

Veeam ONE v12
Common Criteria Evaluated Configuration Guide
(CCECG)

Version 1.0
July 9, 2023

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Introduction

The Veeam Availability Suite™ is an application suite consisting of two components: Veeam Backup & Replication and Veeam ONE. Veeam Backup & Replication provides cloud, virtual and physical backup and recovery options as well as image-based virtual machine (VM) replication from a VM or backup. Veeam ONE provides real-time monitoring, reporting and intelligent tools for Veeam Backup & Replication, VMware vSphere, and Microsoft Hyper-V.

Document Purpose and Scope

This document provides supplementary administrative guidance for the Veeam ONE v12.

- Monitoring Guide: Veeam ONE Version 12, Monitoring Guide, July, 2023 [Monitor]
- Reporting Guide: Veeam ONE Version 12, Reporting Guide, July, 2023 [Report]
- Quick Start Guide: Veeam ONE Version 12 Quick Start Guide May, 2023 [QuickStart]
- Deployment Guide: Veeam ONE Version 12a, Deployment Guide, July, 2023 [Deploy]
- Common Criteria Hardening Guide for v12 [HardGuide]

This document describes procedures on how to operate and prepare the Veeam ONE v12 to meet its Common Criteria evaluated configuration. This document is referred to as the operational user guide in the Protection Profile for Application Software, v1.4 2021-10-07 [SWAPP], and supplements the other product documentation listed above to meet the required guidance assurance activities.

TOE Overview

Veeam® ONE™, a part of the Veeam Availability Suite™ provides a monitoring and analytics solution for backup, virtual and physical environments, providing support for Veeam Backup & Replication™ and Veeam Agents, as well as VMware, Hyper-V and Nutanix AHV.

Veeam ONE features include:

- Built-in Intelligence: Identify and resolve common infrastructure and software misconfigurations before operational impact.
- Governance & Compliance: Organizations know their data protection posture instantly through consistent monitoring and reporting on backup SLA compliance
- Intelligent Automation: Machine Learning-based diagnostics as well as remediation actions to resolve issues faster.
- Forecasting and planning: Visibility into the costs of compute, storage, and backup repository resources to forecast utilization rates and resource requirements

Veeam ONE relies on a client-server architecture to work effectively in environments of any size and complexity. The Veeam ONE architecture includes the following structural components:

Veeam ONE Server: Veeam ONE Server is responsible for collecting data from virtual and Veeam Backup & Replication 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 to obtain real-time virtual infrastructure performance data and data protection statistics.

Veeam ONE Agent: Veeam ONE agent is a component that enables communication with Veeam Backup & Replication servers, performs collection of event logs and infrastructure information, and sends remediation commands.

Veeam ONE Agent can work in the following modes:

- **Server:** In this mode, Veeam ONE agent is responsible for analyzing VBR event log data, infrastructure information and signature updates.
Veeam ONE Agent Server is included into Veeam ONE installation package and deployed on the machine running Veeam ONE Server during product installation.
- **Client:** In this mode, Veeam ONE agent is responsible for collecting logs and executing remediation actions on Veeam Backup & Replication servers.
Only Veeam ONE Agent configured in Server mode is in scope for this evaluation.
 - **Veeam ONE Web Client** provides a set of dashboards and reports that allow an administrator to verify configuration issues, optimize resource allocation and utilization, track implemented changes, plan capacity growth and track whether workloads are properly protected in the virtualized datacenter.

Veeam ONE's supporting environment includes the following systems.

- **Veeam Backup & Replication host:** runs the VBR application.
- **Microsoft SQL Server:** Veeam ONE database is hosted on a Microsoft SQL Server that can run remotely or can be co-installed with other Veeam ONE components. The repository stores data used by product components.
- **Windows Workstation:** connects to Veeam ONE to view event logs and infrastructure information.

Evaluated Configuration

For this evaluation, the TOE and Microsoft SQL Server (providing the database for Veeam ONE) are installed on a single Windows Server.

The TOE is installed on a single Windows Server with the following minimum requirements.

Physical Boundaries

The TOE is installed on a single Microsoft Windows Server 2019 with the following minimum requirements.

Table 1 Windows Server Minimum Requirements for Veeam ONE

Item	Minimum Requirements
CPU	8 vCPUs (minimum) – 16 vCPUs (recommended) for Veeam ONE Server, Microsoft SQL Server (Veeam ONE Database).
Memory	8 GB (minimum) – 16 GB (recommended) for Veeam ONE Server, Microsoft SQL Server (Veeam ONE Database)
Hard Disk Space	50 GB for product operation and Microsoft SQL Server (Veeam ONE Database)
OS	Only 64-bit versions of the following operating systems are supported: Microsoft Windows Server 2019
Software	The following components are included in the Veeam ONE setup package and can be installed automatically: <ul style="list-style-type: none"> Microsoft .NET Framework 4.7.2 or later Microsoft .NET Runtime 6.0.14 Microsoft Visual C++ 2015-2019 Redistributable (x64) Microsoft System CLR Types for SQL Server 2014 Microsoft SQL Native Client 2012 Microsoft SQL Server 2014 Management Objects Microsoft SQL Server 2012 Management Objects Microsoft OLE DB Driver for SQL Server Microsoft XML 6.0 Parser and SDK Microsoft ASP.NET Core Shared Framework 6.0.14 Microsoft Universal C Runtime

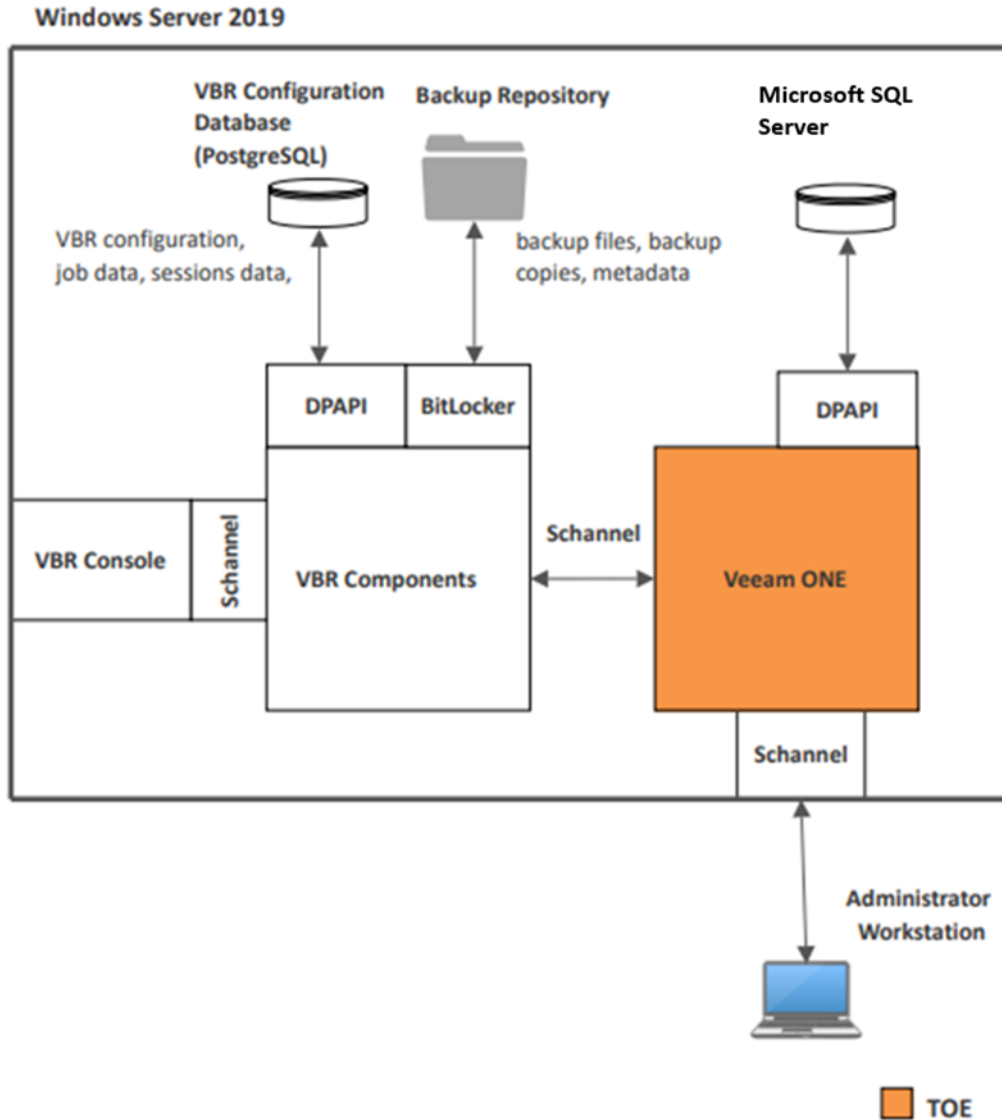
The TOE was installed on a platform with Windows Server 2019 Standard edition. The platform processor was the Intel Xeon Gold 6126 CPU @ 2.60 GHz. The processor is included in the Skylake microarchitecture.

CAVP certificate A2014 identifies Microsoft Windows Server 2019 (64-bit) on Intel Xeon Silver 4114 with AES-NI and without SHA extensions. The Intel Xeon Silver 4114 also implements the Skylake microarchitecture. Therefore, for the purpose of this evaluation the processors may be considered equivalent.

The following requirements must be satisfied by other equipment in the OE.

Required Item	Veeam ONE Infrastructure Component	Description
A Workstation	A computer with a web browser.	Used for a remote connection that the administrator uses to connect to the Veeam ONE UI.

Required Item	Veeam ONE Infrastructure Component	Description
Microsoft SQL Server		<p>Veeam ONE database is hosted on a Microsoft SQL Server that can run remotely or can be co-installed with other Veeam ONE components. The repository stores data used by product components.</p> <p>For this evaluation both Microsoft SQL Server and Veeam are installed on the same host.</p>
Veeam Backup and Replication v12	One instance of VBR.	<p>One instance of VBR. Veeam ONE connects to VBR to retrieve event logs about backup and recovery tasks performed by VBR and infrastructure information of the hosts VBR connects to.</p> <p>For this evaluation both VBR and Veeam are installed on the same host.</p>



Logical Boundaries

The TOE provides the security functionality required by [SWAPP].

The Target of Evaluation (TOE) for the Veeam ONE v12 consists of the mandatory functionality prescribed by the [SWAPP].

The logical boundary is summarized below. In general, the following Veeam ONE v12 capabilities are considered to be within the scope of the TOE:

- **Cryptographic Support**

The TOE invokes platform-provided cryptography to protect data in transit and at rest.

- **User Data Protection**

The TOE accesses the minimum amount of Windows Server hardware and data in order to perform its function. Database connectivity information is stored in the Registry, and other TOE configuration information is saved in the SQL database.

- **Security Management**

Both the TOE binary components themselves and the configuration settings they use are stored in locations recommended for Microsoft Windows Server.

The TOE includes a console UI and remote administration via the platform-provided web server (IIS). Users must login to Windows and have permissions to access the UI in order to access the TOE.

Administrators may configure which VBR instances have their Event Logs analyzed by the TOE, and access reports resulting from that analysis.

- **Privacy**

The TOE does not handle personally identifiable information (PII) of any individuals.

- **Protection of the TSF**

The TOE enforces various mechanisms to prevent itself from being used as an attack vector to its Windows platform. The TOE implements address space layout randomization (ASLR), does not allocate any memory with both write and execute permissions, does not write user-modifiable files to directories that contain executable files, is compiled using stack overflow protection, and is compatible with the Windows Defender security features of its host platform.

The TOE contains libraries and invokes system APIs that are well-known and explicitly identified.

The TOE has a mechanism to display its current software version. The TOE can be used to determine if software updates for it are available. If so, an administrator uses out of band mechanisms to securely acquire, validate and install the update.

The TOE developer provides a secure mechanism for receiving reports of security flaws. Product vulnerabilities are tracked and addressed. Availability of updates is announced via email sent to customers as well as via the Veeam website.

- **Trusted Path/Channels**

The TOE protects data in transit with remote administrators by invoking the platform-provided IIS.

Assumptions

The following assumptions were drawn from the [SWAPP].

Assumption	Description
A.PLATFORM	The TOE relies upon a trustworthy computing platform with a reliable time clock for its execution. This includes the underlying platform and whatever runtime environment it provides to the TOE.
A.PROPER_USER	The user of the application software is not willfully negligent or hostile, and uses the software in compliance with the applied enterprise security policy.
A.PROPER_ADMIN	The administrator of the application software is not careless, willfully negligent or hostile, and administers the software in compliance with the applied enterprise security policy.

Functionality Excluded From the Evaluation Configuration

The following components/functionality/configurations/tools are excluded from the evaluated configuration.

- Veeam ONE includes the ability to monitor Veeam Backup & Replication (VBR) and VMware vSphere, VMware vCloud Director and Microsoft Hyper-V. Only monitoring of VBR is included in the evaluated configuration.
- Veeam ONE Agent Client is excluded from the evaluated configuration.

Software Download, Installation and Configuration

Download and Installation

See [Guide] for download and installation instructions.

See [Guide] Section **Installing Veeam ONE > All-in-One Installation**

In the all-in-one deployment scenario, all Veeam ONE components are installed on a single machine.

Step 1. Obtain Installation Image File

Download the Veeam ONE installation image file at <https://www.veeam.com/downloads.html>.

Step 2. Insert Disk or Mount Image File

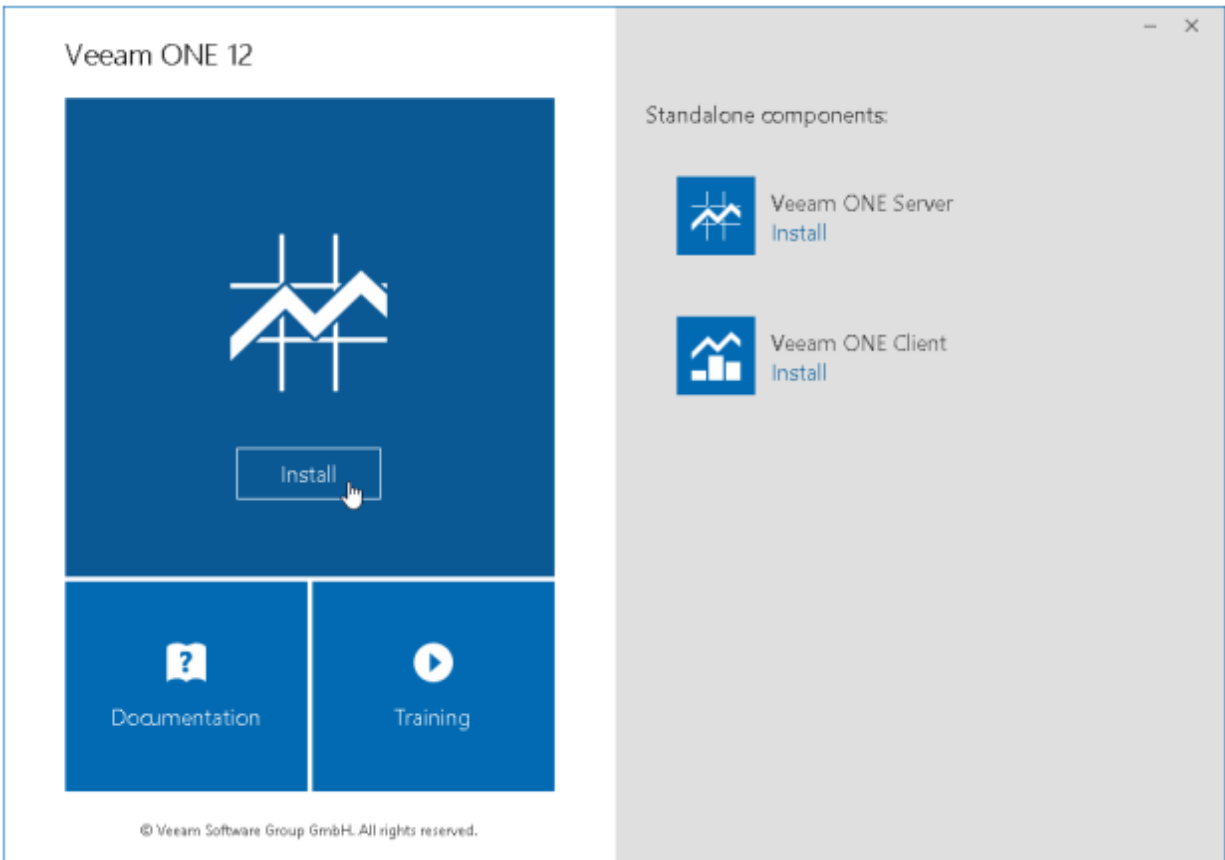
Burn the downloaded ISO image file to a CD/DVD or mount the installation image using disk image emulation software.

Step 3. Launch Splash Window

After you mount or insert the disk with Veeam ONE installation image, **Autorun** will open a splash screen with installation options. On the splash window, do one of the following to launch the **Veeam ONE Setup** wizard:

- Click **Install** on the left
- Click **Veeam ONE Server** on the right

If **Autorun** is disabled, run the **Setup.exe** file from the installation image. Alternatively, you can right-click the new disk in **My Computer** and select **Execute Veeam ONE Autorun**.



Note: The installer will verify what version of .NET Framework is currently present on the machine. If the required version is not found, the installer will prompt to automatically install .NET Framework software that is included with the Veeam ONE installer. After the completion of .NET Framework installation, Veeam ONE installation will proceed.

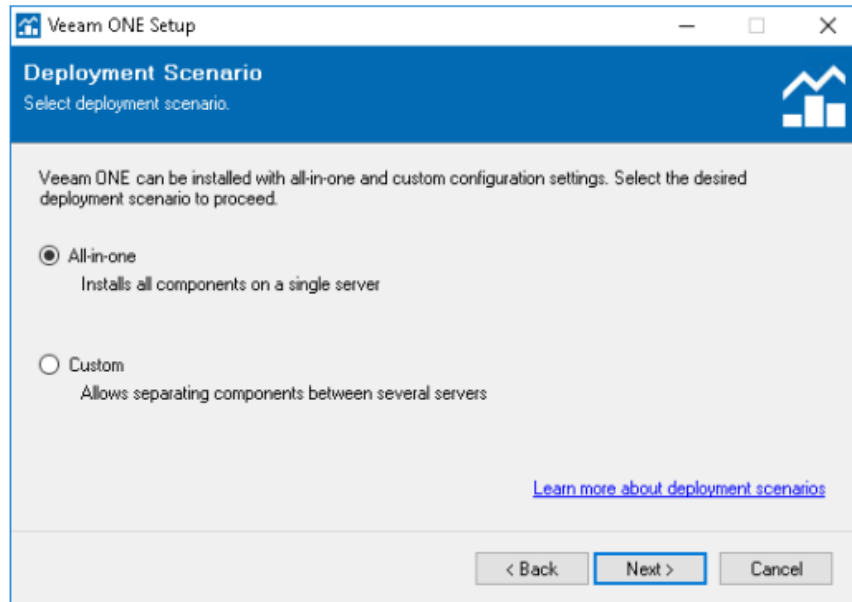
Step 4. Accept License Agreements

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**.

Step 5. Choose Setup Type

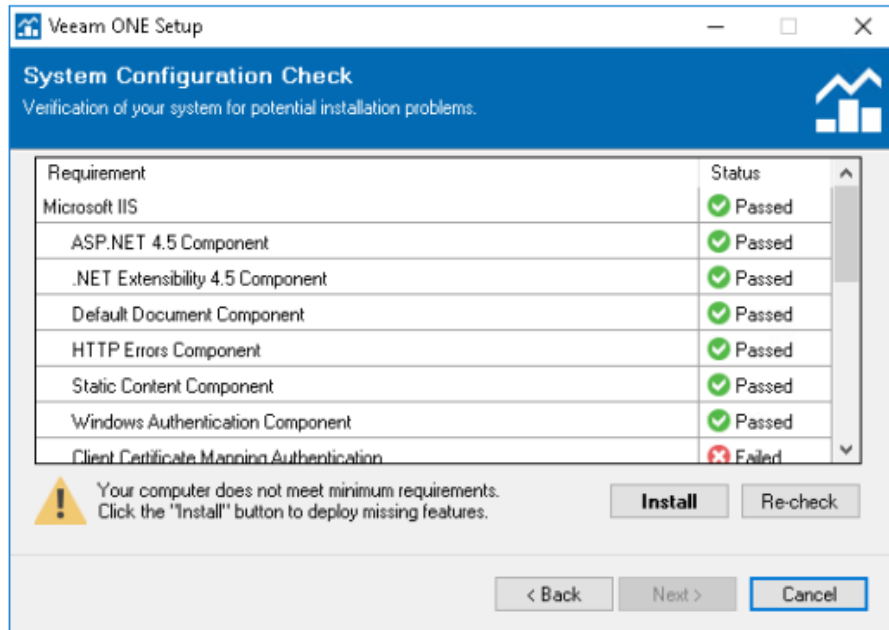
At the Deployment Scenario step of the wizard, select **All-in-one** as a preferred deployment mode.



Step 6. Perform System Configuration Check

Before proceeding with the installation, the installer will perform system configuration check to determine if all prerequisite software is available on the machine.

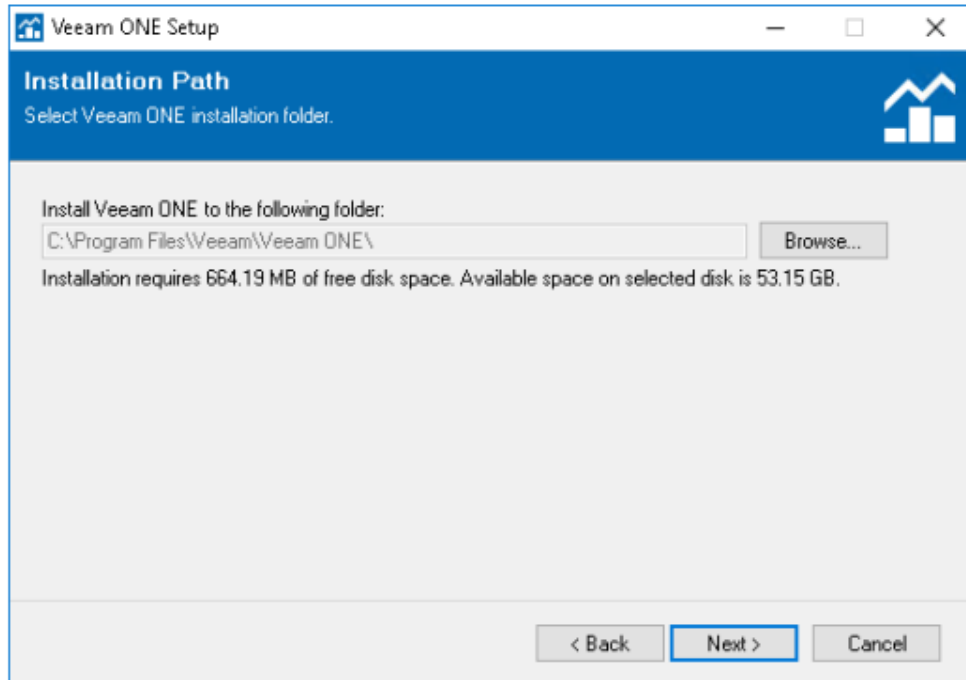
If some of the required software components are missing, the setup wizard will offer you to install the missing software components and enable missing features automatically.



To install the missing software components and enable missing features automatically, click the **Install** button.

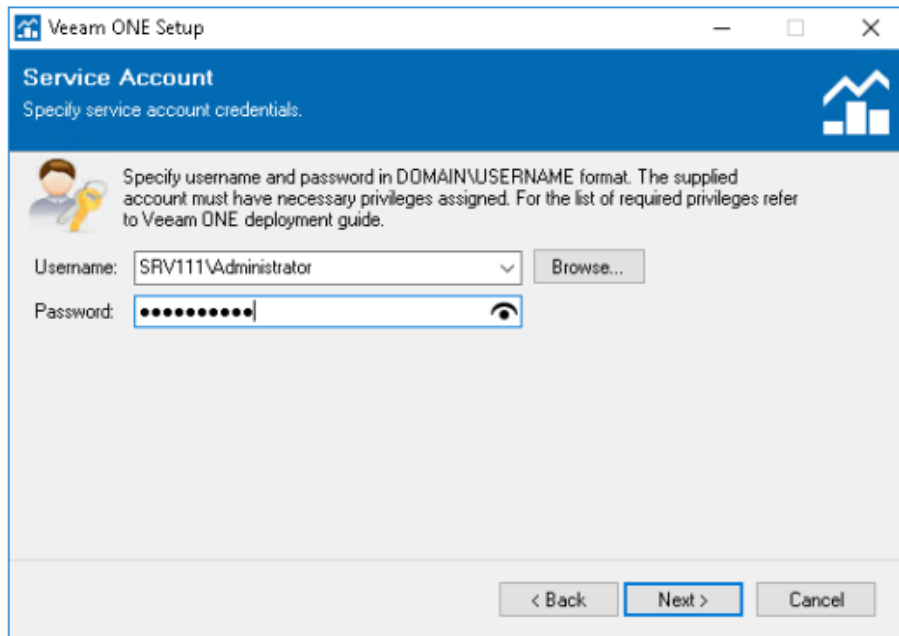
Step 7. Choose Installation Directory

At the **Installation Path** step of the wizard, choose the installation directory. In the typical installation mode, the setup installs all components to a single directory and creates a subdirectory for every Veeam ONE component.



Step 8. Specify Service Account Credentials

At the Service Account step of the wizard, specify credentials of the account under which the Veeam ONE services will run. The user name must be specified in the DOMAIN\USERNAME format.



Step 9. Choose Microsoft SQL Server

At the SQL Server Instance step of the wizard, choose a Microsoft SQL Server instance that will host the Veeam ONE database.

- If you do not have a Microsoft SQL Server instance that you can use for Veeam ONE database, select the Install new instance of SQL Server option.

If this option is selected, the setup will install Microsoft SQL Server 2017 Express locally, on the computer where you are installing Veeam ONE.

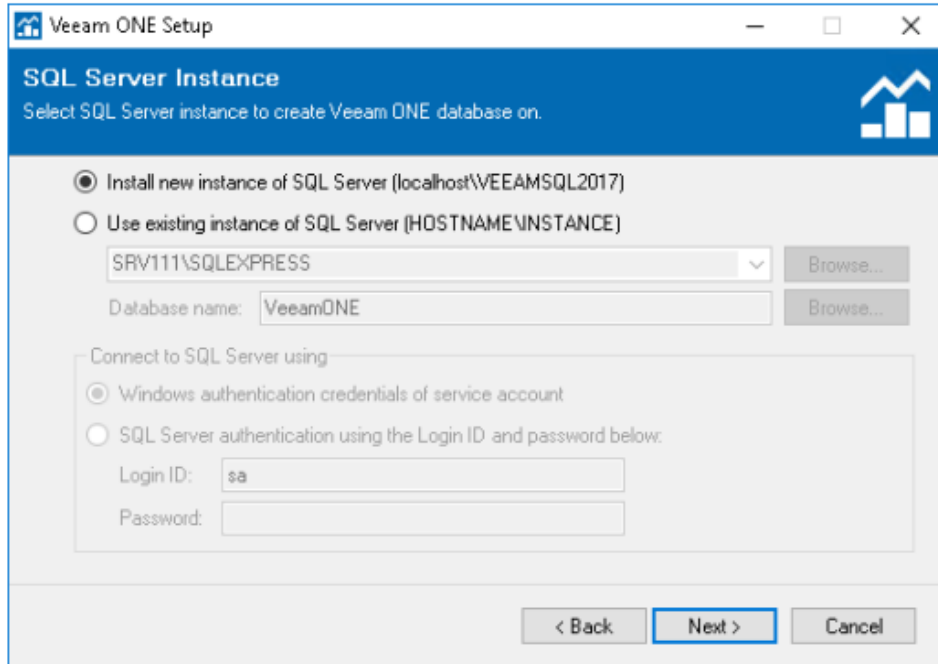
- If you want to use an existing local or remote Microsoft SQL Server instance, select the **Use existing instance of SQL Server** option and choose a local Microsoft SQL Server instance or browse to a Microsoft SQL Server instance running remotely. You can enter the address of a preferred Microsoft SQL Server manually or use the **Browse** button to choose among available remote instances.

In the Database name field, specify the name of the database that will be created by Veeam ONE. Provide credentials for the account that will be used by Veeam ONE components to access the database. You can enter credentials explicitly or use Windows authentication credentials of the Veeam ONE service account to connect to the Microsoft SQL Server.

- If you already have an existing Veeam ONE database that you want to use in your deployment, select the **Use existing instance of SQL Server** option and choose a Microsoft SQL Server

instance that hosts the database. This can be a database that you have previously created with a SQL script. In the Database name field, specify the name of the database.

- Provide credentials for the account that will be used by Veeam ONE components to access the database. You can enter credentials explicitly or use Windows authentication credentials of the Veeam ONE service account to connect to the Microsoft SQL Server.

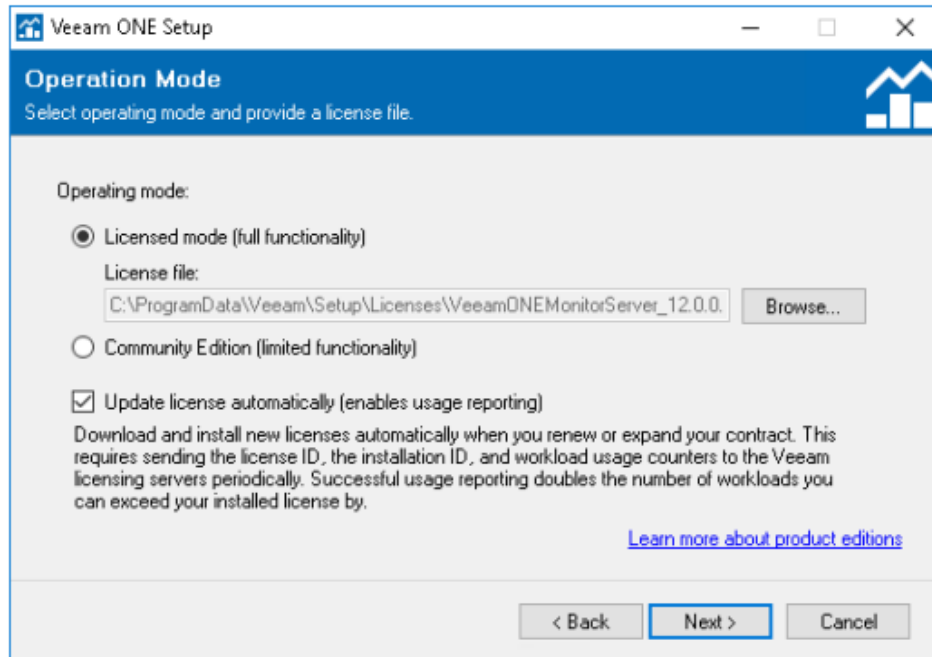


The screenshot shows the 'Veeam ONE Setup' window, specifically the 'SQL Server Instance' step. The window title is 'Veeam ONE Setup' and the subtitle is 'SQL Server Instance'. Below the subtitle, it says 'Select SQL Server instance to create Veeam ONE database on.' There are two radio button options: 'Install new instance of SQL Server (localhost\VEEAMSQL2017)' which is selected, and 'Use existing instance of SQL Server (HOSTNAME\INSTANCE)'. Under the second option, there is a dropdown menu showing 'SRV111\SQLEXPRESS' and a 'Browse...' button. Below that is a text field for 'Database name:' containing 'VeeamONE' and another 'Browse...' button. A section titled 'Connect to SQL Server using' contains two radio button options: 'Windows authentication credentials of service account' which is selected, and 'SQL Server authentication using the Login ID and password below:'. Under the second option, there are text fields for 'Login ID:' containing 'sa' and 'Password:'. At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'.

Step 10. Choose Operation Mode

At the **Operation Mode** step of the wizard, provide a license file. Select the **Licensed mode** option, click **Browse** and specify the path to the license file.

To install new licenses automatically when you renew or expand your contract, select the Update license automatically check box.

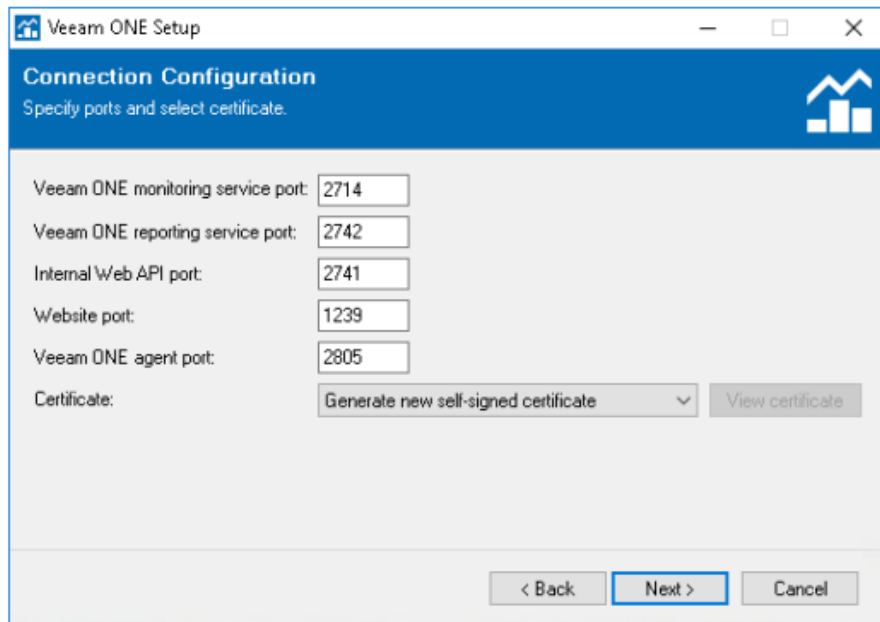


Step 11. Specify Connection Ports

At the **Connection Configuration** step of the wizard, specify connection settings for Veeam ONE components, Veeam ONE Web API and Veeam ONE agent:

- In the **Veeam ONE monitoring service port** field, type a number of the port that will be used to interact with Veeam ONE Monitoring service.
The default port number is 2714.
- In the **Veeam ONE reporting service port** field, type a number of the port that will be used to interact with Veeam ONE Reporting service.
The default port number is 2742.
- In the **Internal Web API** port field, type a number of the port that will be used by Veeam ONE Monitoring service and Web Services component to interact with Veeam ONE Reporting service.
The default port number is 2741.
- In the **Website port** field, type a number of the port that will be used to access the Veeam ONE Web Client through a web browser.
The default port number is 1239.
- In the **Veeam ONE agent** port field, type a number of the port that Veeam ONE Agent will use to collect data from connected Veeam Backup & Replication servers.
The default port number is 2805.

- In the **Certificate list**, choose a certificate that will be used to secure traffic between the web browser, Veeam ONE Web Services and Veeam ONE Reporting service.



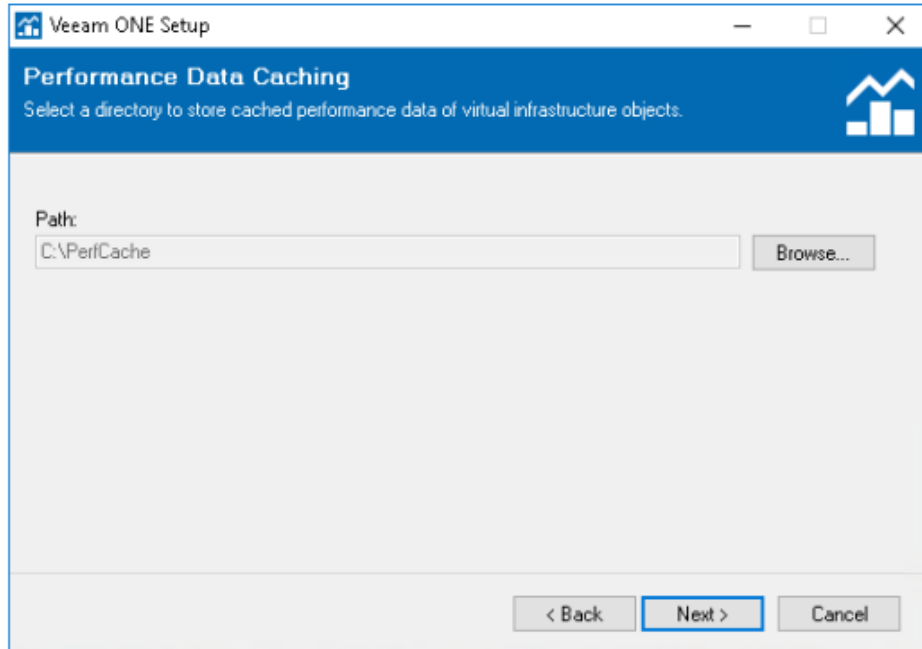
Most of the communication ports are not visible to the outside world since the VBR and Veeam ONE are installed on the same platform in the evaluated configuration.

Step 12. Choose Performance Cache Location

At the **Performance Data Caching** step of the wizard, choose a directory where the performance cache must be located.

Performance cache is space on disk to which Veeam ONE stores real-time performance data, as this data is collected. Performance data stored in cache is used for Veeam ONE Client dashboards and views. Disk-based performance cache allows significantly decreased RAM utilization on the machine that runs the Veeam ONE Server component.

By default, the performance cache is stored to the C:\PerfCache folder. To store the cache to a different folder, click Browse next to the Path field and specify a path to the new folder.



Step 13. Choose Data Collection Mode

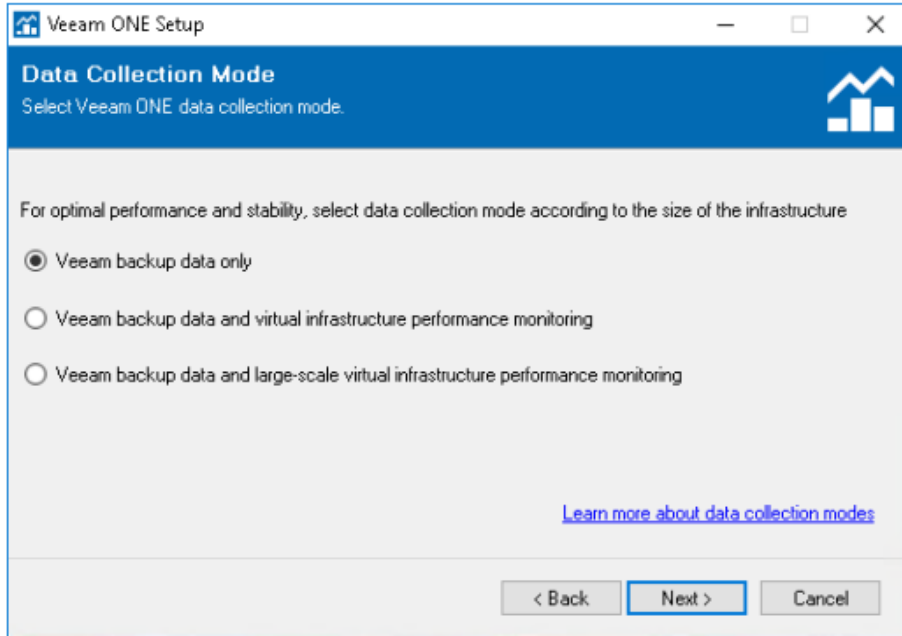
At the Data Collection Mode step of the wizard, choose the mode in which Veeam ONE will collect data from virtualization and Veeam Backup & Replication servers.

Data collection mode determines what metrics Veeam ONE will collect, and specifies the product configuration in a number of areas. Choosing an appropriate data collection mode allows you to optimize monitoring and reporting performance and improve user experience in Veeam ONE.

Veeam Backup Data Only

The **Veeam backup data only** mode is recommended for users who want to focus on Veeam Backup & Replication reporting, and do not need a deep visibility of the virtual infrastructure.

In this mode, Veeam ONE collects all inventory, configuration and performance metrics from Veeam Backup & Replication server. It also collects inventory and configuration metrics from virtualization servers, but skips virtual infrastructure performance metrics. As a result, Veeam ONE dashboards, reports and alarms display backup-related data only. For VMware vSphere and Microsoft Hyper-V objects, performance data is not available.

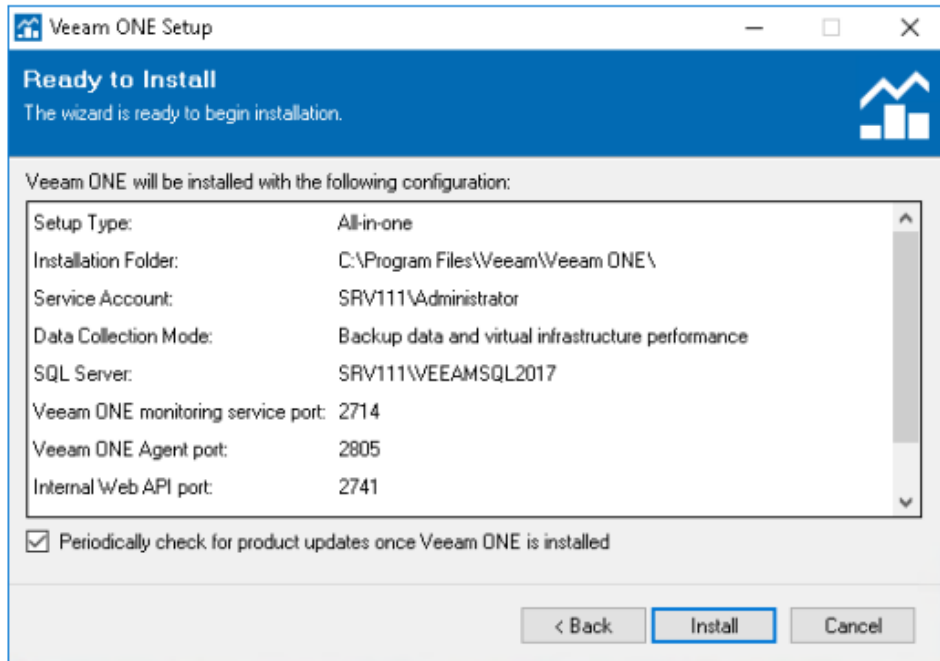


Step 14. Review Installation Summary

At the **Ready to Install** step of the wizard, review installation configuration to ensure that you have provided correct settings.

Do not select the **Periodically check for updates once Veeam ONE is installed** check box. In the evaluated configuration updates must be manually downloaded and installed.

Click **Install** to begin the installation.



When the installation completes, click Finish to close the wizard.

Logon

[Deploy] See Section **Deployment > Accessing Veeam ONE Client and Web Client**

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 the account under which you are logged on to the machine, select the **Use Windows session credentials** check box.

4. Click **Connect**

Veeam ONE Web Client

To access Veeam ONE Web Client:

1. Open the Veeam ONE Web Client using one of the following options:
 - Access Veeam ONE Web Client from Veeam ONE Client. To do this, in the main menu, click **Reports**.

- Access Veeam ONE Web Client locally, on the machine where the Veeam ONE Web Services component is installed. To do this, in **Microsoft Windows Programs** menu choose **Veeam ONE Web Client**.
 - Access Veeam ONE Web Client remotely using your web browser. To do this, browse to the URL of the Veeam ONE Web Client website. This website runs on the machine where the Veeam ONE Web Services component is installed. The URL must look similar to the following one (assuming you use the default website port 1239):
<https://webserver.domain.tld:1239>
Note that Veeam ONE Web Client is available over HTTPS
2. Type credentials of a user account under which you want to connect to Veeam ONE Web Services.
The user account must either:
Be a member of the Veeam ONE Administrators, Veeam ONE Power Users or Veeam ONE Read-Only Users group. For details on user groups, see Security Groups in [Deploy]

Cryptographic Support

The application invokes platform-provided functionality to use the selected key generation schemes and key sizes identified in the Security Target. Refer to the [HardGuide] for instructions.

Management

The TOE provides authorized administrators with the ability to configure retrieval and analysis of VBR event logs and infrastructure information from VBR systems, and review reports that the TOE generates concerning the analyzed event logs and infrastructure. Users access the TOE using a remote web UI with platform-provided HTTPS (Schannel).

See [QuickStart] Section **Data Protection Monitoring > Connecting Veeam Backup & Replication Servers**

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:

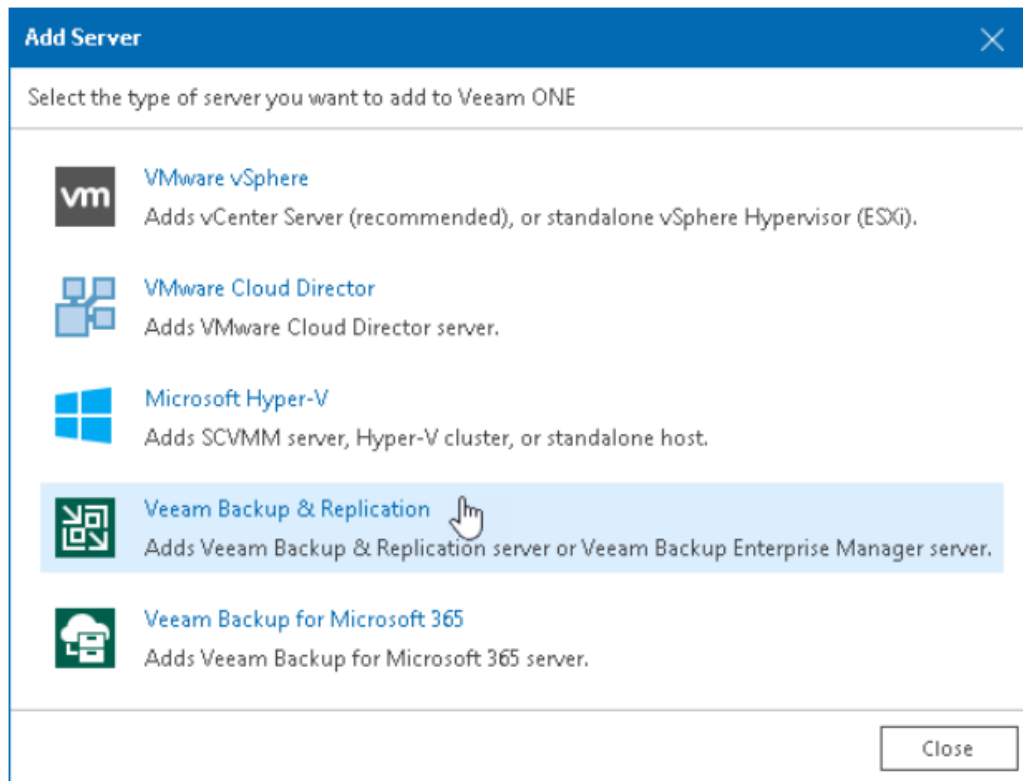
- Your Veeam Backup & Replication version and edition are supported.
- All necessary ports are open. For details, see section Ports of the Veeam ONE Deployment Guide.

For this scenario, you will connect to a Veeam Backup & Replication server.

To connect to a Veeam Backup & Replication server:

1. Open Veeam ONE Client.

- a. Log on to the machine where Veeam ONE Client is installed.
 - b. In the **Microsoft Windows Programs** menu, select **Veeam ONE Client**.
 - c. 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.
 - d. Click **Connect**.
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.

Add Veeam Backup & Replication Infrastructure

Connection Specify server connection details

Credentials

Summary

DNS name or IP address of the server:
vac01.tech.local

Server is:

Veeam Backup & Replication server

Veeam Backup Enterprise Manager

Install Veeam ONE Agent
Agent allows to analyze backup server logs and perform remediation actions

Port number: 2805

Previous Next Finish Cancel

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.

The screenshot shows a wizard window titled "Add Veeam Backup & Replication Infrastructure". The window has a blue header with a close button (X). The main area is divided into a left sidebar and a main content area. The sidebar has three tabs: "Connection", "Credentials", and "Summary". The "Summary" tab is currently selected. The main content area shows a "Credentials:" label above a dropdown menu containing "vac01\administrator (Backup administrator, Last edited: Today)". To the right of the dropdown is a green "+ Add" button. Below the dropdown is a link "Manage Credentials" with a key icon. A message below reads "Local Administrator permissions are required to install Veeam ONE Agent." At the bottom of the window are four buttons: "Previous", "Next", "Finish", and "Cancel".

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

[Monitor] Section **Veeam Backup & Replication Monitoring > Veeam Backup & Replication Summary Dashboards**

Veeam Backup & Replication summary dashboards serve as the 'launch point' for monitoring the backup infrastructure and data protection operations in the virtual environment. The dashboards reflect the latest state of backup, replication and SureBackup jobs, and help you analyze the performance and configuration of backup infrastructure components.

To view summary details for a specific backup infrastructure object or segment:

1. Open Veeam ONE Client.
2. In the inventory pane, click **Veeam Backup & Replication**.
3. In the inventory pane, select the necessary infrastructure level.
4. Open the **Summary** tab.

Backup Infrastructure Summary

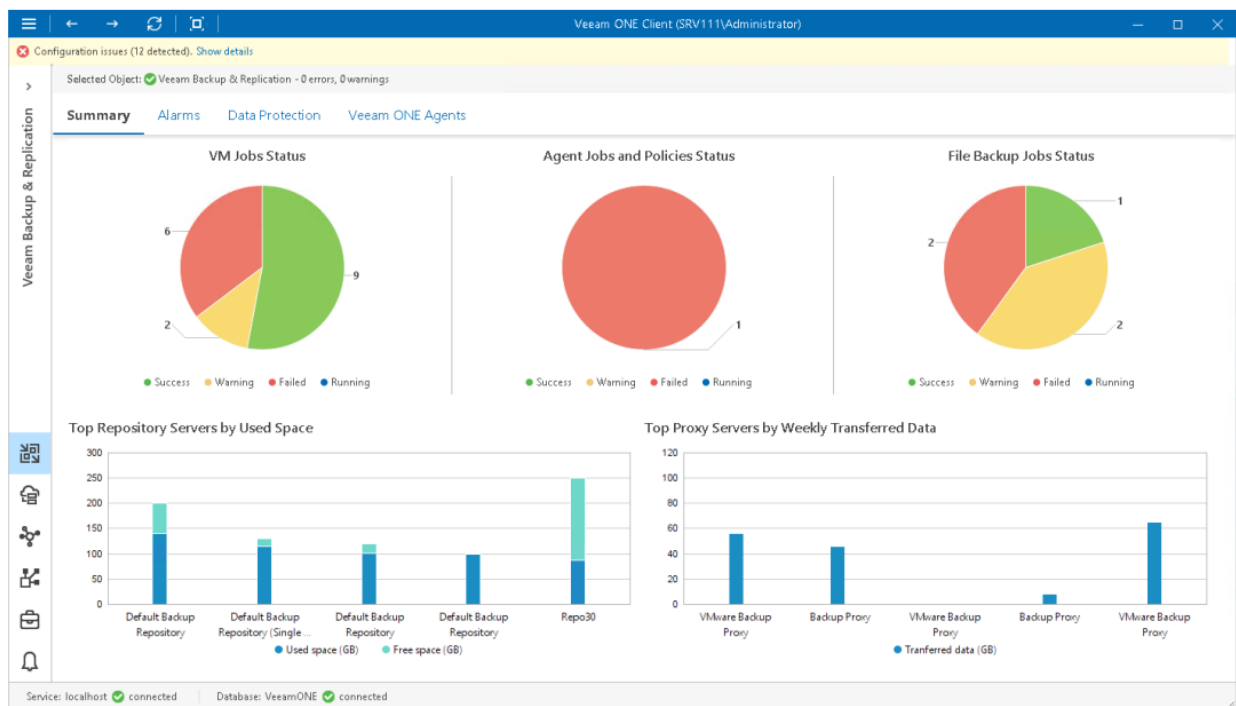
[Monitor] Section **Veeam Backup & Replication Monitoring > Veeam Backup & Replication Summary Dashboards > Backup Infrastructure Summary**

The backup infrastructure summary dashboard shows the latest state of data protection operations in the virtual environment and indicates the most intensively used resources in the backup infrastructure.

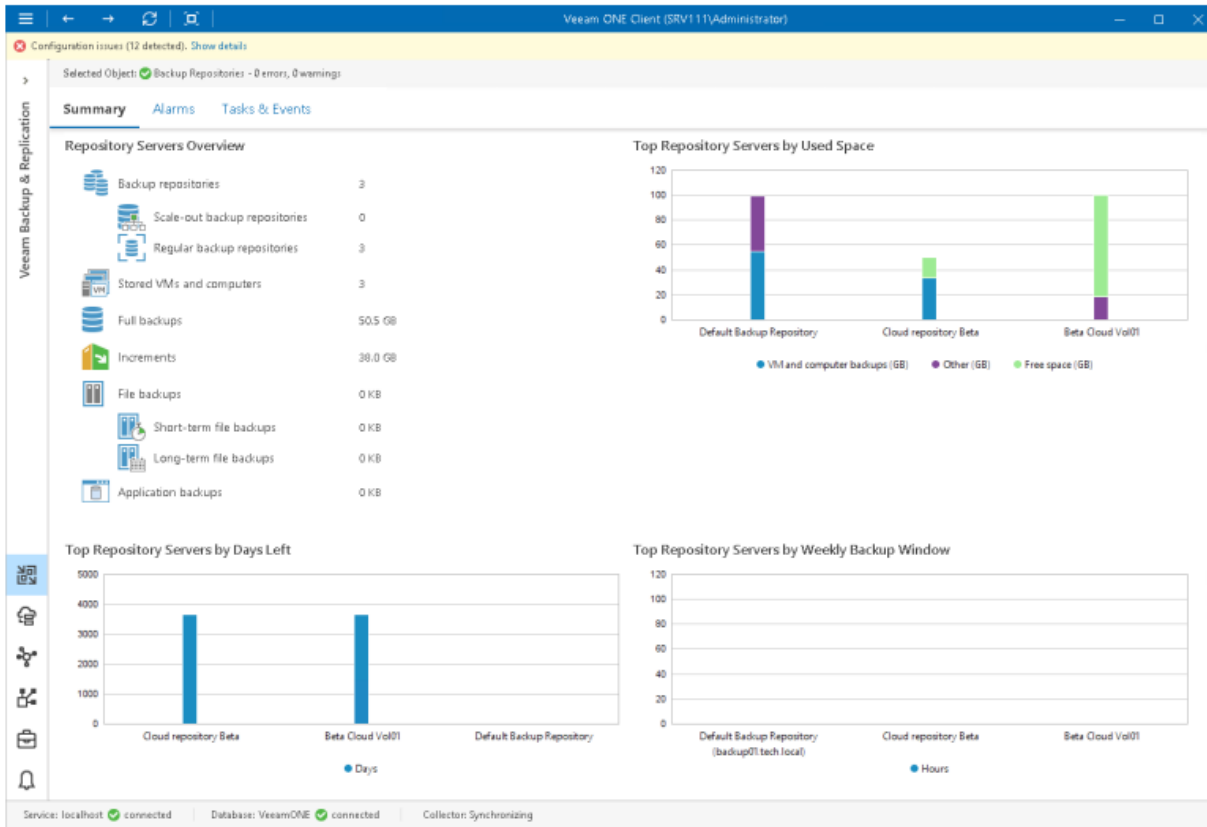
The dashboard is available for the following nodes:

- Backup Infrastructure
- Veeam Backup Enterprise Manager
- Veeam Backup & Replication server

Note: the Veeam Backup Enterprise Manager is not included in the evaluated configuration.



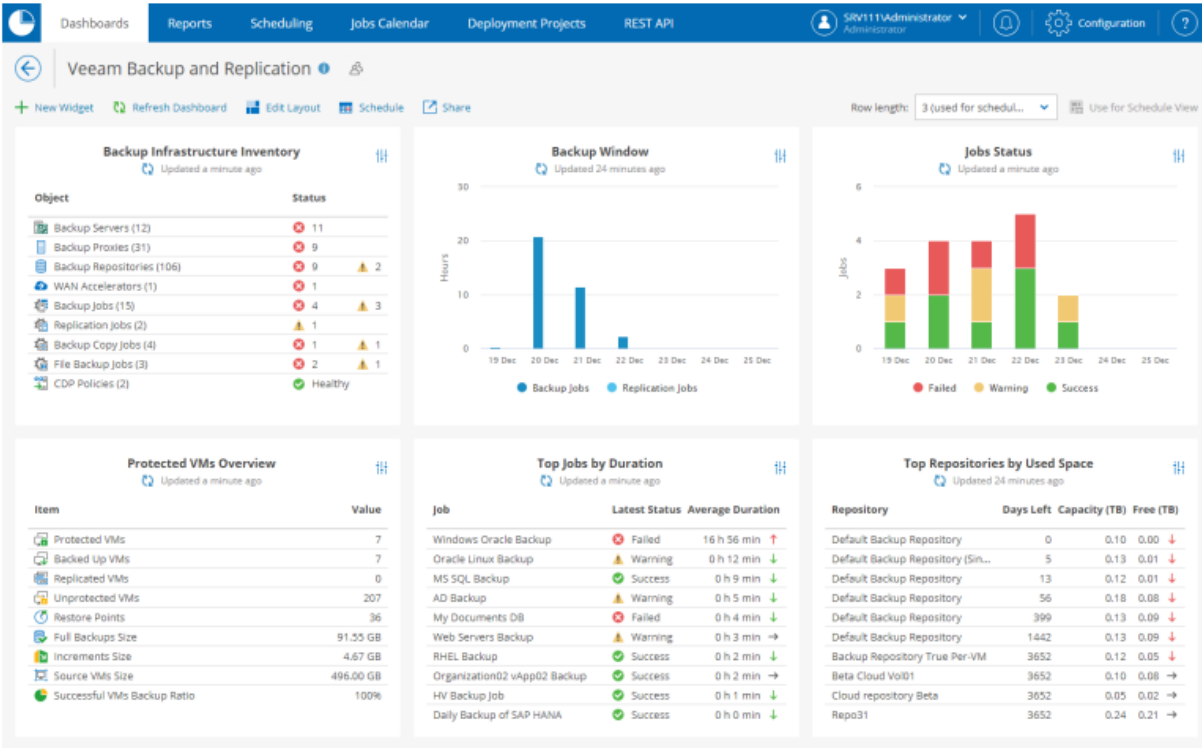
The summary dashboard for the Repositories node provides a configuration overview and performance analysis for backup repositories managed by a backup server.



[Report] Section **Predefined Dashboards and Reports > Predefined Veeam ONE Dashboards > Veeam Backup & Replication Dashboard**

The Veeam Backup & Replication dashboard provides information on the state of the key backup infrastructure components. The built-in widgets display a list of important events and help focus on the core efficiency indicators.

1. In the Veeam ONE Web Client Select **Dashboards > Veeam Backup and Replication**



Widgets Included

- Backup Infrastructure Inventory**
 This widget describes your backup infrastructure inventory and shows how many backup components of each type are deployed. The widget reflects the health state of backup infrastructure and displays healthy objects (green), objects with warnings (yellow), objects with errors (red).
 The widget also provides details on scheduled backup, backup copy and replication jobs, and the state of the latest job sessions.
- Backup Window**
 This widget shows the total duration of daily backup and replication job sessions. It allows you to track the efficiency of backup jobs, to detect issues occurred in the backup process and to check whether jobs completed within the prescribed backup window.
- Jobs Status**
 This widget provides information on the completion state of scheduled backup and replication jobs. It displays a daily summary of successfully completed jobs, and shows the number of jobs that completed with warnings and errors during the past week.

The widget helps you assess the efficiency of your data protection operations.

- **Protected VMs Overview**

This widget displays information on VMware vSphere and Microsoft Hyper-V VMs protected with backup and replication jobs, specifically:

- Protected VMs — the total number of VMs protected with backups or replicas.
- Backed Up VMs — the total number of VMs for which backups are available.
- Replicated VMs — the total number of VMs for which replicas are available.
- Unprotected VMs — the total number of VMs not protected with backups or replicas.
- Restore Points — the total number of available restore points for protected VMs.
- Full Backups Size — the amount of storage space consumed by full backups.
- Increments Size — the amount of storage space consumed by incremental backups.
- Source VMs Size — the total size of storage space consumed by source VMs on production storage.
- Successful VMs Backup Ratio — the percentage of latest backup and replication sessions that completed successfully over the previous week against the total number of latest sessions for protected VMs.

- **Top Jobs by Duration**

This widget displays top 10 jobs in terms of the longest duration, job completion status and the value of the average weekly duration. The widget helps you assess the backup infrastructure health and efficiency.

Arrows on the right show how job duration has changed over the previous week.

- **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.

Review Reports of the Analyzed Event Logs

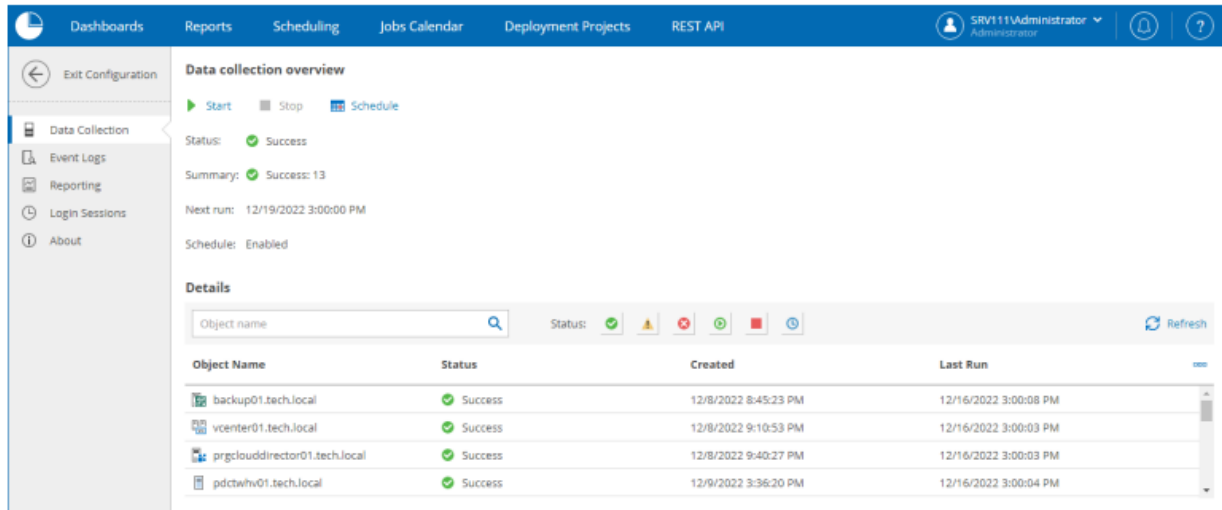
[Report] Section **Configuring Veeam One Web Client > Data Collection**

To start working with dashboards and reports, you need to collect data from Veeam Backup & Replication, Veeam Backup for Microsoft 365 and virtualization servers.

Server connections can be configured either during Veeam ONE installation or you can connect servers later, in the Veeam ONE Client. In Veeam ONE Web Client, you can review configured connections, change the data collection schedule or run data collection manually.

Before you configure Veeam ONE Web Client settings, review the data collection summary:

1. Open Veeam ONE Web Client.
2. At the top right corner of the Veeam ONE Web Client window, click **Configuration**.
3. In the Configuration menu on the left, click **Data Collection**.



The Data collection overview section contains information about connected servers, including results of the latest collection sessions and date and time of the next data collection run according to the schedule.

If you do not have any connected servers yet, connect them in the Veeam ONE Client. For details, see section **Connecting Servers** of the Veeam ONE Deployment Guide.

The **Details** section displays Veeam Backup & Replication, Veeam Backup for Microsoft 365 and virtualization servers from which data for Veeam ONE Web Client is collected.

For each server in the list, the following details are available:

- Server name
- Status of the latest data collection (Success, Warning, Failed, Processing, Stopped)
- Date and time when connection settings were configured
- Date and time of the latest data collection session

By default, data for Veeam ONE Web Client and Business View is collected automatically, according to a predefined schedule. Data collection runs on weekdays at 3:00 a.m. This schedule applies to all Veeam Backup & Replication, Veeam Backup for Microsoft 365 and virtualization servers that are managed by Veeam ONE.

Running Data Collection Manually

You can run data collection for Veeam ONE Web Client manually. This can be required if you disabled automatic data collection, or if you want to collect data between scheduled collection sessions.

Starting Data Collection

When you start data collection manually, Veeam ONE will collect data from all connected servers.

1. Open Veeam ONE Web Client.
2. At the top right corner of the Veeam ONE Web Client window, click **Configuration**.
3. In the configuration menu on the left, click **Data Collection**.
4. On the toolbar, click **Start**.

Stopping Data Collection

You can stop a data collection session that was started either manually or by the schedule:

1. Open Veeam ONE Web Client.
2. At the top right corner of the Veeam ONE Web Client window, click **Configuration**.
3. In the configuration menu on the left, click **Data Collection**.
4. On the toolbar, click **Stop**.

Viewing Data Collection Session Details

Every run of data collection initiates a new data collection session. Veeam ONE keeps record of tasks performed during data collection sessions and stores this information, so that you can view session details.

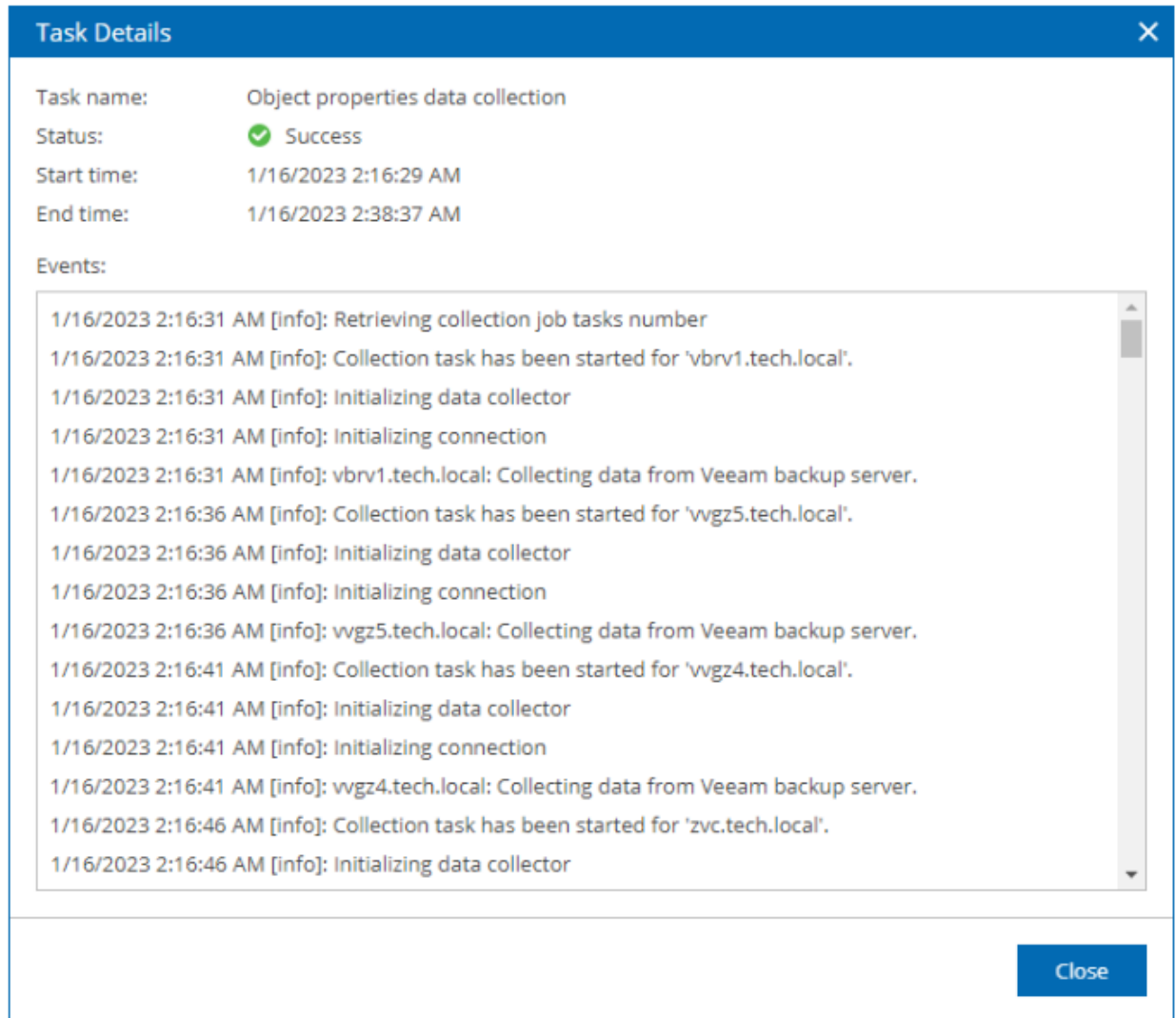
To view data collection session details:

1. Open Veeam ONE Web Client.
2. At the top right corner of the Veeam ONE Web Client window, click **Configuration**.
3. In the configuration menu on the left, click **Event Logs**.
4. In the list of sessions, select the necessary *Object properties data collection*.

To easily find the necessary session, you can apply the following filters:

- **Task name** — limit the list of sessions by name
- **Task type** — limit the list of sessions by data collection type
- **Task status** — limit the list of sessions by status (Success, Warning, Failed, Processing, Stopped)
- **Time period** — limit the list of sessions by start date

5. Click the necessary session in the list to view its details.



The screenshot shows a 'Task Details' window with a blue header and a close button (X) in the top right corner. The window displays the following information:

- Task name:** Object properties data collection
- Status:** ✔ Success
- Start time:** 1/16/2023 2:16:29 AM
- End time:** 1/16/2023 2:38:37 AM

Below this information is an 'Events' section containing a scrollable list of log entries:

- 1/16/2023 2:16:31 AM [info]: Retrieving collection job tasks number
- 1/16/2023 2:16:31 AM [info]: Collection task has been started for 'vbrv1.tech.local'.
- 1/16/2023 2:16:31 AM [info]: Initializing data collector
- 1/16/2023 2:16:31 AM [info]: Initializing connection
- 1/16/2023 2:16:31 AM [info]: vbrv1.tech.local: Collecting data from Veeam backup server.
- 1/16/2023 2:16:36 AM [info]: Collection task has been started for 'vvgz5.tech.local'.
- 1/16/2023 2:16:36 AM [info]: Initializing data collector
- 1/16/2023 2:16:36 AM [info]: Initializing connection
- 1/16/2023 2:16:36 AM [info]: vvgz5.tech.local: Collecting data from Veeam backup server.
- 1/16/2023 2:16:41 AM [info]: Collection task has been started for 'vvgz4.tech.local'.
- 1/16/2023 2:16:41 AM [info]: Initializing data collector
- 1/16/2023 2:16:41 AM [info]: Initializing connection
- 1/16/2023 2:16:41 AM [info]: vvgz4.tech.local: Collecting data from Veeam backup server.
- 1/16/2023 2:16:46 AM [info]: Collection task has been started for 'zvc.tech.local'.
- 1/16/2023 2:16:46 AM [info]: Initializing data collector

A blue 'Close' button is located in the bottom right corner of the window.

Every session is described with the following details:

- Session type
- Session result
- Session start and end date and time
- Details on operations performed during the session

Trusted Update

The product version number is displayed in the application by selecting the **Help** menu and then selecting **About**.

Veeam ONE provides the ability for authorized administrators to check for available updates. The administrator must manually check for product updates at the website:

<https://www.veeam.com/download-version.html?tab=current>. If a new version update is available, the administrator must manually download the file and execute it on the platform on which the application is installed.

The screenshot shows the Veeam website's download page. At the top, there is a navigation bar with the Veeam logo and links for Products, Solutions, Support, Resources, Partners, and Company. Below the navigation bar, there is a disclaimer: "By downloading Veeam products, you agree with the Veeam End User Software License Agreement." Underneath, there are two tabs: "Current Version" (which is selected) and "Previous Versions". The main content area is a table with three columns: "PRODUCT", "RELEASE NOTES", and "DOWNLOADS".

PRODUCT	RELEASE NOTES	DOWNLOADS
Veeam Backup & Replication 12 Version : 12.0.0.1420 P20230412 Size : 12.8 GB MD5: f298...c1e4 SHA-1: c4f3...7cad	Release notes February 14, 2023	
Veeam ONE 12 Version : 12.0.1.2591 P20230314 Size : 1.5 GB MD5: 60a3...af20 SHA-1: f28d...4bf2	Release notes February 14, 2023	

Locate the **Veeam One 12** update and select **Download**.

Veeam ONE is signed by Veeam Software Group GmbH certificate, DigiCert is the Certificate Authority. Code is signed on the Veeam signing server during the build process.

The installation package and update/patch digital signature is verified by the Windows OS. The digital signature of the executable is also verified by the Windows OS platform. If something is wrong with the signature, Windows displays a message with the issue and asks if the installation should proceed. The administrator should terminate the installation.

The .exe file is distributed within a .iso file.

The installation package and update/patch include all of the TOE components in the evaluated configuration.