**

  View the full list of events that triggered Veeam Backup & Replication alarms, and events notifying about connection problems.

This section includes the following example scenarios:

1. Connecting Veeam Backup & Replication Servers
2. Reviewing Repository Capacity
3. Viewing List of Jobs on Backup Server

Connecting Veeam Backup & Replication Servers

To collect information about your backup infrastructure and track the efficiency of data protection, you must configure the connection to one or more Veeam Backup & Replication servers.

Before you begin, make sure that:

- Your Veeam Backup & Replication version and edition are supported. For details, see section Integration with Veeam Backup & Replication of Veeam ONE Deployment Guide.

- All necessary ports are open. For details, see section Ports of the Veeam ONE Deployment Guide.

For this scenario, you will connect a Veeam Backup & Replication server. Optionally, you can also connect Veeam Backup Enterprise Manager to monitor all backup servers federated under Veeam Backup Enterprise Manager in a similar way.
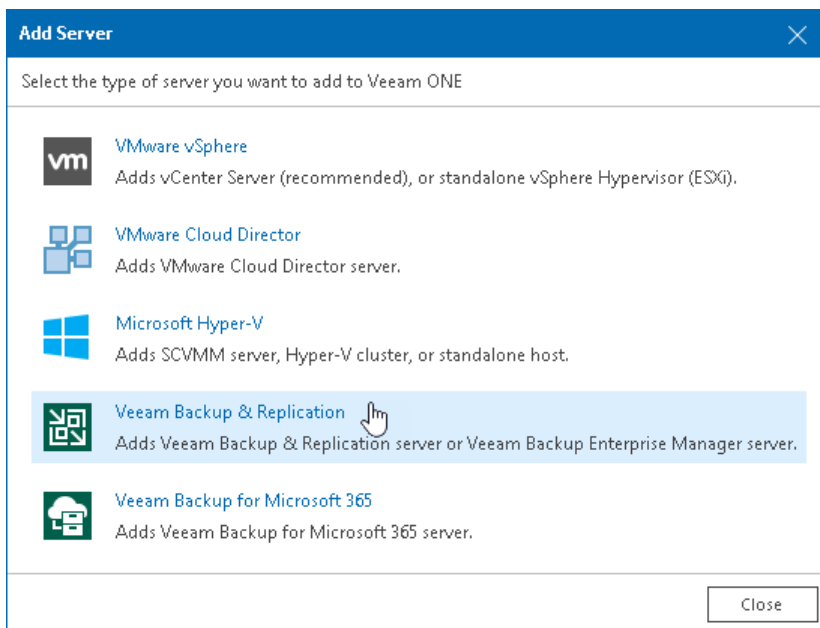
To connect Veeam Backup & Replication server:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. In the main menu, click **Add Server**.

   The **Add Server** wizard will open.

3. At the first step of the wizard, select **Veeam Backup & Replication**.

4. At the **Connection** step of the wizard, specify DNS name or IP address of the server and select the **Veeam Backup & Replication server** role. If you do not want to install Veeam ONE Agent, clear the **Install Veeam ONE Agent** check box.

5. At the **Credentials** step of the wizard:

   a. Click **Add**.

   b. In the **Add Credentials** window, specify credentials of the user account for connecting to the server in the `DOMAIN\USERNAME` format.

   The provided credentials will be used to connect the backup server and all managed servers in the backup infrastructure.

6. At the **Summary** step of the wizard, review the connection details and click **Finish**.

More information

You can also connect Veeam Backup Enterprise Manager to monitor all backup servers federated under Veeam Backup Enterprise Manager in a similar way. For more information, see section Connecting Veeam Backup & Replication Servers of the Veeam ONE Deployment Guide.

Reviewing Repository Capacity

Storage capacity is one of the key repository metrics that you must take into account when configuring backup job frequency, retention policy, compression and so on. If you know when and whether a repository is about to run out of free space, you can prevent potential problems.

To view storage capacity:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Veeam Backup & Replication**.

3. In the inventory pane, select the necessary backup repository.

4. Open the **Summary** tab.

   The **Capacity Planning** section contains the following details concerning repository capacity:

   o Storage capacity of the repository

   o Amount of free space on the repository

   o Assumed number of days before the repository runs out of free space
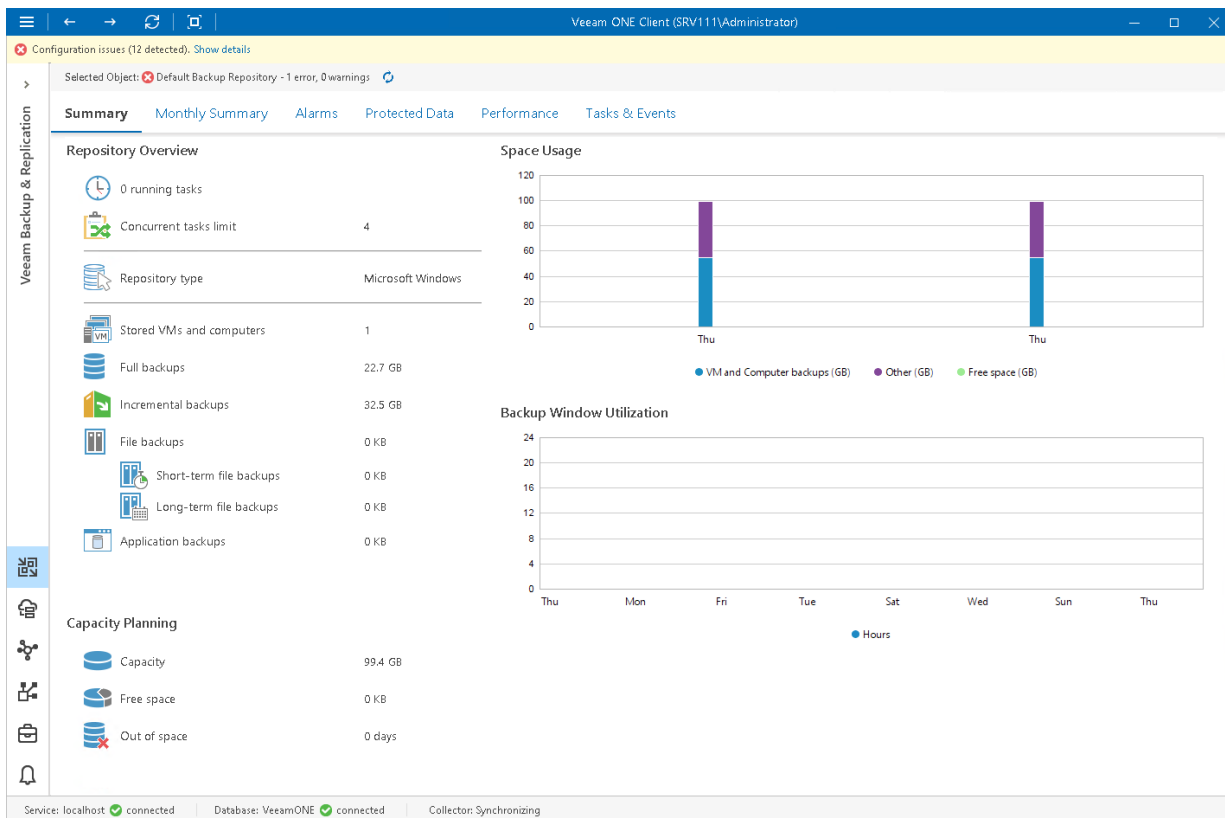
Viewing List of Jobs on Backup Server

You can monitor all types of jobs configured on the Veeam Backup & Replication servers that you connected to Veeam ONE in the Connecting Veeam Backup & Replication Servers section.

To view the list of VM jobs:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Veeam Backup & Replication**.

3. In the inventory pane, select a Veeam Backup & Replication server.

4. Open the **Data Protection** tab.

5. Open the **Virtual Machines** tab.

6. To find the necessary job, you can use filters at the top of the job list:

   o To show or hide jobs that ended with a specific status, use the status buttons at the top of the list (*Show failed jobs*, *Show jobs with warnings*, *Show successful jobs*, *Show running jobs* and *Show jobs with no status*).

   o To show only the jobs of specific types, click **Filters** and select check boxes of the job types (*Backup*, *Replication*, *Backup copy*, *Backup to tape*, *CDP policy*, *VM copy*, *SureBackup*, *SQL database transaction log backup*, *Oracle Database transaction log backup*, *PostgreSQL transaction log backup* and *Snapshot-only*).

   o To show or hide jobs that protect VMs residing on specific hypervisors, click **Filters** and select check boxes of the hypervisors (*VMware vSphere*, *VMware Cloud Director*, *Microsoft Hyper-V* and *Nutanix AHV*).

   o To set the time interval when jobs ran for the last time, use the **Filter jobs by time period** button. Release the button to discard the time period filter.

o To find jobs by name, use the search field at the top of the list.

Job Status	Job Name	Backup Server	Job Ty...	Last Run	Duration	Avg. Duration (Last Month)	Transferred Data (GB)
> ❌ Failed	Backup Copy Job Cloud	backup01.tech.local	Backup co...	6/6/2022 4:43:31 AM	-	-	-
> ⚠️ Warning	Backup Copy Job Simple to ...	backupsrv06.tech.local	Backup co...	10/4/2022 7:33:48 AM	-	-	-
✅ Success	Backup Job 1	qa08.tech.local	Backup	No info	No info	No info	No info
✅ Success	Backup Job HV	backupsrv06.tech.local	Backup	11/18/2022 2:43:44 AM	8 min 47 s	8 min 47 s	45.92
✅ Success	Backup Job Lin	qa08.tech.local	Backup	No info	No info	No info	No info
✅ Success	Backup Job Linux	backupsrv06.tech.local	Backup	11/18/2022 3:42:13 AM	4 min 3 s	4 min 3 s	9.02
❌ Failed	Backup Job Local	backup01.tech.local	Backup	No info	No info	No info	No info
❌ Failed	Backup Job Single Storage	backupsrv06.tech.local	Backup	11/18/2022 1:03:54 AM	3 min 39 s	3 min 39 s	0.00
❌ Failed	Backup Job True Per-VM	backupsrv06.tech.local	Backup	12/4/2022 10:41:03 PM	3 min 34 s	3 min 41 s	0.00
❌ Failed	Backup Job Webservers	backup01.tech.local	Backup	No info	No info	No info	No info
✅ Success	BTT Ext0130	qa08.tech.local	Backup to...	No info	No info	No info	No info
✅ Success	BTT Ext0230	qa08.tech.local	Backup to...	No info	No info	No info	No info
❌ Failed	Daily Backup Job	backupsrv29.tech.local	Backup	11/17/2022 1:55:54 AM	31 min 4 s	31 min 4 s	32.92
✅ Success	Ext0130	qa08.tech.local	Backup	No info	No info	No info	No info
✅ Success	Ext0230	qa08.tech.local	Backup	No info	No info	No info	No info
✅ Success	Migration Job	qa08.tech.local	Backup	No info	No info	No info	No info
✅ Success	Replication Job	backupsrv29.tech.local	Replication	11/17/2022 1:30:27 AM	10 min 59 s	10 min 59 s	67.22
⚠️ Warning	Replication Job	backupsrv06.tech.local	Replication	10/3/2022 3:38:33 AM	7 min 50 s	No info	15.74
✅ Success	Test Backup to Tape Job 3	qa08.tech.local	Backup to...	No info	No info	No info	No info
✅ Success	Weekly Backup Job	backupsrv29.tech.local	Backup	11/17/2022 1:56:39 AM	14 min 35 s	14 min 35 s	16.02

Managing Alarms

Veeam ONE alarms notify users about important events, significant changes and potential problems in the managed virtual and backup environment. Alarms speed up the process of identifying and reacting to issues that may affect mission-critical services and business operations.

Veeam ONE comes with a set of predefined alarms so that you can start monitoring your environment immediately after installing the solution. You can customize predefined alarms or create new alarms for specific monitoring conditions.

This section includes the following example scenarios:

1. Modifying Alarms

2. Configuring Alarm Notifications

More Information

For more information about Veeam ONE alarms, see section Working with Alarms of the Veeam ONE Monitoring Guide.

Modifying Alarms

You can change settings of a predefined alarm, if they do not suit your requirements.

In this scenario, you will add a new condition to the **Backup repository free space** alarm for the backup repository. The modified alarm will trigger a warning in case free space reaches 10 GB, or an error message in case free space reaches 5 GB.

To modify an alarm:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Alarm Management**.

3. In the inventory pane, under **Veeam Backup & Replication**, select **Backup repository**.

4. In the list of alarms, select **Backup repository free space** and do one of the following:

   o Double click the alarm.

   o Right-click the alarm and choose **Edit** from the shortcut menu.

   o In the **Actions** pane, click **Edit**.
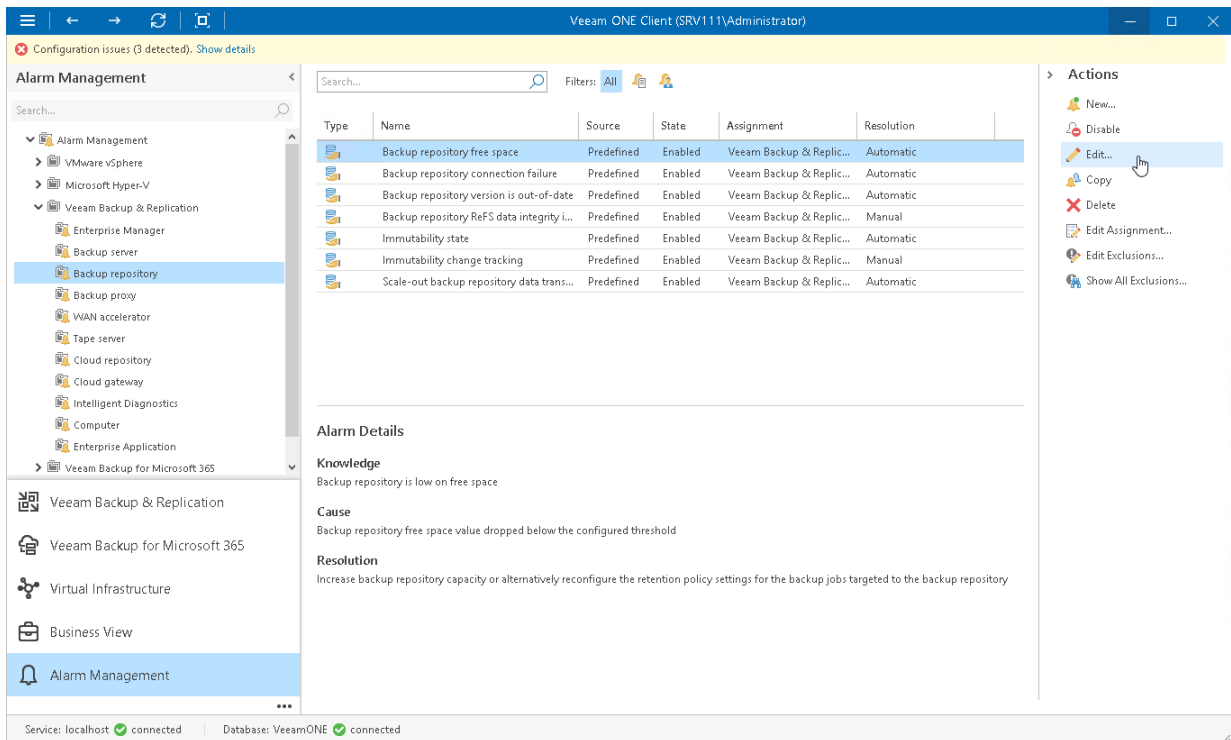
5. Launch the **Add New Rule** wizard. To do this, click **Add** on the **Rules** tab of the **Alarm Settings** window.

   a. At the **Choose Rule Type** step of the wizard, choose the **Rule for specific conditions or state** trigger type.

   b. Select **Repository server is running out of free space**.

   c. At the **Define Rule** step of the wizard, specify the following conditions:

   ▪ From the **Detection type** drop-down list, select **Absolute**.

   ▪ From the **When free space is** drop-down list, select **Below**.

   ▪ In the **Warning (GB)** field, type **10**.

- In the **Error (GB)** field, type **5**.

d. Click **Finish**.

6. Click **Save**.

More Information

For more information about alarm rules, see section Alarm Rules of the Veeam ONE Monitoring Guide. For the list of all alarm rules, see section Alarm Rules Reference of the Veeam ONE Monitoring Guide.

Configuring Alarm Notifications

To ensure you do not miss critical events or state changes in the managed infrastructure, you can configure Veeam ONE to send notifications when alarms are triggered. There are the following types of notification:

- Email notifications

- SNMP traps

In this scenario, you will configure email notifications. Email notifications contain basic information about the issue that caused the alarm. Veeam ONE can send notifications when a new alarm is triggered or when an existing alarm changes its status. To follow this scenario, you must have an SMTP server.

To configure email notifications:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. In the main menu, click **Notifications**.

   The **Notification Settings** wizard will open.

3. At the **Mail Server Settings** step of the wizard, specify the following details:

   o Select the **Enable email notifications** check box.

   o From the drop-down list, select **Custom SMTP (Basic authentication)**.

   o In the **SMTP server** field, specify DNS name or IP address of the SMTP server that must be used for sending email notifications.

      The default SMTP port number is 25.

   o In the **From** field, enter an email address of the notification sender.

      This email address will be displayed in the **From** field of the email header.

   To adjust other settings, click **Advanced** and do the following:

   o For an SMTP server with SSL support, select the **Connect using SSL** check box.

o If your SMTP server requires authentication, select the **Use authentication** check box and specify authentication credentials.
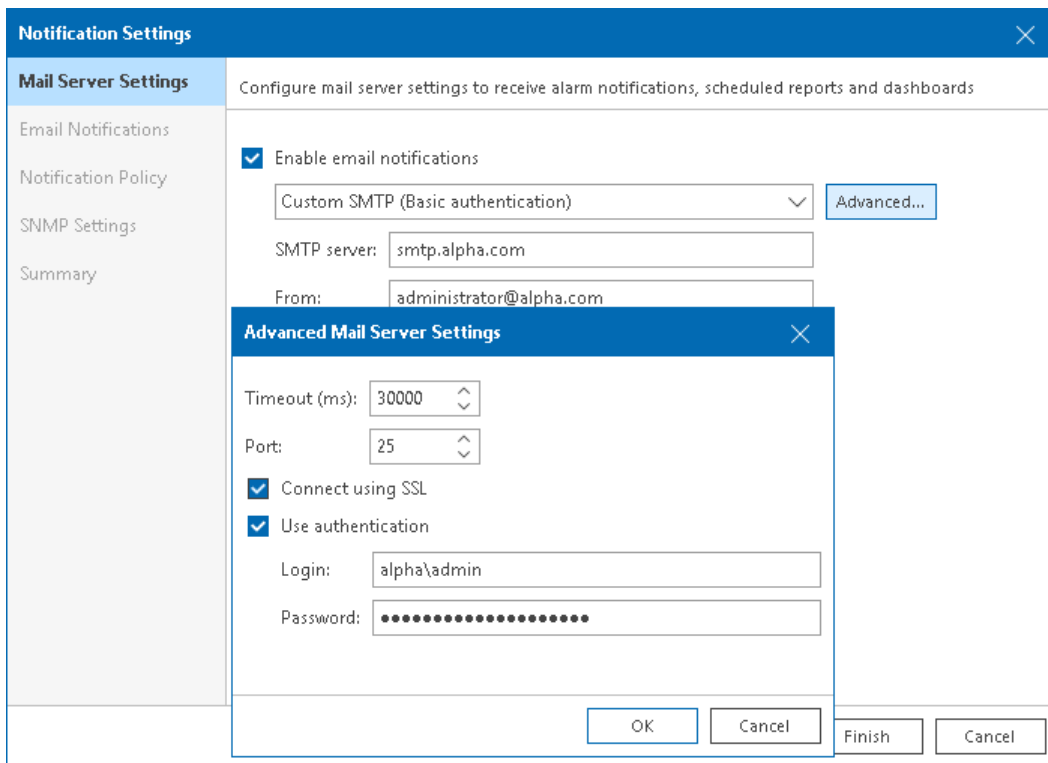
4. At the **Email Notifications** step of the wizard, specify the following details:

o In the **Add or remove recipient email addresses** field, specify the email address of the notification recipient and click **Add**.

Repeat this action for every recipient.

o From the **Notification Level** list, select the severity of alarms about which recipients must be notified
   (*Any state*, *Errors and warnings*, *Errors only*, *Resolved*).

5. Click **Finish**.

More Information

For more information about alarm notifications, see section Configuring Alarm Notifications of the Veeam ONE
Working with Alarms Guide.

Business View Categorization

To simplify the management of the connected infrastructure, Veeam ONE Client allows organizing virtual and backup infrastructure objects into categories and groups.

Category is a logical division of the infrastructure. Group is a collection of infrastructure objects that share same characteristics or match same criteria. You can think of a group as a tag assigned to an object. Each category includes one or more groups.

By default, Veeam ONE Client categorizes objects into predefined groups. To categorize objects into different groups, you can use the following methods:

- **Single-Parameter Categorization** — this method allows you to create groups automatically based on the values of a single property.

- **Multiple-Condition Categorization** — this method allows you to create groups manually by combining multiple properties and logical operators.

- **Grouping Expressions** — this method allows you to create groups based on properties, operators and methods included into expressions.

In this section, you will review the following examples:

- Creating Category and Groups Based on VCPU Count

- Creating Category and Groups Based on RAM and Guest OS Parameters

More Information

For more information about categorization, see section Business View of the Veeam ONE Monitoring Guide.

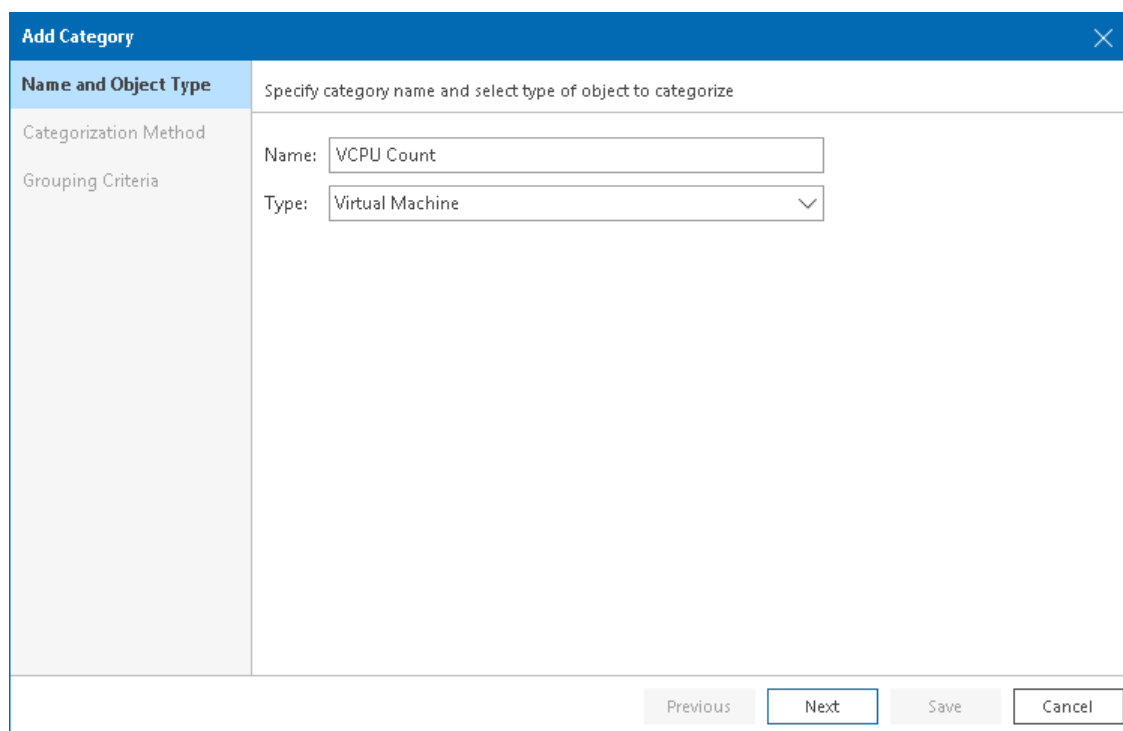# Creating Category and Groups Based on VCPU Count

To create a category based on a single parameter, you will select a property as a categorization condition. Veeam ONE Client automatically creates groups for each unique value of the selected property. All VMs with the same property value will fall into one group.

For this scenario you will categorize VMs based on vCPU count. To do that:

1. Open Veeam ONE Client.

   For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Business View**.

3. Launch the **Add Category** wizard. To do this:

   a. In the information pane, switch to the **Categories** tab.

   b. In the **Actions** pane, click **Add Category**.

   Alternatively, you can right-click anywhere in the inventory pane and choose **Add Category** from the shortcut menu.

4. At the **Name and Object Type** step, enter a category name and make sure that **Virtual Machine** is selected as the object type.
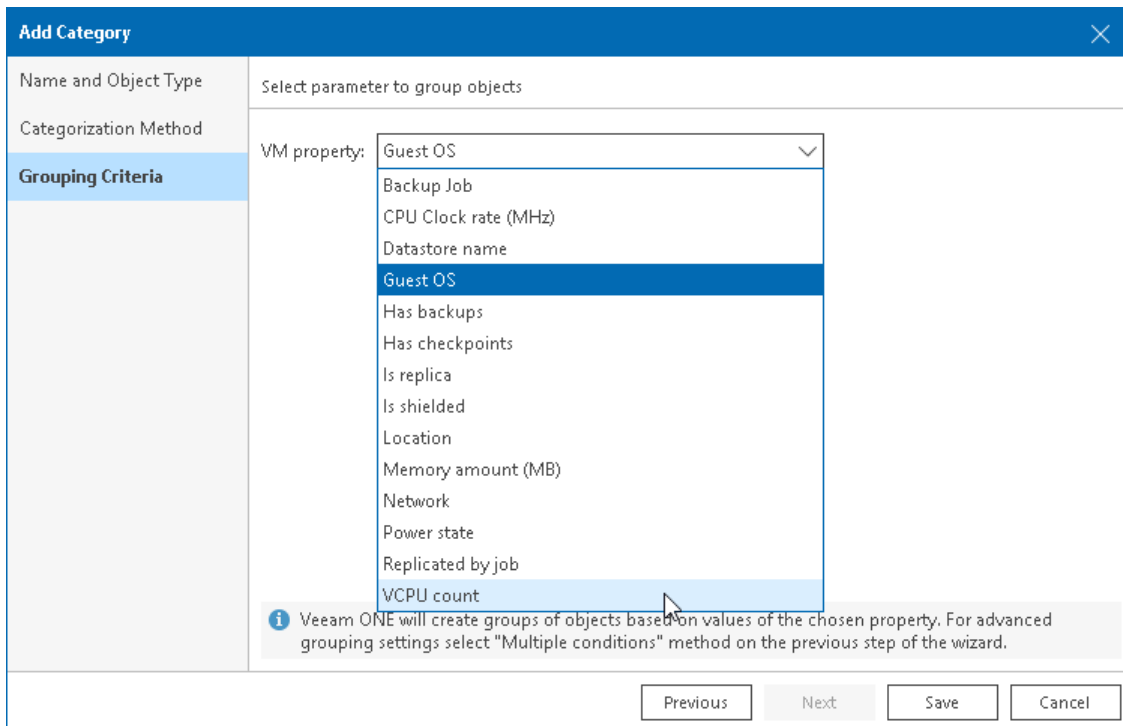
5. At the **Categorization Method** step, select the **Single parameter** option.
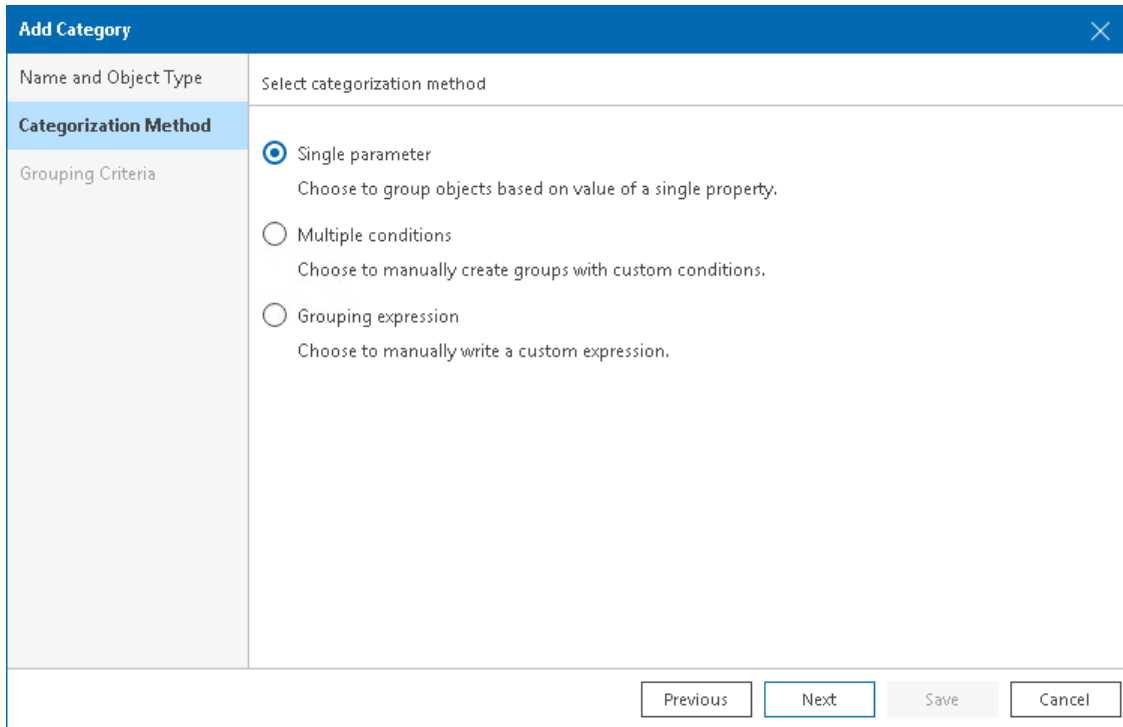
6. At the **Grouping Criteria** step, select **VCPU count** as VM property.

7. Click **Save**.

Veeam ONE Client will create an individual group for each unique value of the **VCPU count** property.

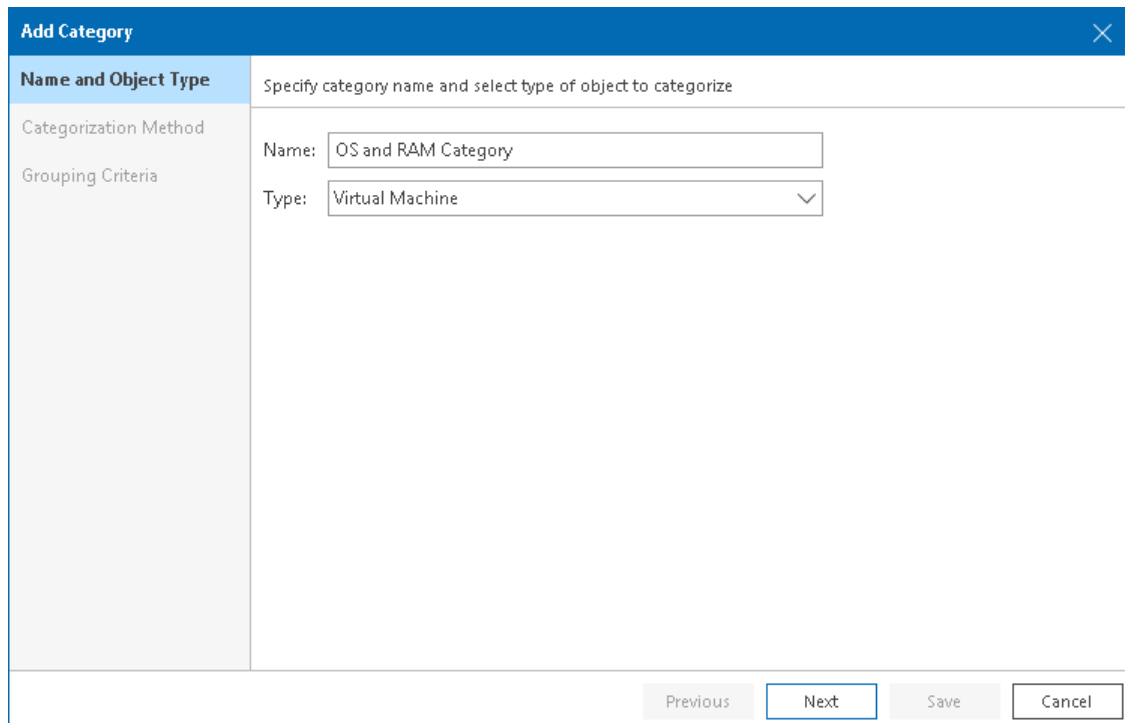# Creating Category and Groups Based on RAM and Guest OS Parameters

Veeam ONE allows combining multiple conditions to create groups. This method makes categories highly customizable, as each group within a category can have its own condition. Conditions can be based on different object properties and logical operators. For one group, you can specify one or more conditions and link them with the AND or OR operator.

In this scenario, you will create a category with the following groups: Windows VMs with 10 or less GB RAM and Linux VMs with more than 10 GB RAM. To do that:

1. Open Veeam ONE Client.

    For more information, see Accessing Veeam ONE Client.

2. At the bottom of the inventory pane, click **Business View**.

3. Launch the **Add Category** wizard. To do this:

    a. In the information pane, switch to the **Categories** tab.

    b. In the **Actions** pane, click **Add Category**.

    Alternatively, you can right-click anywhere in the inventory pane and choose **Add Category** from the shortcut menu.

4. At the **Name and Object Type** step, enter a category name and make sure that **Virtual Machine** is selected as the object type.

5. At the **Categorization Method** step, select the **Multiple conditions** option.

6. At the **Grouping Criteria** step, click **Add**. The **Add Group** wizard will open.

   a. At the **Group Name** step, enter a group name and description.

   b. At the **Grouping Conditions** step, set up the OS condition:

   ▪ From the **Property** drop-down list, select **Guest OS**.

   ▪ From the **Operator** drop-down list, select the **Contains**.

   ▪ In the **Value** field, type *Windows*.

c. Click **Add Condition** and set up the RAM conditions:

  ▪ From the **Property** drop-down list, select **Memory amount (MB)**.

  ▪ From the **Operator** drop-down list, select **<=**.

  ▪ In the **Value** field, type *10240*.

d. Click **Save**.

7. At the **Grouping Criteria** step, click **Add**.

  a. At the **Group Name** step, enter a group name and description.

  b. At the **Grouping Conditions** step, set up OS condition:

    ▪ From the **Property** drop-down list, select **Guest OS**.

    ▪ From the **Operator** drop-down list, select the **Contains**.

    ▪ In the **Value** field, type *Ubuntu*.

  c. Click **Add Condition** and set up condition for another OS option:

    ▪ From the **Property** drop-down list, select **Guest OS**.

    ▪ From the **Operator** drop-down list, select the **Contains**.
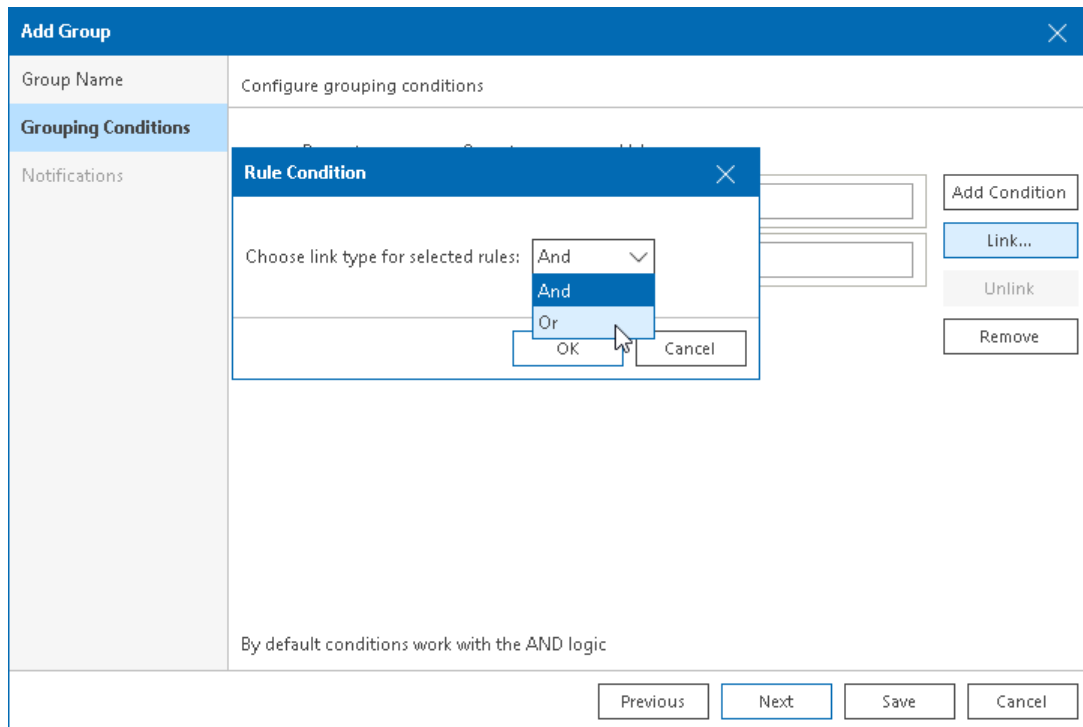
    ▪ In the **Value** field, type *CentOS*.

  d. To make both Ubuntu and CentOS VMs fall in one group, you will link these OS conditions. To do that:

    ▪ Select check boxes next to each **Guest OS** condition.

    ▪ Click **Link**.

- In the **Rule Condition** window, from the **Choose link type for selected rules** select **Or**.

e. Click **Add Condition** and set up RAM conditions:

- From the **Property** drop-down list, select **Memory amount (MB)**.

- From the **Operator** drop-down list, select **>**.

- In the **Value** field, type *10240*.

f. Click **Save**.

8. Click **Next** and at the **Export** step of the **Add Category** wizard, select **Do not create vSphere Tags**. Therefore, your VMware vSphere infrastructure remains with its current tags.

9. Click **Save**.

Assigning a Group Owner

You can receive notifications about alarms triggering for objects in multiple condition groups. Group owner is an email address that is assigned to a group to receive these notifications.

To assign a group owner:

1. At the bottom of the inventory pane, click **Business View**.

2. In the inventory pane, right-click the group and select **Edit Group** from the shortcut menu. The **Edit Group** wizard will open.

3. At the **Notifications** step of the wizard:

   a. Select check box next to **Email address** field.

   b. In the **Email address** field, specify the email address to which the notifications must be sent.

c. Click **Save**.

Add Group

Group Name

Grouping Conditions

Notifications

Specify group owner email address and alarm notification policy

☑ Email address: stephanie.brown@alpha.com

ⓘ *To receive notifications, you must enable sending emails to Business View group owner in the alarm notification settings*

Notification policy:

◉ Send email notification on every alarm

◯ Send periodical summary every   30 ⌄   minutes ⌄

Previous   Next   Save   Cancel

Reports and Dashboards

Veeam ONE Web Client is a part of the Veeam ONE solution that is designed for documenting and reporting on virtual and backup infrastructures.

Veeam ONE Web Client includes the following tools to help you with analysis, decision-making, chargeback, change tracking, capacity planning and optimization of resource utilization:

- Customizable predefined reports containing structured historical data.

- Entirely custom reports with various addable parameters to comply with your specific requirements.

- Predefined and custom dashboards that graphically represent collected data through sets of handy visual components.

- Deployment projects that simulate changes in infrastructure.

This section includes the following example scenarios:

1. Generating Protected VMs Report

2. Generating Custom Infrastructure Report

3. Generating Infrastructure Overview Offline Report for Visio

4. Scheduling Report

5. Reviewing Dashboards

Accessing Veeam ONE Web Client

To access Veeam ONE Web Client:

1. Open the Veeam ONE Web Client website by doing one of the following:

   o Double-click the **Veeam ONE Web Client** icon on the desktop.

   o In Veeam ONE Client, on the toolbar, click **Report** and select the necessary report in the list.

   o In the **Microsoft Windows Programs** menu, select **Veeam ONE Client**.

   o Open your web browser and enter the address similar to the following one:

      `https://webserver.domain.tld:1239`

      where `webserver.domain.tld` is the server name and domain of the machine where the Veeam ONE Web Services component is installed. `1239` is the port number.

   Note that Veeam ONE Web Client is available over HTTPS.

2. In the **Username** and **Password** fields, specify credentials of the local Administrator account on the machine where Veeam ONE Web Client is installed.
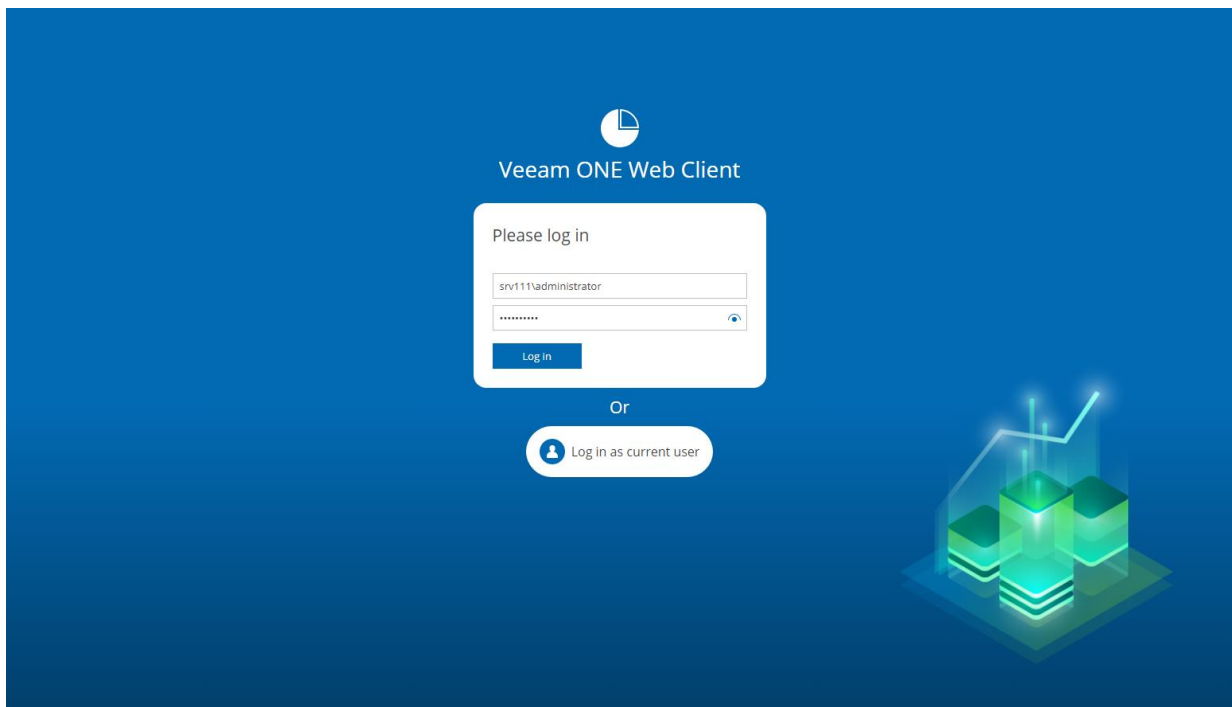
3. Click **Log in**.

Working with Reports

Veeam ONE Web Client reports are available in the **Reports** section. You can view reports in the web browser, export them to various formats (Excel, PDF, Word, Visio), or schedule automatic report delivery by email, to disk or a network share.

The left pane of the **Reports** section contains a hierarchy of report packs or folders organizing reports. The mid part of the **Reports** section displays the list of reports in the selected report pack or folder.

More Information

For details on the functionality of Veeam ONE Web Client, see the Reporting Guide.

Generating Protected VMs Report

Veeam ONE Web Client includes a set of predefined reports that analyze the managed environment from various aspects.

For this scenario, you will run and review the **Protected VMs** predefined report. A VM is protected if there is at least one valid backup or replica restore point that meets the designated RPO for it. The report helps you identify which VMs in your environment function without proper protection and make sure the existing backups and replicas meet established RPO requirements.

To generate a **Protected VMs** report:

1. Open Veeam ONE Web Client.

   For more information, see Accessing Veeam ONE Web Client.

2. Open the **Reports** tab.

3. In the hierarchy on the left, select the **Veeam Backup Monitoring** folder.

4. In the displayed list of reports, select the **Protected VMs** report.

5. You can specify the following report parameters:

   o **Scope (Infrastructure objects)**: defines a virtual infrastructure level and its sub-components.

   o **Scope (VM folders)**: defines a list of VMware folders to include in the report (applies to VMware vSphere environments only). VM folders view is an alternate way to present the virtual infrastructure. If VMs in your infrastructure are grouped into folders according to their profile, you can limit the report scope by specifying the necessary folders only.

   o **Scope (vCloud Director objects)**: defines vCloud Director components to analyze in the report.

   o **Scope (Business View objects)**: defines Business View groups to analyze in the report. You can select only objects of the Virtual Machine type.

   o **RPO** (Recovery Point Objective): defines the age of the latest backup or replica files required to resume normal operation if a system failure occurs. For example, to compile a list of VMs protected on a daily basis, you need to set the RPO value to 1 day.

   o **VM exclusion rule**: defines VMs to exclude from the report scope. You can enter VM names explicitly or create a wildcard mask by using the asterisk (*) to replace any number of characters. Multiple entries are separated by a semicolon. Usage example: the following string will exclude machines with the _R&D suffix from appearing in the report: "*_R&D".

   o **Job types**: defines job types that must be evaluated (*Backup*, *Replication*, *Backup Copy*, *vCD Backup*, *vCD Replication*, *All Items*).

   o **Exclude jobs**: defines a list of jobs to exclude from the report scope.

   o **Include VM templates in this report**: defines whether VM templates must be included in the report.

6. Click **Preview**.

   The report will open in a pop-up browser window.

   The navigation menu at the top of a report allows you to navigate the report.

The report includes the following elements:

- **Description**: report description

- **Report Parameters**: summarized report parameters

- **Summary**: protected and unprotected VMs overview, numerical data in the form of pie charts

- **Details**: detailed information about all VMs, VM restore points and last backups.

veeam

Protected VMs

Description

This report lists protected and unprotected VMware vSphere and Microsoft Hyper-V VMs including their last backup job status.
Note: VM replicas not protected by any Veeam Backup & Replication job are not accounted in this report.
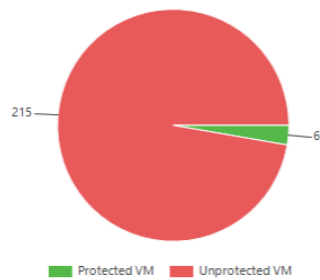
Report Parameters

Scope:	Virtual Infrastructure
RPO:	24 hours (1/7/2023 3:00:00 AM)
VM exclusion rule:	
Job types:	VM backup, Replication, Backup copy, Cloud Director backup, Cloud Director replication
Analyze VM templates:	No
Excluded jobs:	-

Summary

VMs Overview

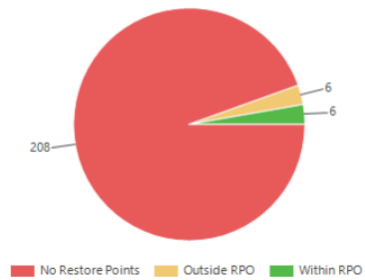|	
Total VMs:	228
Including VM Replicas:	7
Protected VMs:	6
With Backup:	6
With Replication:	0
Unprotected VMs:	215

Protected VMs

215 — 6

■ Protected VM ■ Unprotected VM

VM Last Backup State

4
2

■ Success ■ Warning

VM Last Backup Age

6
6
208

■ No Restore Points ■ Outside RPO ■ Within RPO

Save the configured report for further use. To do that, on the report configuration page:

1. Click **Save to**.

2. In the **Save Report** window, specify the report name and description.

3. Click **Save**.

   If you want to open the report after saving, click **Save and navigate to the saved report**.

Generating Custom Infrastructure Report

Veeam ONE allows you to create custom reports and include specific properties that are not covered in predefined reports.

For this scenario, you will configure the **Custom Infrastructure** report to present some in-depth information about your hosts:
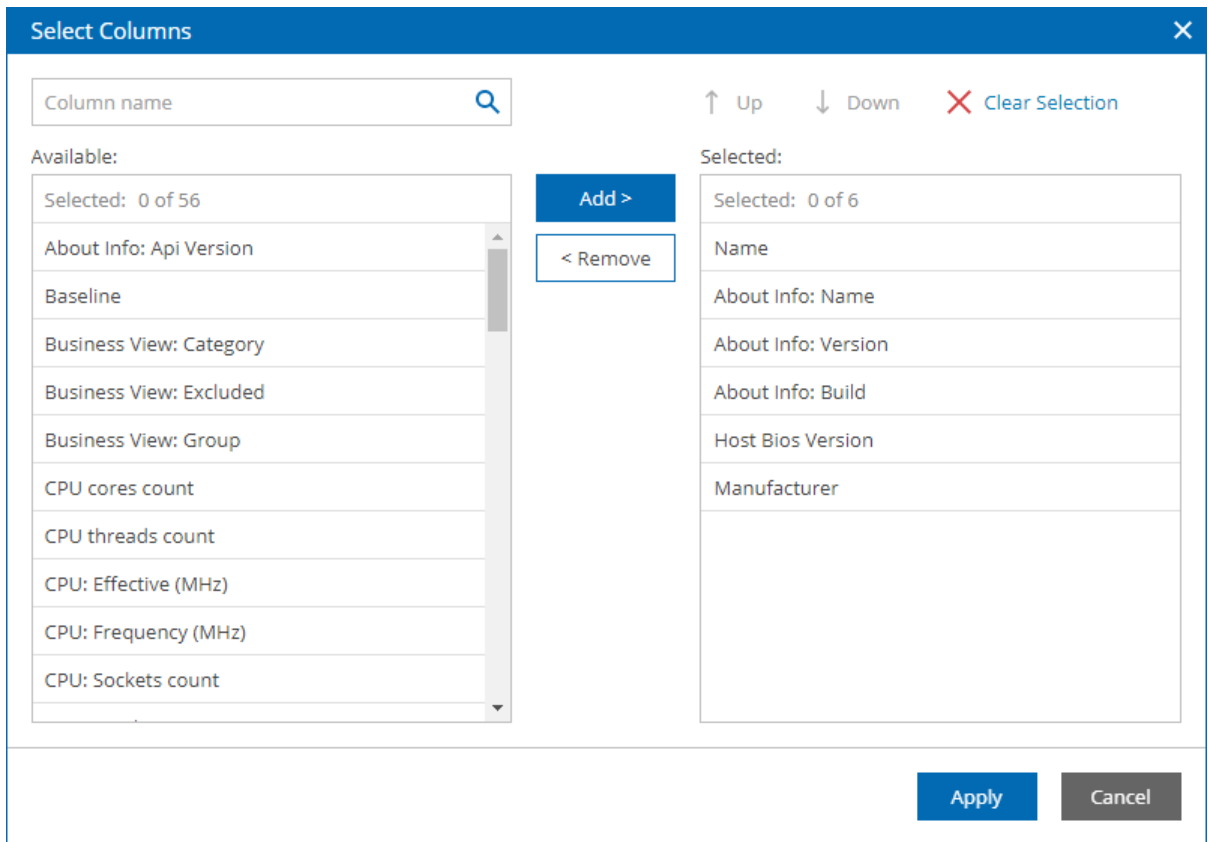
- Version

- Build

- Bios version

- Manufacturer

Before you begin, make sure you have hosts connected to Veeam ONE as described in the Connecting VMware vSphere Servers section.

To create the **Custom Infrastructure** report:

1. Open Veeam ONE Web Client.

   For more information, see Accessing Veeam ONE Web Client.

2. Open the **Reports** tab.

3. In the hierarchy on the left, select the **Custom Reports** folder.

4. In the displayed list of reports, select the **Custom Infrastructure** report.

5. Specify the following report parameters:

   o **Object type**: defines a list of objects to analyze in the report. Select the *vSphere Host System* option.

- o **Columns**: defines configuration properties to analyze in the report. The list of available properties will depend on the selected object type. Use the **Column name** field to search for the necessary properties by name. Select the *Name*, *About Info: Name*, *About Info: Version*, *About Info: Build*, *Host Bios Version* and *Manufacturer* properties in the **Available** list and click **Add**. After you add all columns, click **Apply**.

6. Click **Preview**.

   The report will open in a pop-up browser window.

Saving Reports

You can save the configured report for further use. To do that:

1. Click **Save to**.

2. In the **Save Report** window, specify the report name and description.

3. Click **Save**.

   If you want to open the report after saving, click **Save and navigate to the saved report**.

Save Report	✕
Specify report name, description, and target folder	

Name: `Custom Infrastructure`

Description:
```
Host Firmware Report
1/20/2023
```

Target folder: 📁 My reports

🖫 Save and navigate to the saved report   [Save]   [Cancel]

Generating Infrastructure Overview Offline Report for Visio

In addition to regular reports that open in a web browser and can be automatically delivered, Veeam ONE offers offline reports. This is a convenient way to view report data off-site, outside the local infrastructure or its networks.

To view offline reports, you must install Veeam Report Viewer:

1. Open Veeam ONE Web Client.

   For more information, see Accessing Veeam ONE Web Client.

2. Open the **Reports** section.

3. In the hierarchy on the left, select **Offline Reports**.

4. In the list of offline reports, click any report.

5. On the report page, click the **Veeam Report Viewer** link.

6. Download the `vmreportviewersetup.msi` installer file.

7. On the machine, where you want to install the Veeam Report Viewer, launch the installer file to start the **Veeam Report Viewer** setup wizard.

8. Follow the steps of the setup wizard to install Veeam Report Viewer.

In this scenario, you will generate the **Infrastructure Overview (Visio)** report for the VMware vSphere infrastructure. The infrastructure is presented with a set of diagrams that illustrate different views or inventories:

- Configuration inventory

- Storage inventory

- Network inventory

- Datastore utilization

- vMotion

> **NOTE:**
>
> To open and edit this report, you must have Microsoft Visio installed.
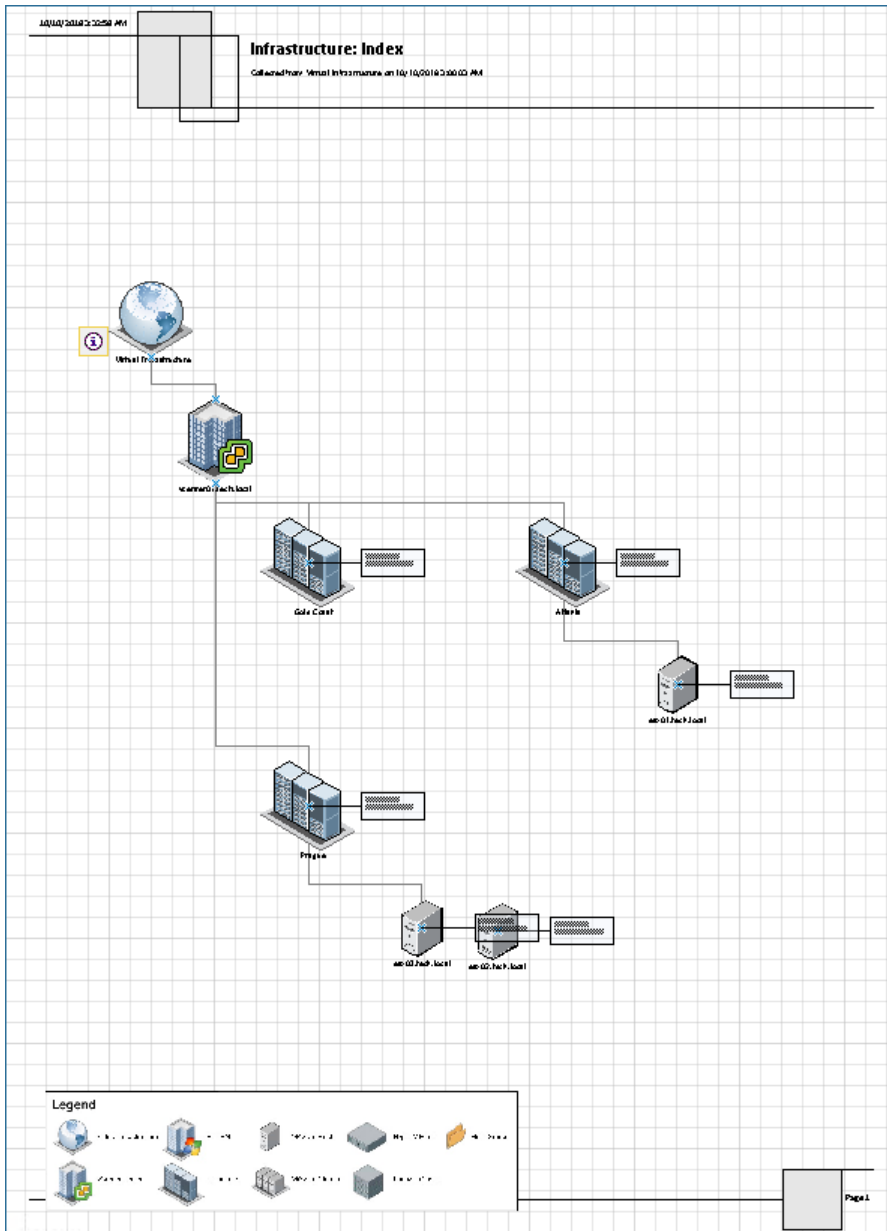
To generate the **Infrastructure Overview** report:

1. Open Veeam ONE Web Client.

   For more information, see Accessing Veeam ONE Web Client.

2. Open the **Reports** tab.

3. In the hierarchy on the left, select the **Offline Reports** folder.

4. In the displayed list of reports, select the **Infrastructure Overview (Visio)** report.

5. Select the **Show VMs** check box.

6. Click **Preview**.

   Veeam ONE Web Client will generate a file with the VMR extension and save it to the download location.

7. Open the downloaded file on the machine where Veeam Report Viewer is installed.

   Veeam Report Viewer will process data in the VMR report and prepare the output. The output contains data viewable in Microsoft Visio.

Scheduling Report

You can receive reports automatically on schedule. You can choose to receive reports by email, save reports to a disk or network share. This option is available for one report or for a number of reports included in a report folder. Note that you can only schedule delivery for saved reports.

For this scenario, you will schedule a daily report delivery by email in `.pdf` format. To do that:

1. Open Veeam ONE Web Client.

   For more information, see Accessing Veeam ONE Web Client.

2. Open the **Reports** tab.

3. Open the **Saved Reports** tab.

4. In the hierarchy on the left, navigate to the *My reports* folder.

5. Click the report that you want to schedule.

6. Click **Schedule**.

7. In the **Report Scheduling Settings** window, click **Add**.

   The **Add Schedule** wizard will open.
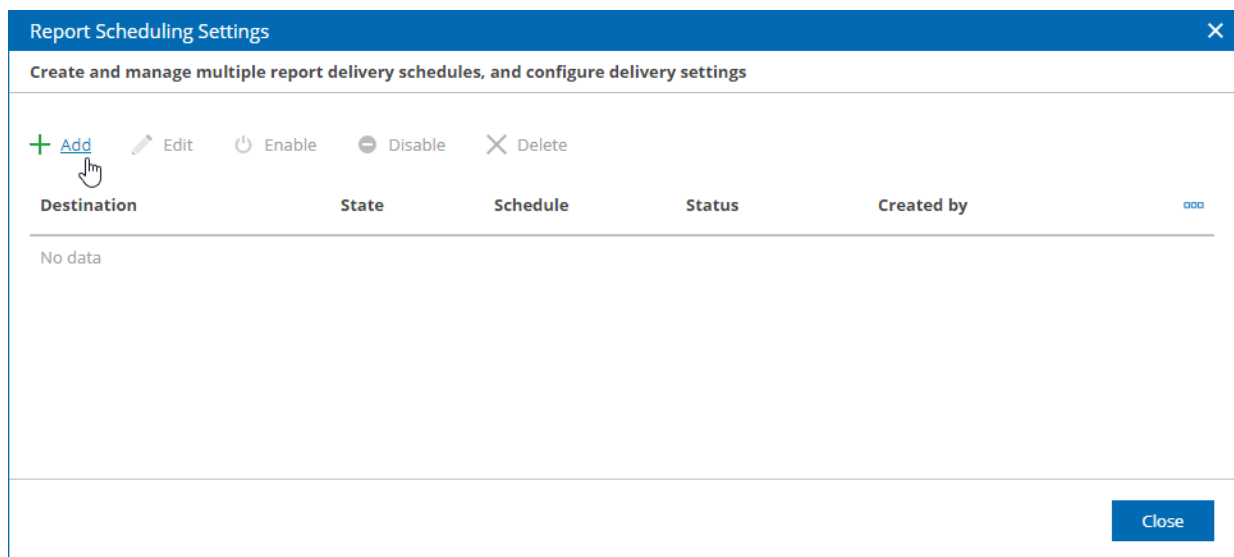
8. On the **Schedule** step of the wizard:

   a. Select **Daily at**.

   b. In the field on the left, specify the time of delivery.

   c. In the list on the right, select **All days**.

d. Click **Next**.

9. On the **Delivery** step of the wizard, clear the **Save to a folder** check box and click **Next**.

10. On the **Recipients** step of the wizard, specify the email address to which the reports must be sent and click **Finish**.

11. Click **Close**.

More Information

For more information about scheduling reports, see section Configuring Delivery Schedules of the Veeam ONE Reporting Guide.

Reviewing Dashboards

Veeam ONE Web Client dashboards provide an overall view of the managed infrastructure. Every dashboard includes a set of widgets. Widgets are visual modules that portray various aspects of the managed environment in the form of charts, graphs or tables. By aggregating several widgets on a single screen, dashboards allow you to focus on critical areas of the managed environment, track dependencies and interrelated aspects.

Veeam ONE Web Client dashboards are available in the **Dashboards** section. For this scenario, you will review the **Veeam Backup and Replication** dashboard which provides information on the state of the key backup infrastructure components.

To open the **Veeam Backup and Replication** dashboard:

1. Open Veeam ONE Web Client.

   For more information, see Accessing Veeam ONE Web Client.

2. Open the **Dashboards** tab.

3. Click the **Veeam Backup and Replication** dashboard preview image.

The **Veeam Backup and Replication** dashboard includes the following widgets:

- **Backup Infrastructure Inventory**. This widget shows the types of objects in your backup infrastructure, the number and health states of objects of each type.

- **Backup Window**. This widget shows the total duration of daily backup and replication job sessions.

- **Jobs Status**. This widget displays information on successfully completed jobs and the number of jobs that completed with warnings and errors.

- **Protected VMs Overview**. This widget displays counters for VMs protected with backup and replication jobs.

- **Top Jobs by Duration**. This widget displays 10 jobs with the longest duration, job completion status and the average weekly duration.

   Arrows on the right show how job duration has changed over the previous week. A gray arrow pointing right next to the **Duration** value means that duration of the job has not changed over the past week, a green arrow pointing down means that job duration has decreased, while a red arrow pointing up means that job duration has increased.

- **Top Repositories by Used Space**. This widget displays 10 repositories that will run out of free space sooner than other repositories, as well as total capacity and free space left on these repositories. The widget also forecasts how many days remain before the repositories will run out of free space.

   Arrows on the right show how the repository free space value has changed over the previous week. They have similar meanings to those in the **Top Jobs by Duration** widget.

Generating Reports from Widgets

Most widgets represent information associated with the respective report. For example, the **Protected VMs Overview** widget is based on the **Protected VMs** report. You can generate a the report to analyze data in a more detailed way or with different parameters.

To generate the **Protected VMs** report:

1. From the menu at the top right corner of the **Protected VMs Overview** widget, select **View Full Report**. The report window will open.
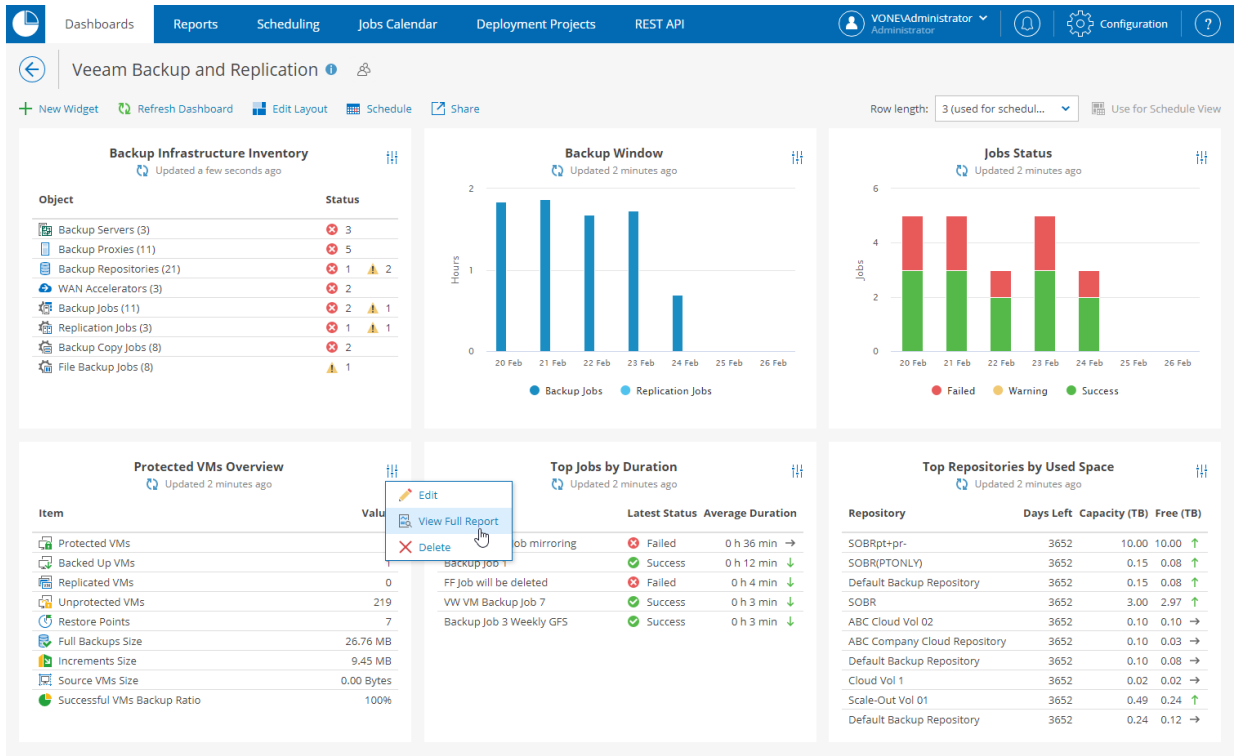
2. Change the settings as in the Generating Protected VMs Report section if needed.

3. Click **Preview**.

Note that all the changes you apply to the report will not be implemented in the widget.

More Information

For more information about dashboards, see sections Dashboards and Predefined Veeam ONE Dashboards of the Veeam ONE Reporting Guide.