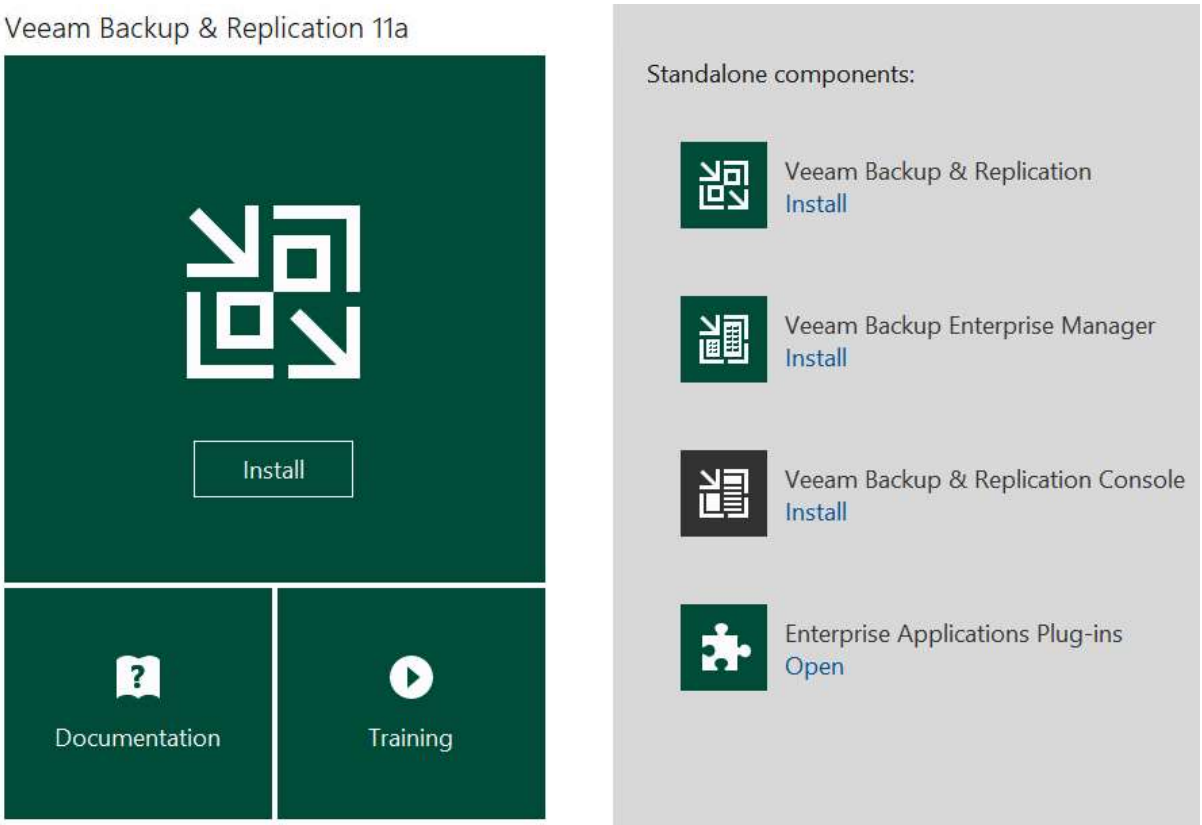
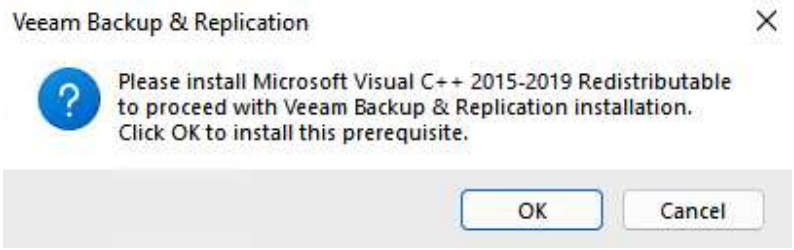
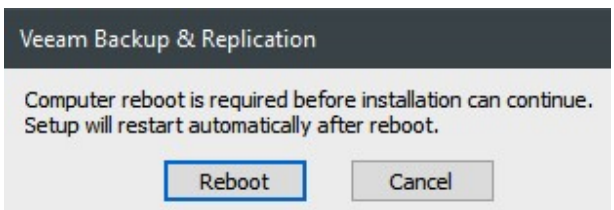
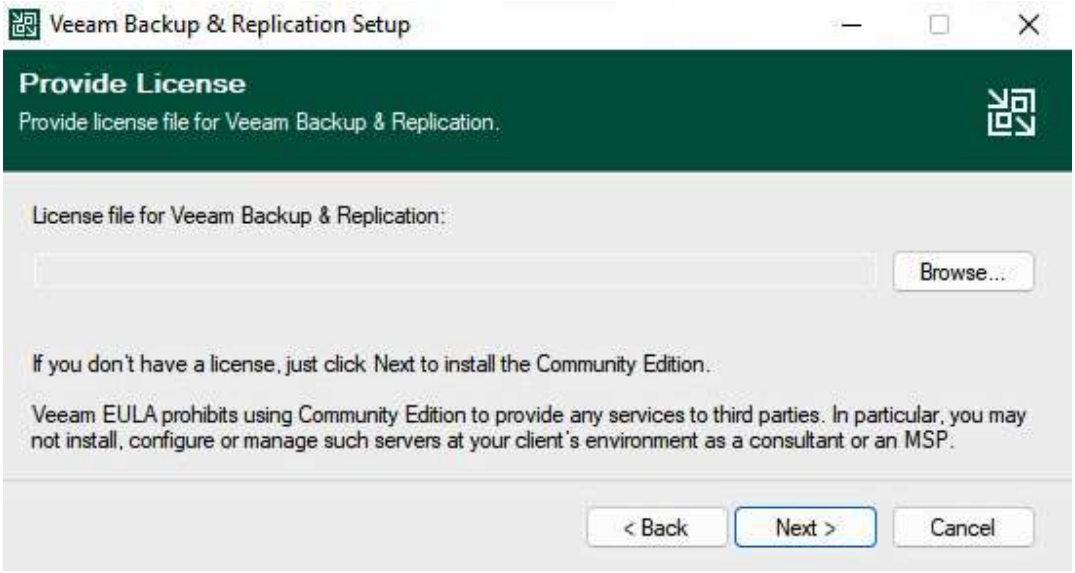
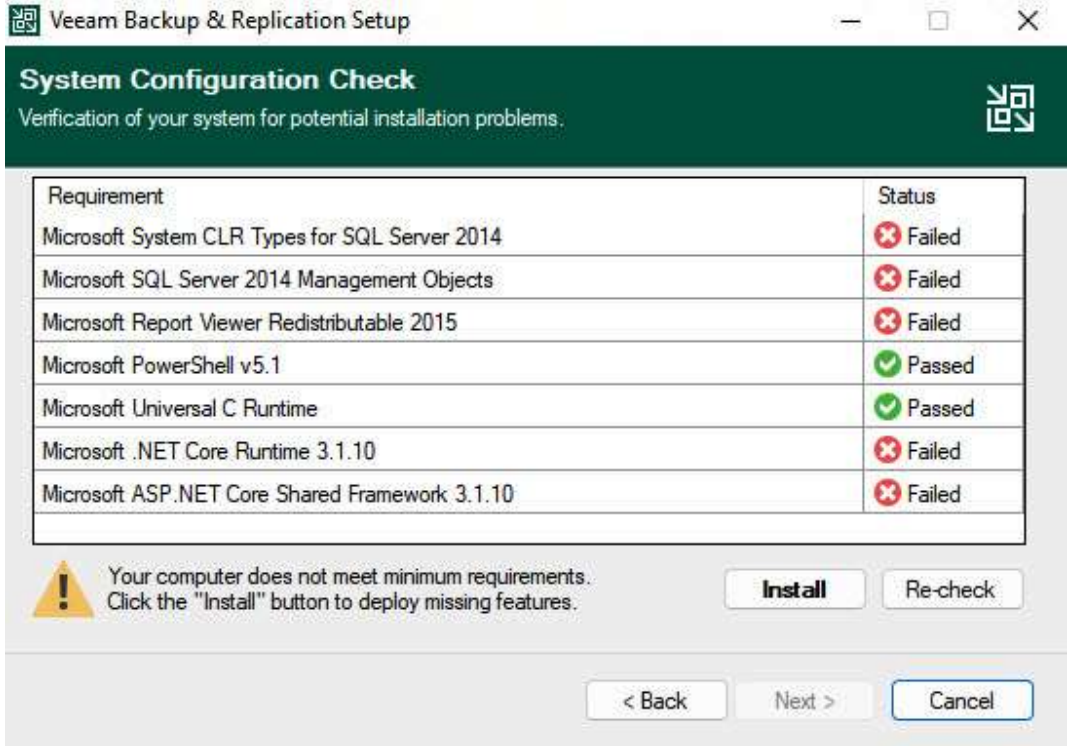
Chapter 1: Installing and Upgrading Veeam

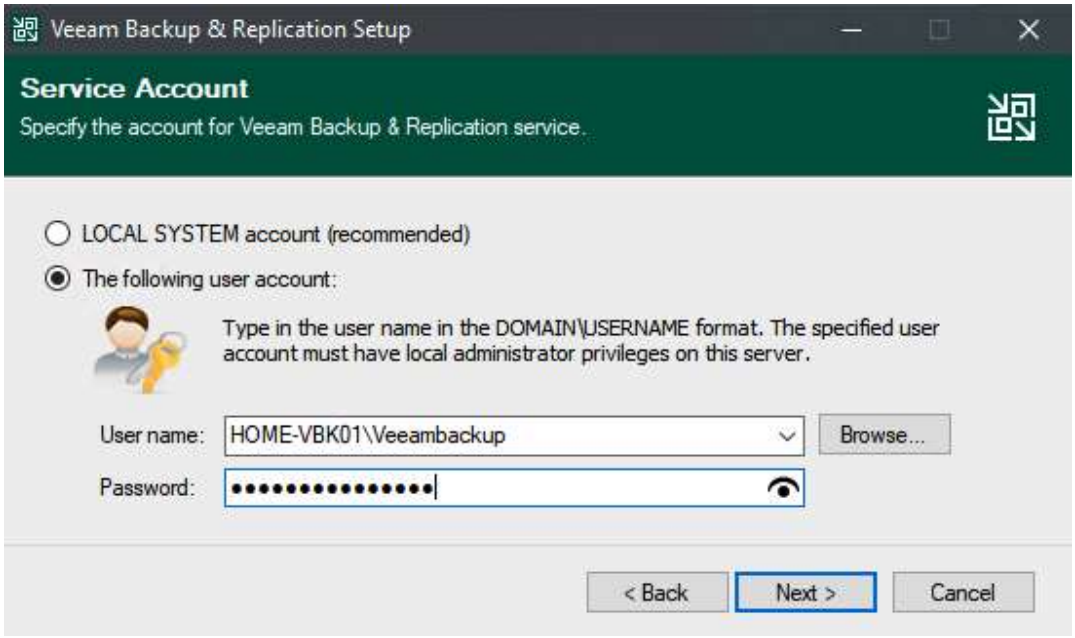


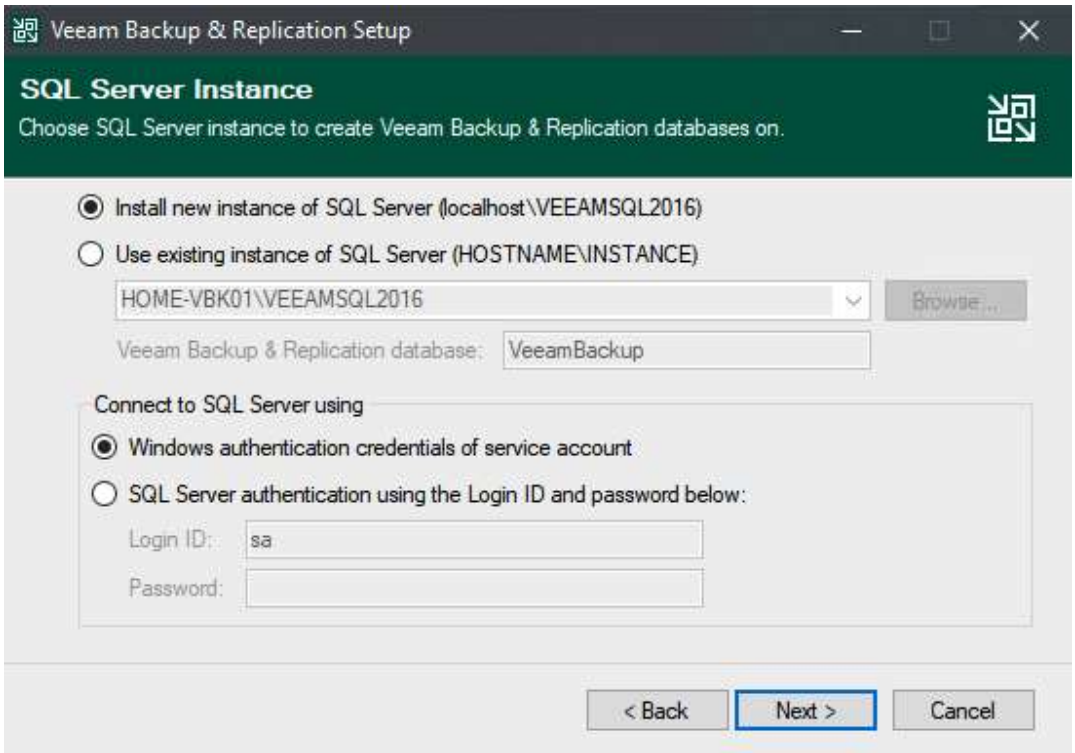


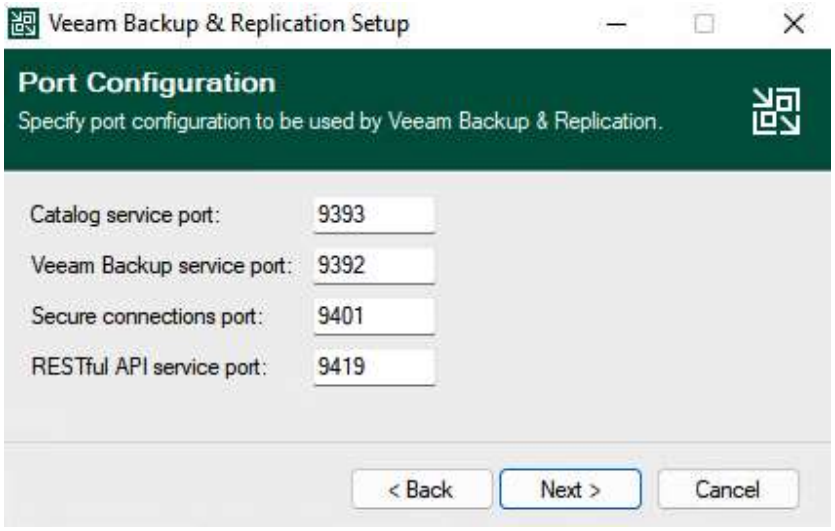


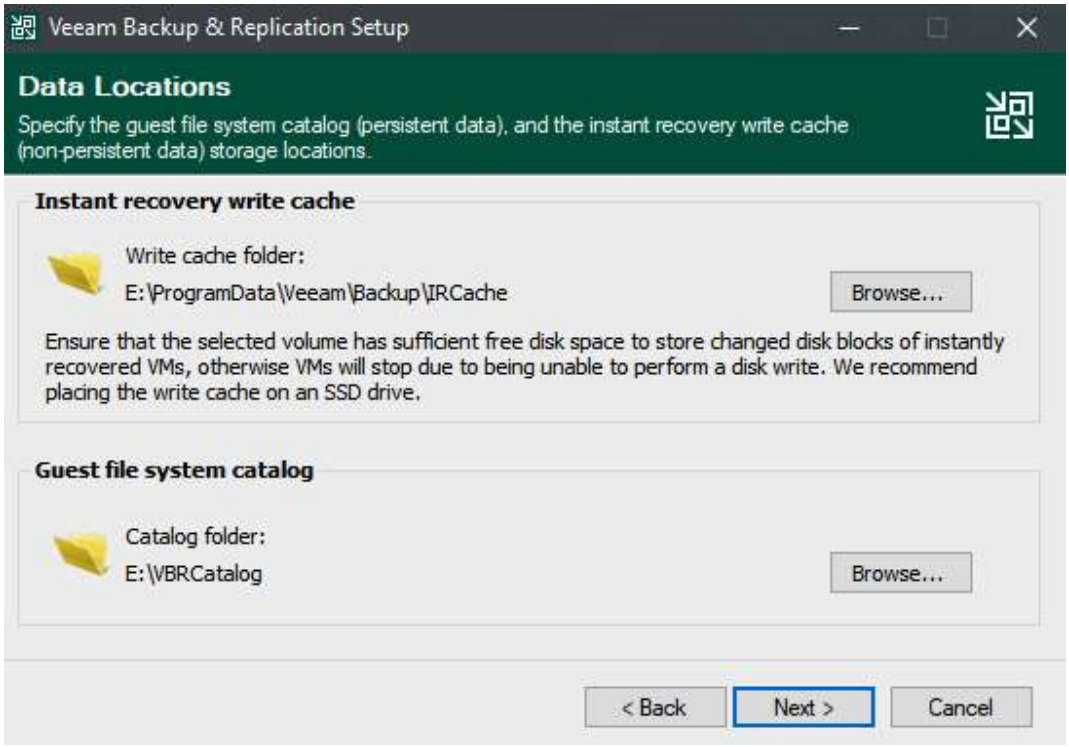

Veeam Backup & Replication Setup
Provide License
Provide license file for Veeam Backup & Replication.
License file for Veeam Backup & Replication:
Browse...
If you don't have a license, just click Next to install the Community Edition.
Veeam EULA prohibits using Community Edition to provide any services to third parties. In particular, you may not install, configure or manage such servers at your client's environment as a consultant or an MSP.
< Back
Next >
Cancel

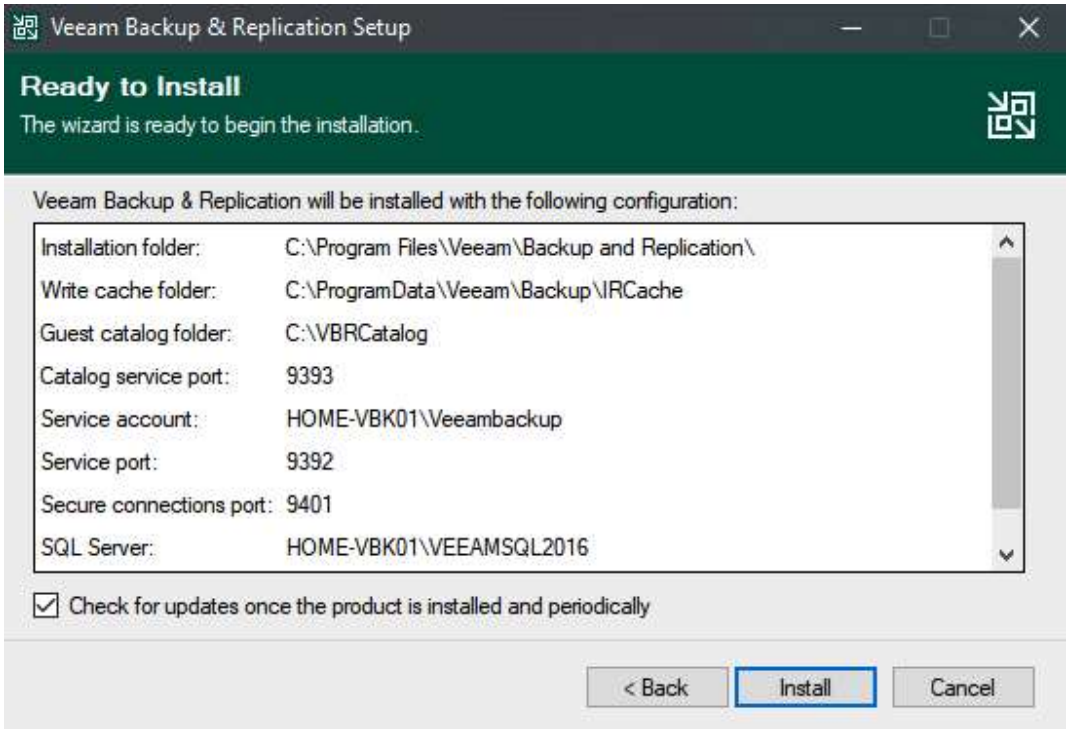

Veeam Backup & Replication Setup
System Configuration Check
Verification of your system for potential installation problems.
Requirement
Status
Microsoft System CLR Types for SQL Server 2014
Failed
Microsoft SQL Server 2014 Management Objects
Failed
Microsoft Report Viewer Redistributable 2015
Failed
Microsoft PowerShell v5.1
Passed
Microsoft Universal C Runtime
Passed
Microsoft .NET Core Runtime 3.1.10
Failed
Microsoft ASP.NET Core Shared Framework 3.1.10
Failed
Your computer does not meet minimum requirements.
Click the "Install" button to deploy missing features.
Install
Re-check
< Back
Next >
Cancel

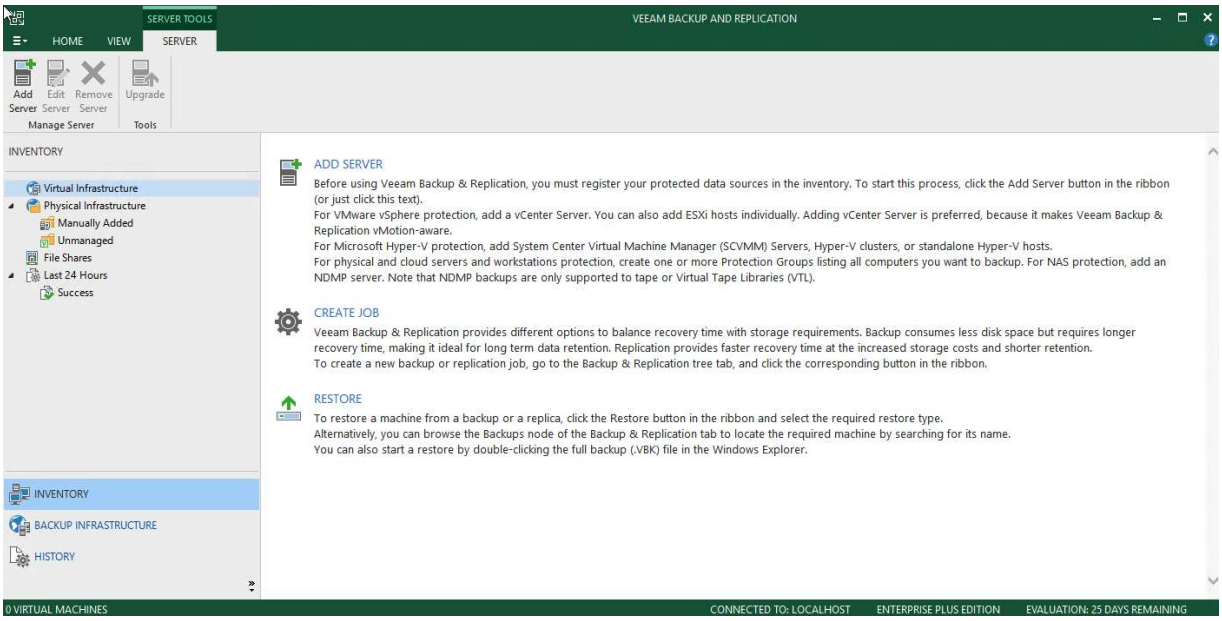

Veeam Backup & Replication Setup
Service Account
Specify the account for Veeam Backup & Replication service.
LOCAL SYSTEM account (recommended)
The following user account:
Type in the user name in the DOMAIN\USERNAME format. The specified user account must have local administrator privileges on this server.
User name:
HOME-VBK01\Veeambackup
Browse...
Password:
< Back
Next >
Cancel


Veeam Backup & Replication Setup
SQL Server Instance
Choose SQL Server instance to create Veeam Backup & Replication databases on.
Install new instance of SQL Server (localhost\VEEAMSQL2016)
Use existing instance of SQL Server (HOSTNAME\INSTANCE)
HOME-VBK01\VEEAMSQL2016
Browse...
Veeam Backup & Replication database:
VeeamBackup
Connect to SQL Server using
Windows authentication credentials of service account
SQL Server authentication using the Login ID and password below:
Login ID:
sa
Password:
< Back
Next >
Cancel


Veeam Backup & Replication Setup
Port Configuration
Specify port configuration to be used by Veeam Backup & Replication.
Catalog service port:
9393
Veeam Backup service port:
9392
Secure connections port:
9401
RESTful API service port:
9419
< Back
Next >
Cancel


Veeam Backup & Replication Setup
Data Locations
Specify the guest file system catalog (persistent data), and the instant recovery write cache (non-persistent data) storage locations.
Instant recovery write cache
Write cache folder:
E:\ProgramData\Veeam\Backup\IRCache
Browse...
Ensure that the selected volume has sufficient free disk space to store changed disk blocks of instantly recovered VMs, otherwise VMs will stop due to being unable to perform a disk write. We recommend placing the write cache on an SSD drive.
Guest file system catalog
Catalog folder:
E:\VBRCatalog
Browse...
< Back
Next >
Cancel


Veeam Backup & Replication Setup
Ready to Install
The wizard is ready to begin the installation.
Veeam Backup & Replication will be installed with the following configuration:
Installation folder: C:\Program Files\Veeam\Backup and Replication\
Write cache folder: C:\ProgramData\Veeam\Backup\IRCache
Guest catalog folder: C:\VBRCatalog
Catalog service port: 9393
Service account: HOME-VBK01\Veeambackup
Service port: 9392
Secure connections port: 9401
SQL Server: HOME-VBK01\VEEAMSQL2016
Check for updates once the product is installed and periodically
< Back
Install
Cancel


SERVER TOOLS
VEEAM BACKUP AND REPLICATION
HOME
VIEW
SERVER
Add Server
Edit Server
Remove Server
Upgrade
Manage Server
Tools
INVENTORY
Virtual Infrastructure
Physical Infrastructure
Manually Added
Unmanaged
File Shares
Last 24 Hours
Success
ADD SERVER
Before using Veeam Backup & Replication, you must register your protected data sources in the inventory. To start this process, click the Add Server button in the ribbon (or just click this text).
For VMware vSphere protection, add a vCenter Server. You can also add ESXi hosts individually. Adding vCenter Server is preferred, because it makes Veeam Backup & Replication vMotion-aware.
For Microsoft Hyper-V protection, add System Center Virtual Machine Manager (SCVMM) Servers, Hyper-V clusters, or standalone Hyper-V hosts.
For physical and cloud servers and workstations protection, create one or more Protection Groups listing all computers you want to backup. For NAS protection, add an NDMP server. Note that NDMP backups are only supported to tape or Virtual Tape Libraries (VTL).
CREATE JOB
Veeam Backup & Replication provides different options to balance recovery time with storage requirements. Backup consumes less disk space but requires longer recovery time, making it ideal for long term data retention. Replication provides faster recovery time at the increased storage costs and shorter retention.
To create a new backup or replication job, go to the Backup & Replication tree tab, and click the corresponding button in the ribbon.
RESTORE
To restore a machine from a backup or a replica, click the Restore button in the ribbon and select the required restore type.
Alternatively, you can browse the Backups node of the Backup & Replication tab to locate the required machine by searching for its name.
You can also start a restore by double-clicking the full backup (.VBK) file in the Windows Explorer.
INVENTORY
BACKUP INFRASTRUCTURE
HISTORY
0 VIRTUAL MACHINES
CONNECTED TO: LOCALHOST
ENTERPRISE PLUS EDITION
EVALUATION: 25 DAYS REMAINING

VMware vSphere

Select the type of a VMware server you want to add to the inventory.

vSphere
Adds vCenter Server (recommended), or standalone vSphere Hypervisor (ESXi) to the inventory.

vCloud Director
Adds VMware vCloud Director server to the inventory.

Add Backup Repository

Select the type of backup repository you want to add.

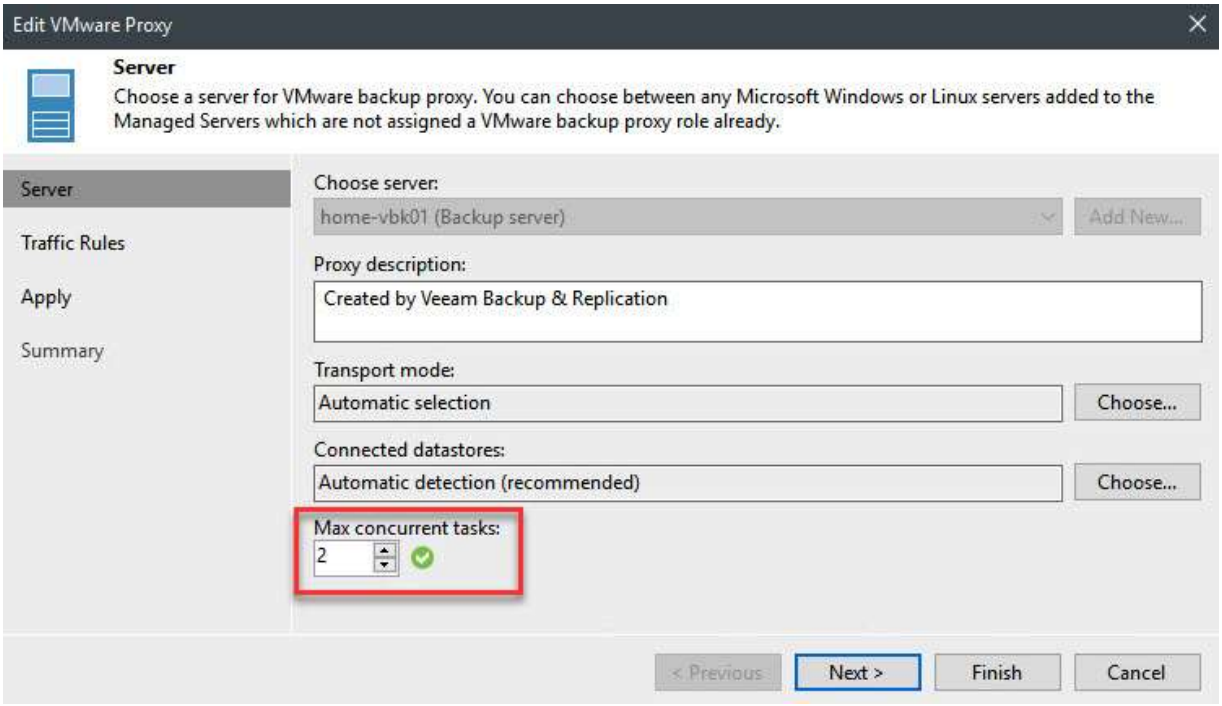
Direct attached storage
Microsoft Windows or Linux server with internal or direct attached storage. This configuration enables data movers to run directly on the server, allowing for fastest performance.

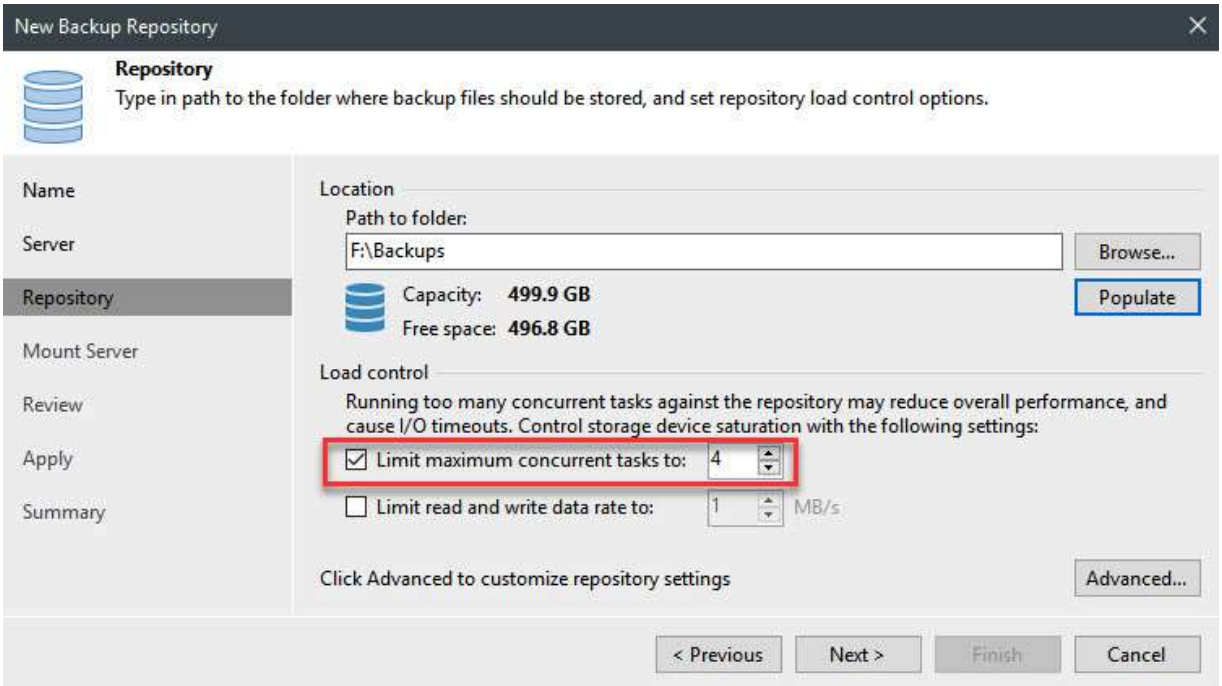
Network attached storage
Network share on a file server or a NAS device. When backing up to a remote share, we recommend that you select a gateway server located in the same site with the share.

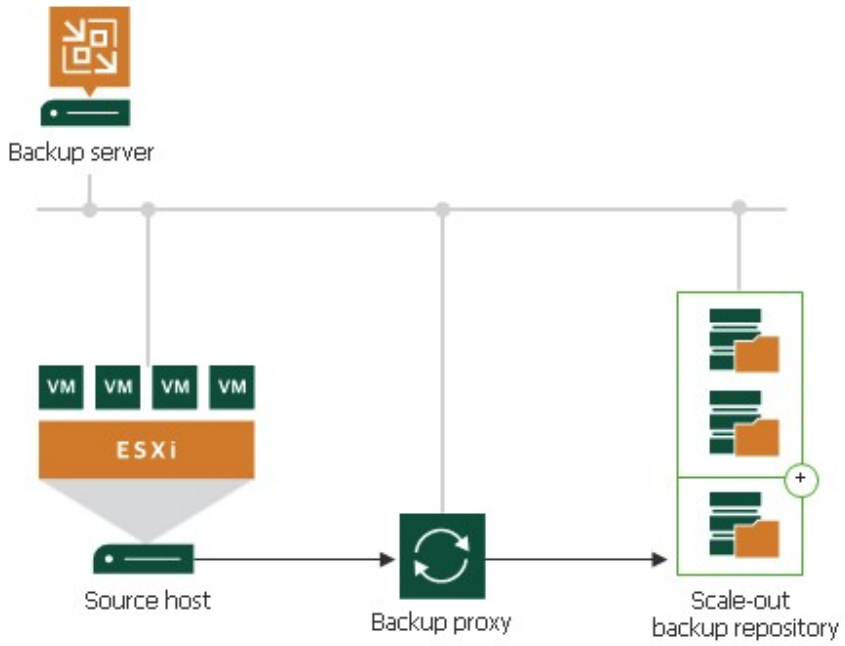
Deduplicating storage appliance
Dell EMC Data Domain, ExaGrid, HPE StoreOnce or Quantum DXi. If you are unable to meet the requirements of advanced integration via native appliance API, use the network attached storage option instead.

Object storage
On-prem object storage system or a cloud object storage provider. Object storage can only be used as a Capacity Tier of scale-out backup repositories, backing up directly to object storage is not currently supported.

Cancel


Edit VMware Proxy
Server
Choose a server for VMware backup proxy. You can choose between any Microsoft Windows or Linux servers added to the Managed Servers which are not assigned a VMware backup proxy role already.
Server
Traffic Rules
Apply
Summary
Choose server:
home-vbk01 (Backup server)
Add New...
Proxy description:
Created by Veeam Backup & Replication
Transport mode:
Automatic selection
Choose...
Connected datastores:
Automatic detection (recommended)
Choose...
Max concurrent tasks:
2
< Previous
Next >
Finish
Cancel


New Backup Repository
Repository
Type in path to the folder where backup files should be stored, and set repository load control options.
Name
Server
Repository
Mount Server
Review
Apply
Summary
Location
Path to folder:
F:\Backups
Browse...
Capacity: 499.9 GB
Free space: 496.8 GB
Populate
Load control
Running too many concurrent tasks against the repository may reduce overall performance, and cause I/O timeouts. Control storage device saturation with the following settings:
Limit maximum concurrent tasks to: 4
Limit read and write data rate to: 1 MB/s
Click Advanced to customize repository settings
Advanced...
< Previous
Next >
Finish
Cancel



Object Storage

Select the type of object storage you want to use as a backup repository.

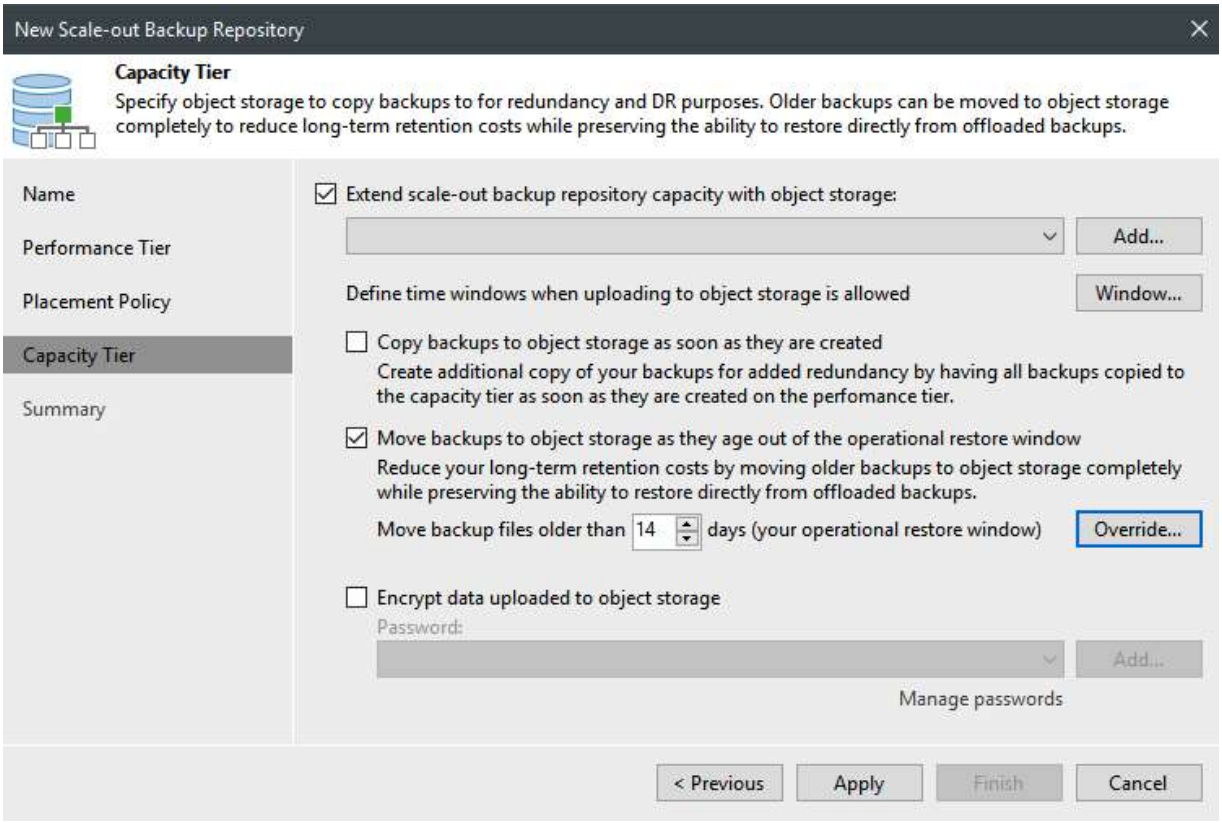
S3 Compatible
Adds an on-premises object storage system or a cloud object storage provider.

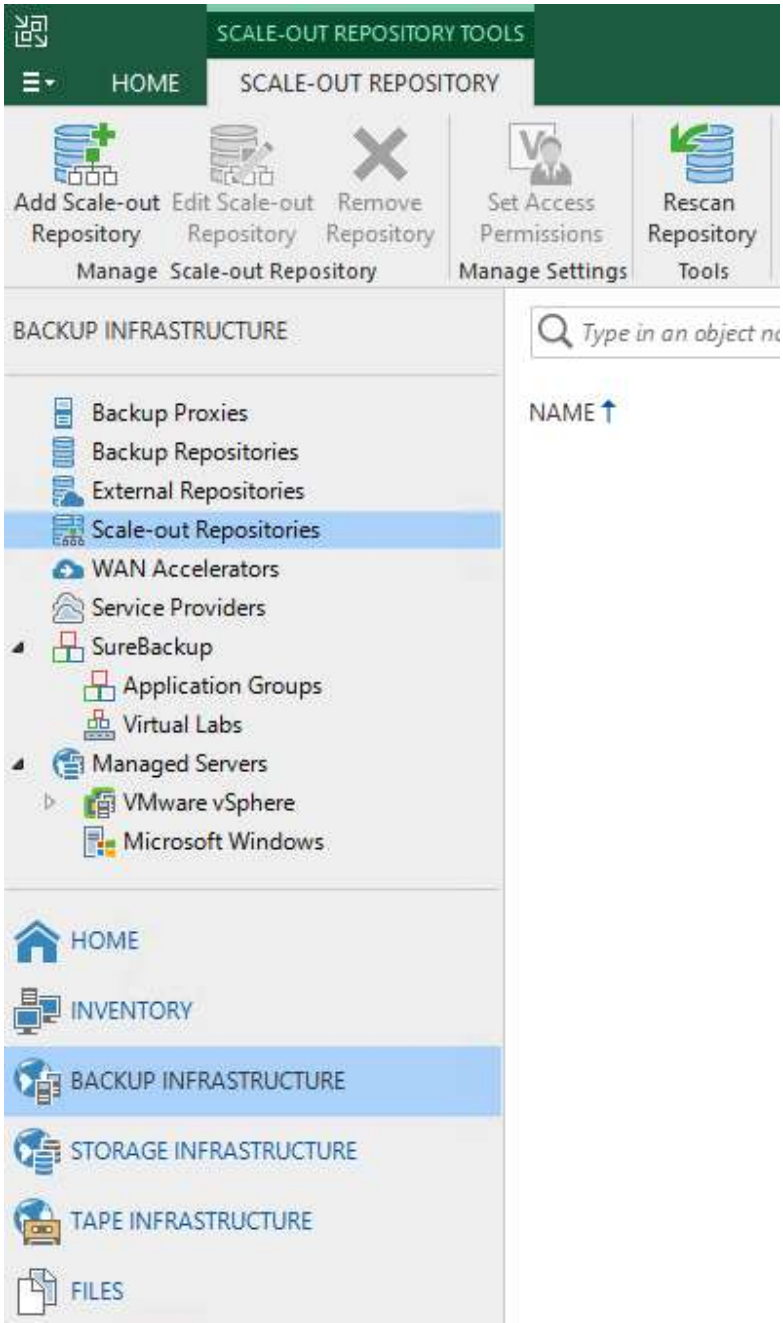
Amazon S3
Adds S3 object storage or an AWS Snowball Edge appliance.

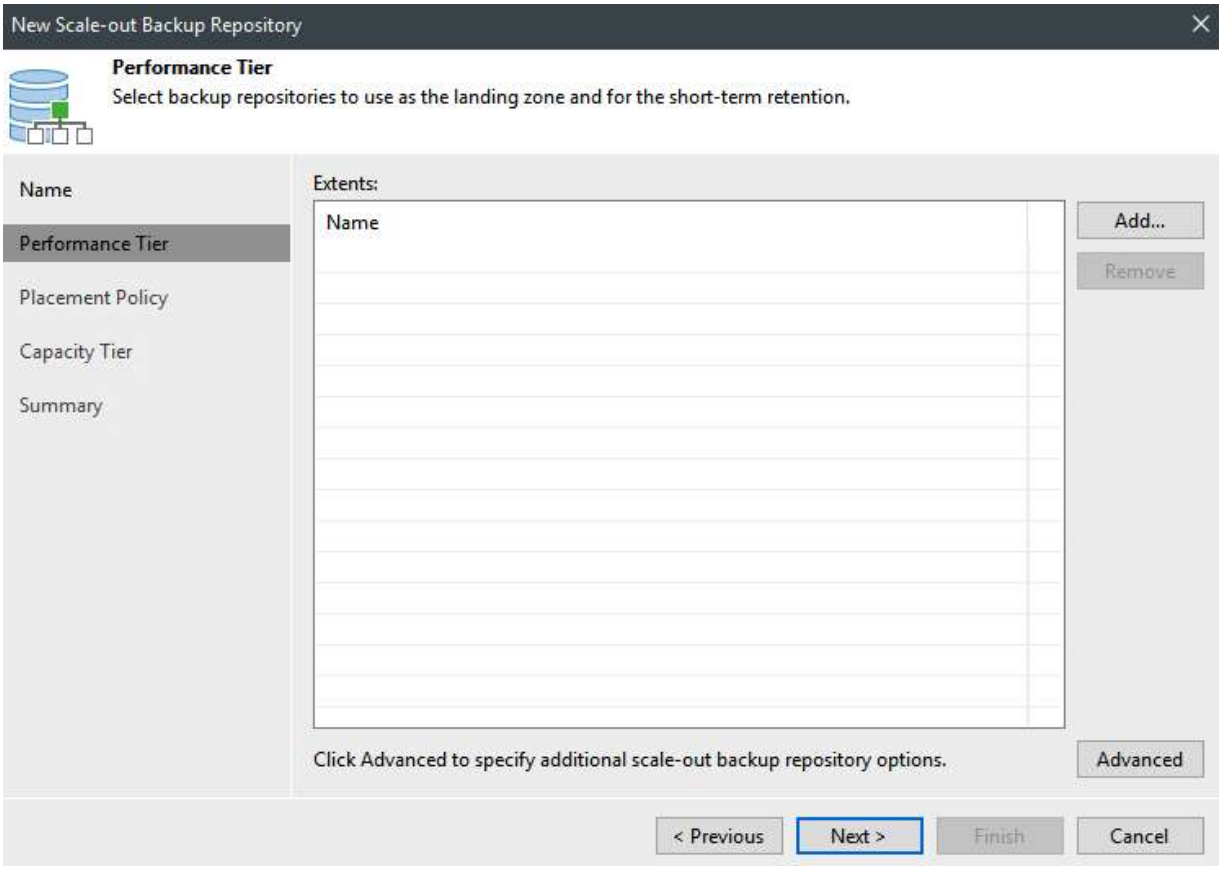
Microsoft Azure Blob Storage
Adds Microsoft Azure blob storage. Both Azure Blob Storage and Azure Data Box are supported.

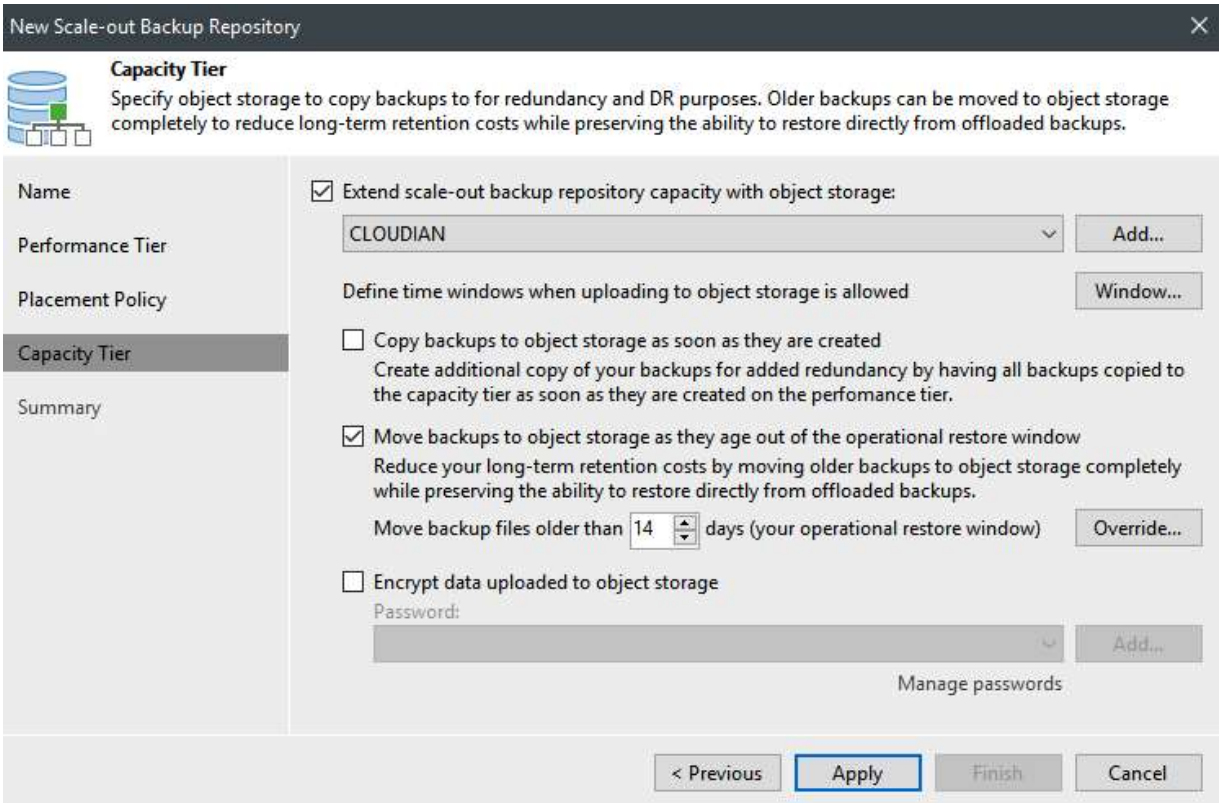
IBM Cloud Object Storage
Adds IBM Cloud object storage. S3 compatible versions of both on-premises and IBM Cloud storage offerings are supported.

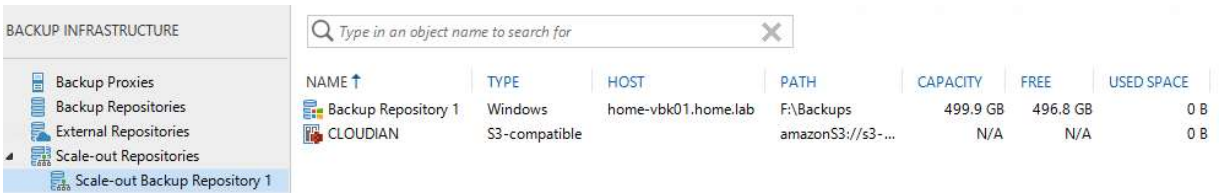
Cancel

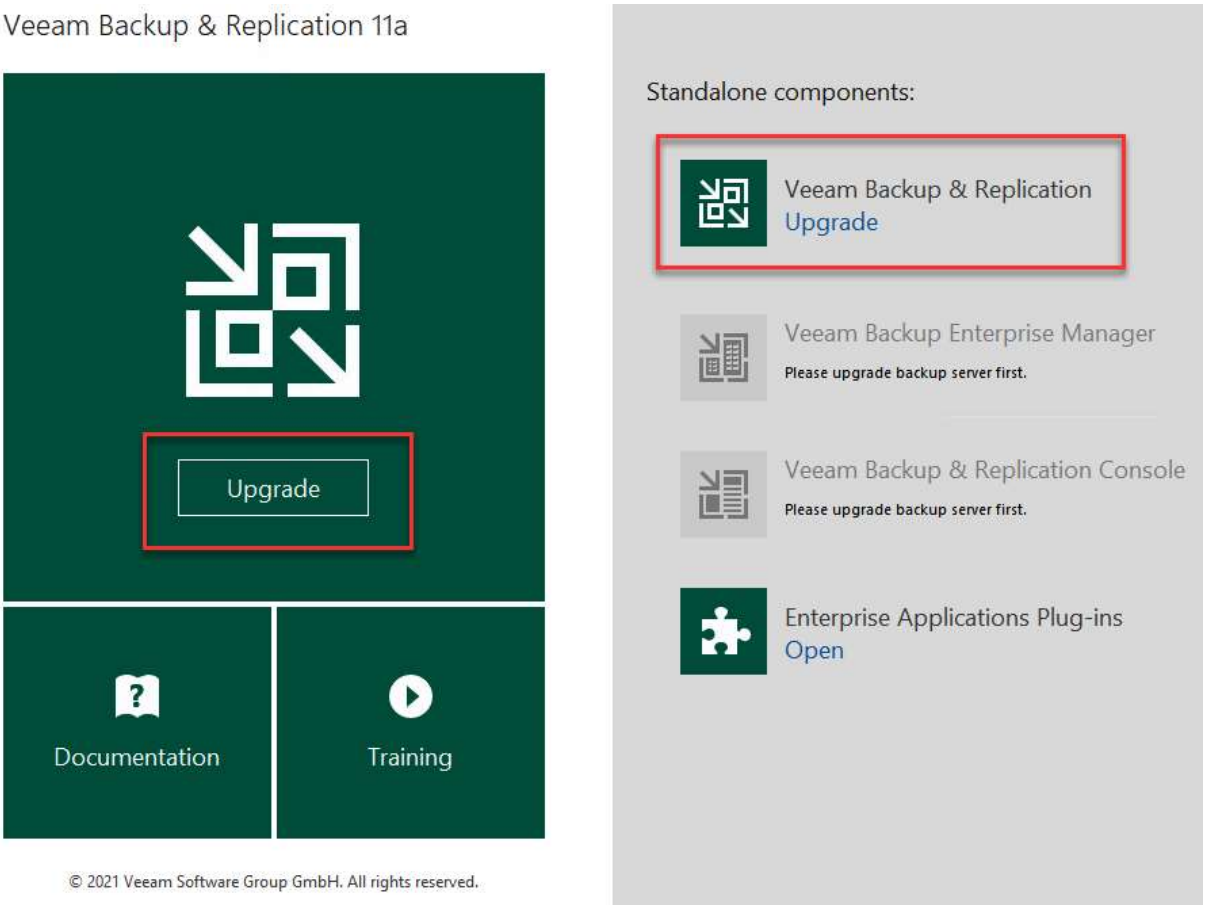

New Scale-out Backup Repository
Capacity Tier
Specify object storage to copy backups to for redundancy and DR purposes. Older backups can be moved to object storage completely to reduce long-term retention costs while preserving the ability to restore directly from offloaded backups.
Name
Performance Tier
Placement Policy
Capacity Tier
Summary
Extend scale-out backup repository capacity with object storage:
Add...
Define time windows when uploading to object storage is allowed
Window...
Copy backups to object storage as soon as they are created
Create additional copy of your backups for added redundancy by having all backups copied to the capacity tier as soon as they are created on the perfomance tier.
Move backups to object storage as they age out of the operational restore window
Reduce your long-term retention costs by moving older backups to object storage completely while preserving the ability to restore directly from offloaded backups.
Move backup files older than 14 days (your operational restore window)
Override...
Encrypt data uploaded to object storage
Password:
Add...
Manage passwords
< Previous
Apply
Finish
Cancel

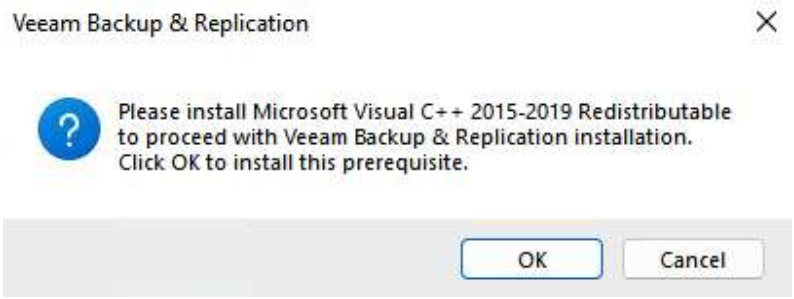

SCALE-OUT REPOSITORY TOOLS
HOME
SCALE-OUT REPOSITORY
Add Scale-out Repository
Edit Scale-out Repository
Remove Repository
Manage Scale-out Repository
Set Access Permissions
Manage Settings
Rescan Repository
Tools
BACKUP INFRASTRUCTURE
Type in an object na
NAME
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
HOME
INVENTORY
BACKUP INFRASTRUCTURE
STORAGE INFRASTRUCTURE
TAPE INFRASTRUCTURE
FILES

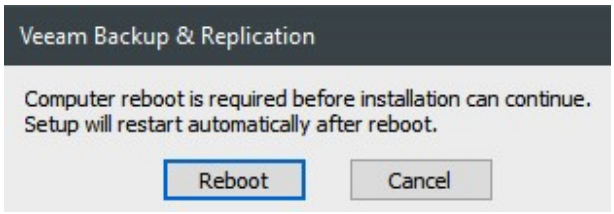

New Scale-out Backup Repository
Performance Tier
Select backup repositories to use as the landing zone and for the short-term retention.
Name
Performance Tier
Placement Policy
Capacity Tier
Summary
Extents:
Name
Add...
Remove
Click Advanced to specify additional scale-out backup repository options.
Advanced
< Previous
Next >
Finish
Cancel

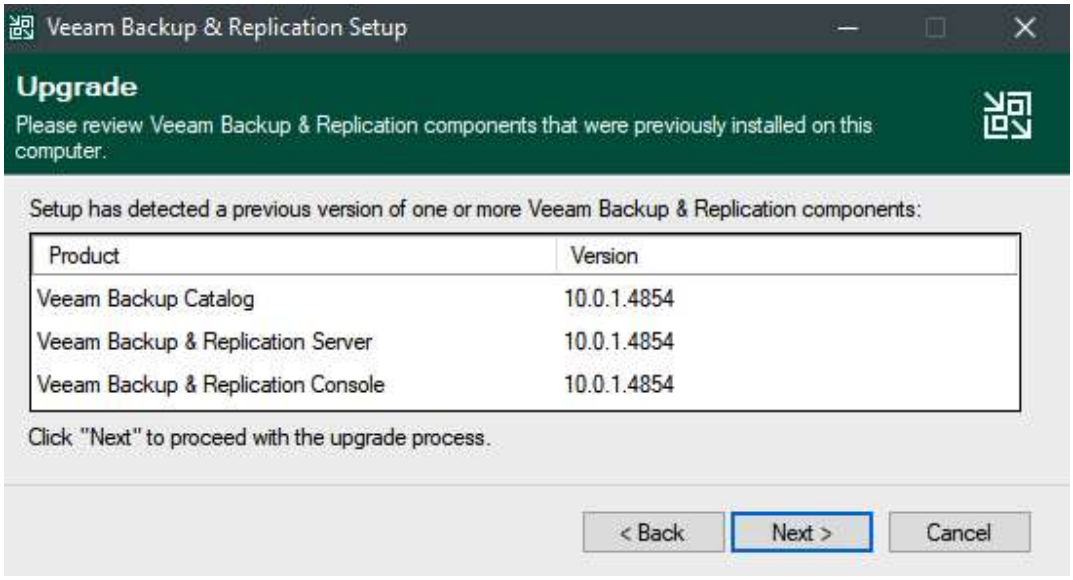

New Scale-out Backup Repository
Capacity Tier
Specify object storage to copy backups to for redundancy and DR purposes. Older backups can be moved to object storage completely to reduce long-term retention costs while preserving the ability to restore directly from offloaded backups.
Name
Performance Tier
Placement Policy
Capacity Tier
Summary
Extend scale-out backup repository capacity with object storage:
CLOUDIAN
Add...
Define time windows when uploading to object storage is allowed
Window...
Copy backups to object storage as soon as they are created
Create additional copy of your backups for added redundancy by having all backups copied to the capacity tier as soon as they are created on the perfomance tier.
Move backups to object storage as they age out of the operational restore window
Reduce your long-term retention costs by moving older backups to object storage completely while preserving the ability to restore directly from offloaded backups.
Move backup files older than 14 days (your operational restore window)
Override...
Encrypt data uploaded to object storage
Password:
Add...
Manage passwords
< Previous
Apply
Finish
Cancel

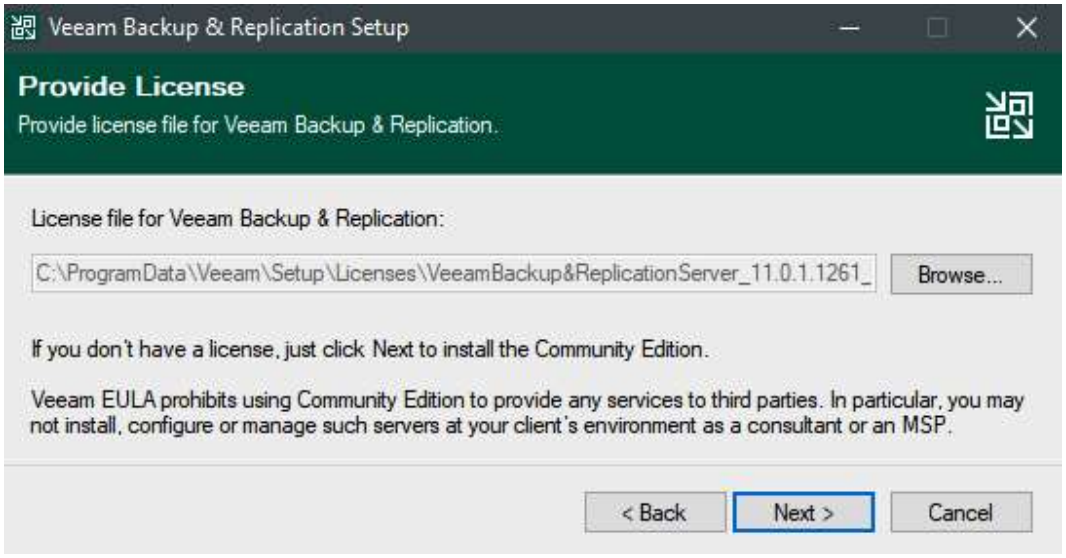

BACKUP INFRASTRUCTURE
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
Type in an object name to search for
NAME
TYPE
HOST
PATH
CAPACITY
FREE
USED SPACE
Backup Repository 1
Windows
home-vbk01.home.lab
F:\Backups
499.9 GB
496.8 GB
0 B
CLOUDIAN
S3-compatible
amazonS3://s3-...
N/A
N/A
0 B

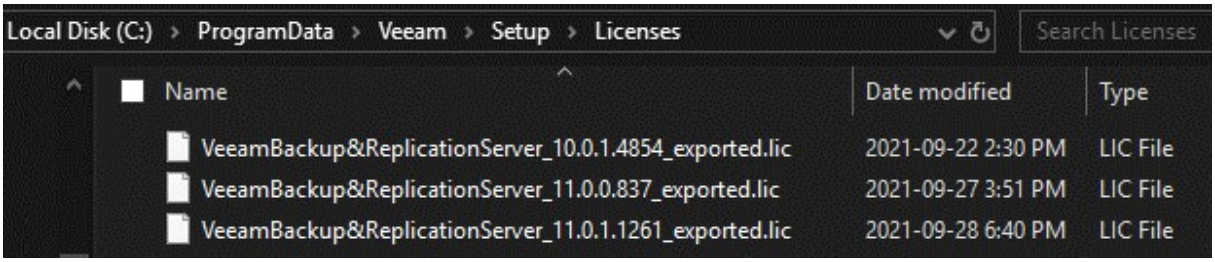

Veeam Backup & Replication 11a
Upgrade
Documentation
Training
© 2021 Veeam Software Group GmbH. All rights reserved.
Standalone components:
Veeam Backup & Replication
Upgrade
Veeam Backup Enterprise Manager
Please upgrade backup server first.
Veeam Backup & Replication Console
Please upgrade backup server first.
Enterprise Applications Plug-ins
Open

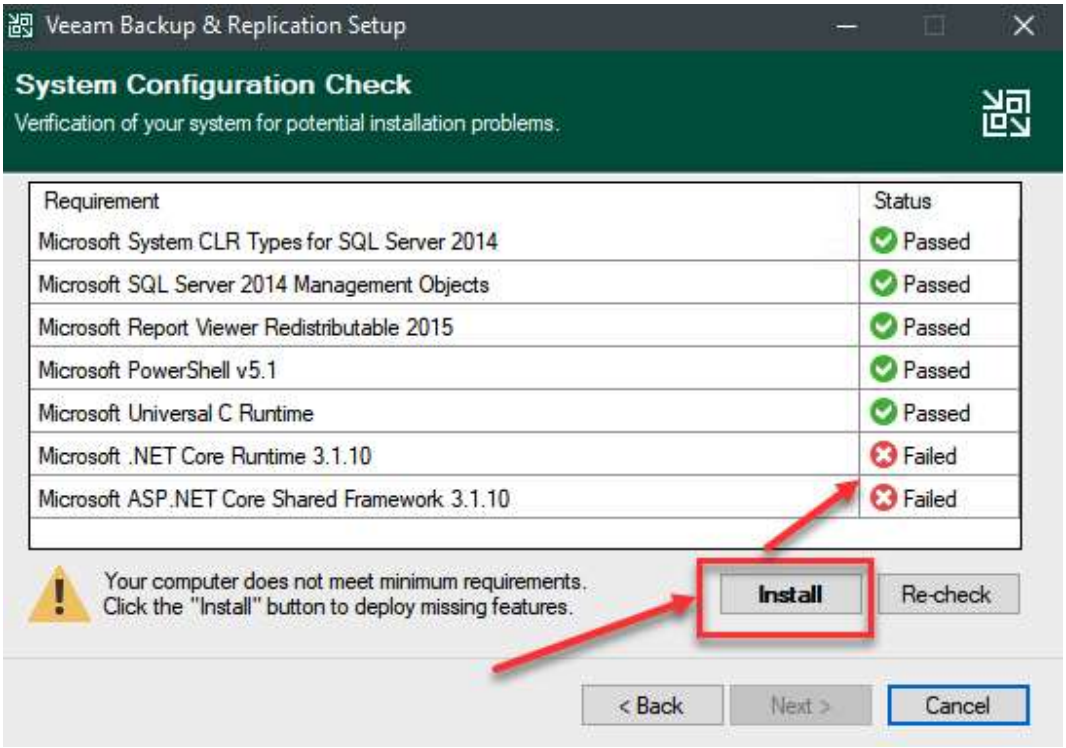

Veeam Backup & Replication
Please install Microsoft Visual C++ 2015-2019 Redistributable
to proceed with Veeam Backup & Replication installation.
Click OK to install this prerequisite.
OK
Cancel

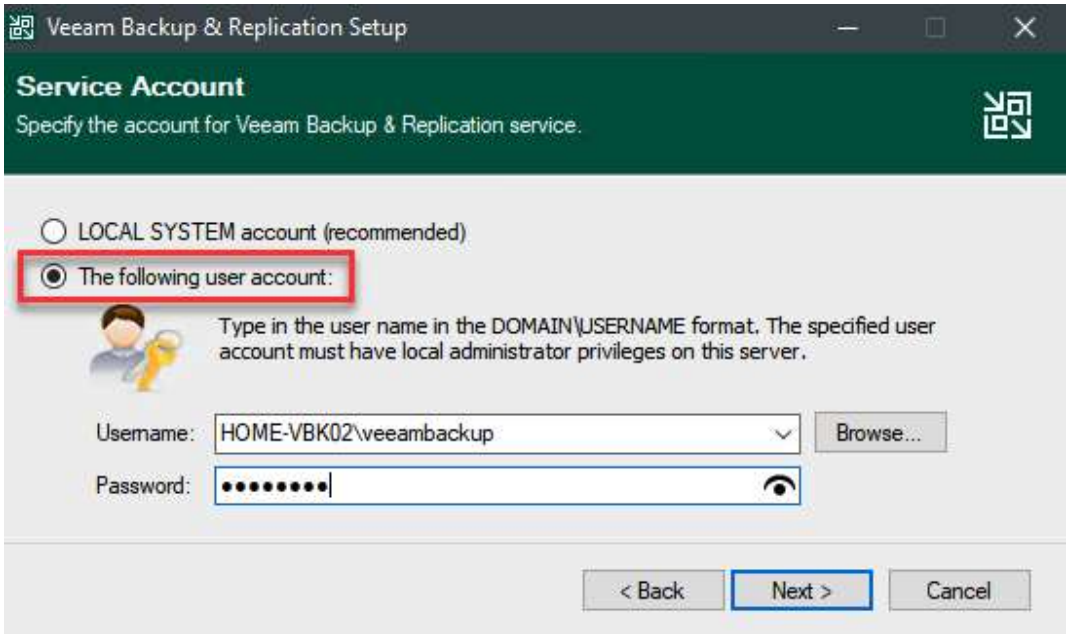

Veeam Backup & Replication
Computer reboot is required before installation can continue.
Setup will restart automatically after reboot.
Reboot
Cancel

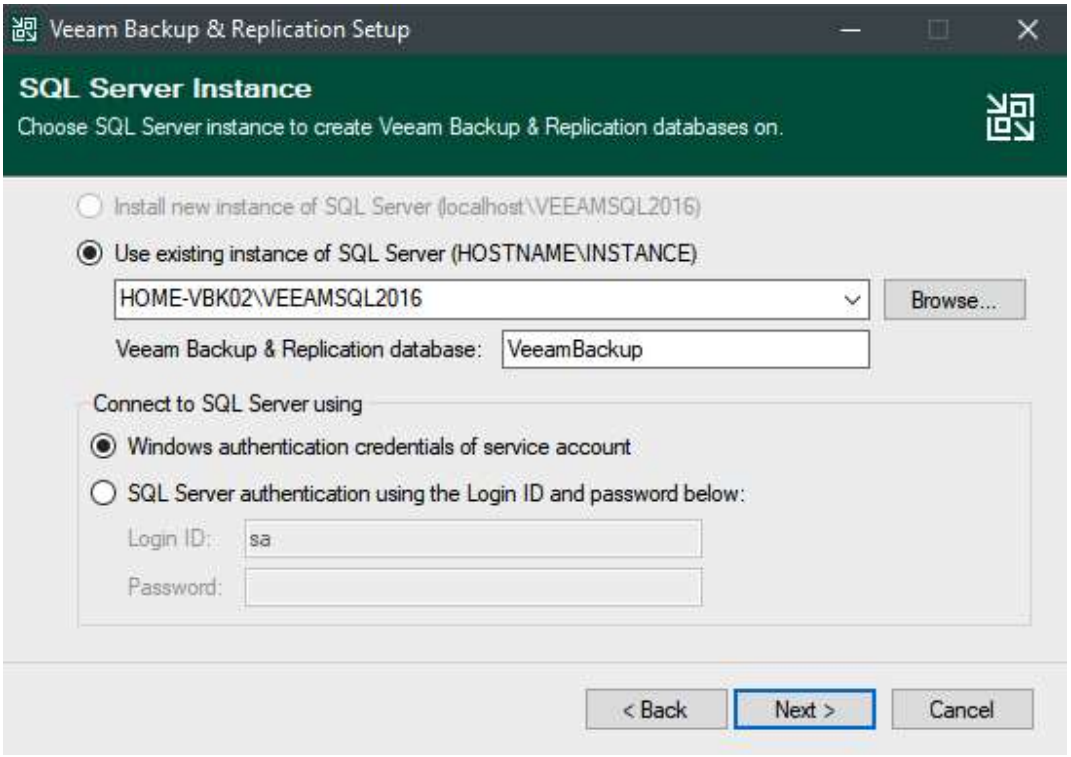

Veeam Backup & Replication Setup
Upgrade
Please review Veeam Backup & Replication components that were previously installed on this computer.
Setup has detected a previous version of one or more Veeam Backup & Replication components:
Product
Version
Veeam Backup Catalog
10.0.1.4854
Veeam Backup & Replication Server
10.0.1.4854
Veeam Backup & Replication Console
10.0.1.4854
Click "Next" to proceed with the upgrade process.
< Back
Next >
Cancel

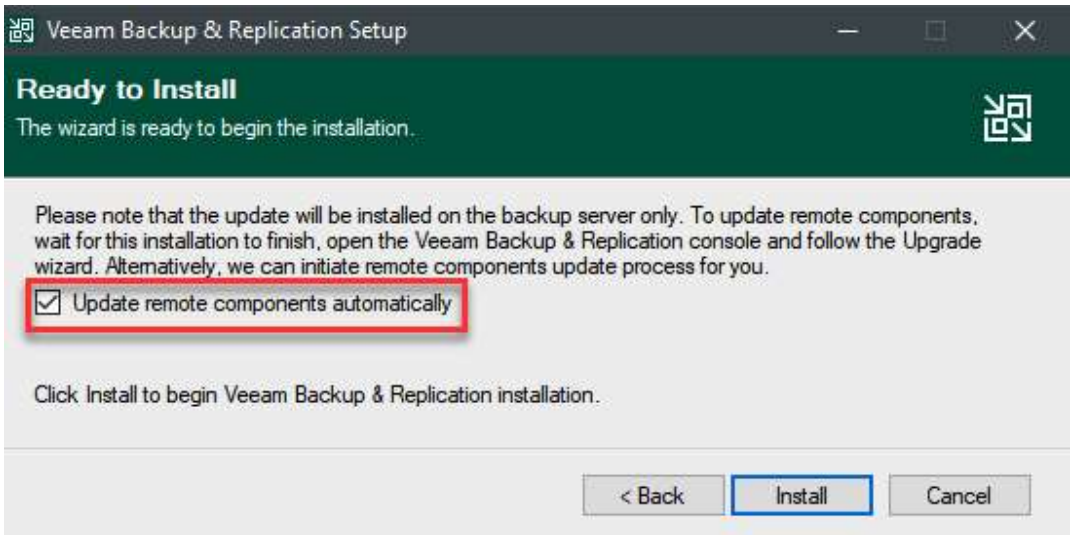

Veeam Backup & Replication Setup
Provide License
Provide license file for Veeam Backup & Replication.
License file for Veeam Backup & Replication:
C:\ProgramData\Veeam\Setup\Licenses\VeeamBackup&ReplicationServer_11.0.1.1261_
Browse...
If you don't have a license, just click Next to install the Community Edition.
Veeam EULA prohibits using Community Edition to provide any services to third parties. In particular, you may not install, configure or manage such servers at your client's environment as a consultant or an MSP.
< Back
Next >
Cancel

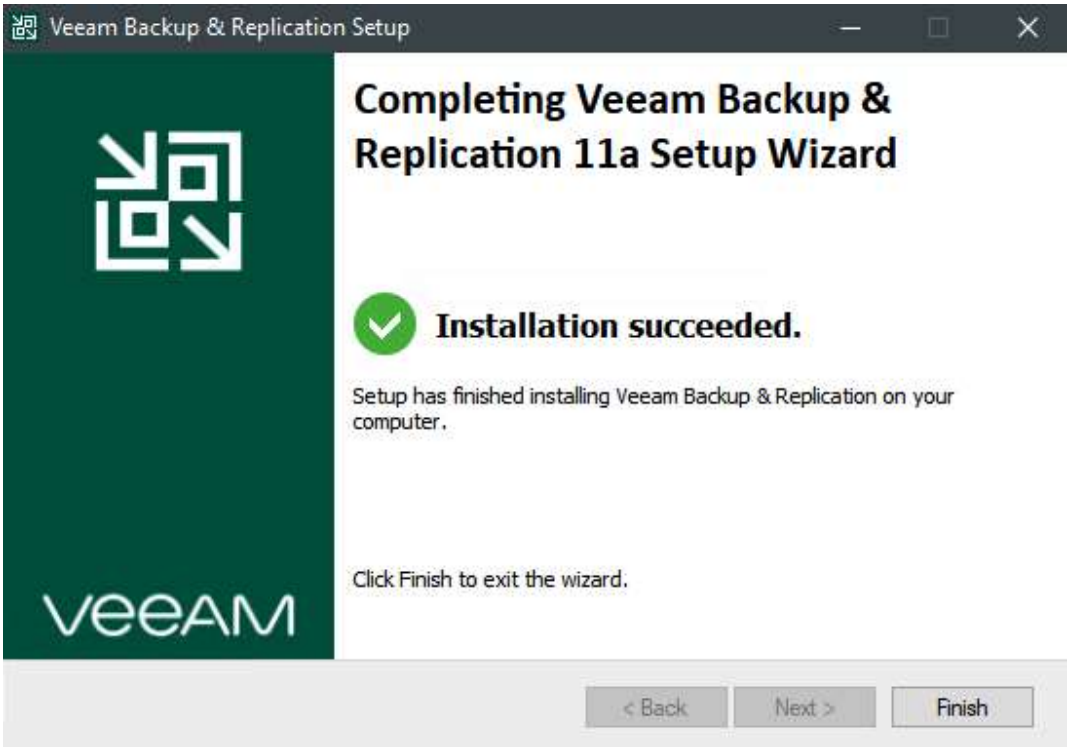

Local Disk (C:) › ProgramData › Veeam › Setup › Licenses
Search Licenses
Name
Date modified
Type
VeeamBackup&ReplicationServer_10.0.1.4854_exported.lic
2021-09-22 2:30 PM
LIC File
VeeamBackup&ReplicationServer_11.0.0.837_exported.lic
2021-09-27 3:51 PM
LIC File
VeeamBackup&ReplicationServer_11.0.1.1261_exported.lic
2021-09-28 6:40 PM
LIC File

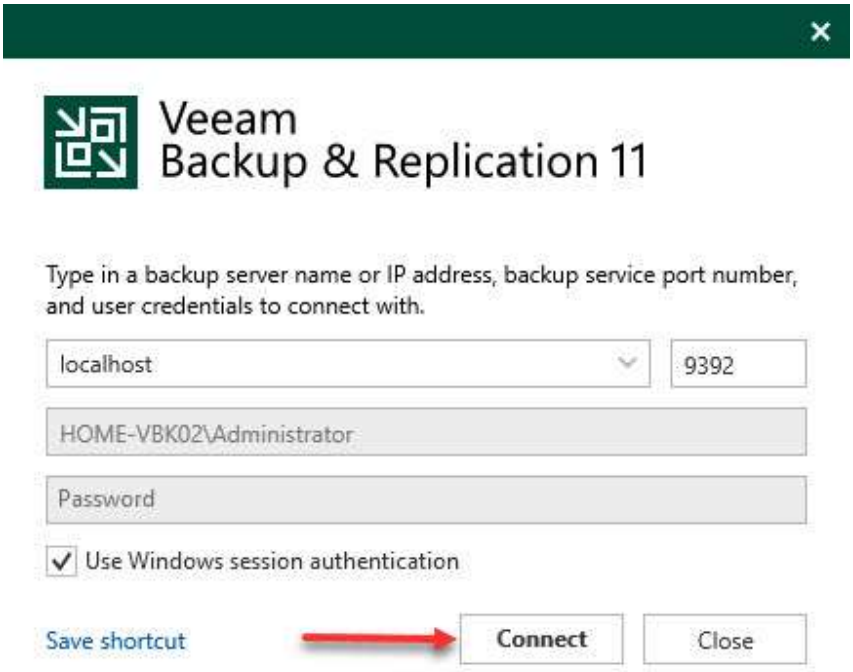

Veeam Backup & Replication Setup
System Configuration Check
Verification of your system for potential installation problems.
Requirement
Status
Microsoft System CLR Types for SQL Server 2014
Passed
Microsoft SQL Server 2014 Management Objects
Passed
Microsoft Report Viewer Redistributable 2015
Passed
Microsoft PowerShell v5.1
Passed
Microsoft Universal C Runtime
Passed
Microsoft .NET Core Runtime 3.1.10
Failed
Microsoft ASP.NET Core Shared Framework 3.1.10
Failed
Your computer does not meet minimum requirements.
Click the "Install" button to deploy missing features.
Install
Re-check
< Back
Next >
Cancel


Veeam Backup & Replication Setup
Service Account
Specify the account for Veeam Backup & Replication service.
LOCAL SYSTEM account (recommended)
The following user account:
Type in the user name in the DOMAIN\USERNAME format. The specified user account must have local administrator privileges on this server.
Username:
HOME-VBK02\veeambackup
Browse...
Password:
< Back
Next >
Cancel

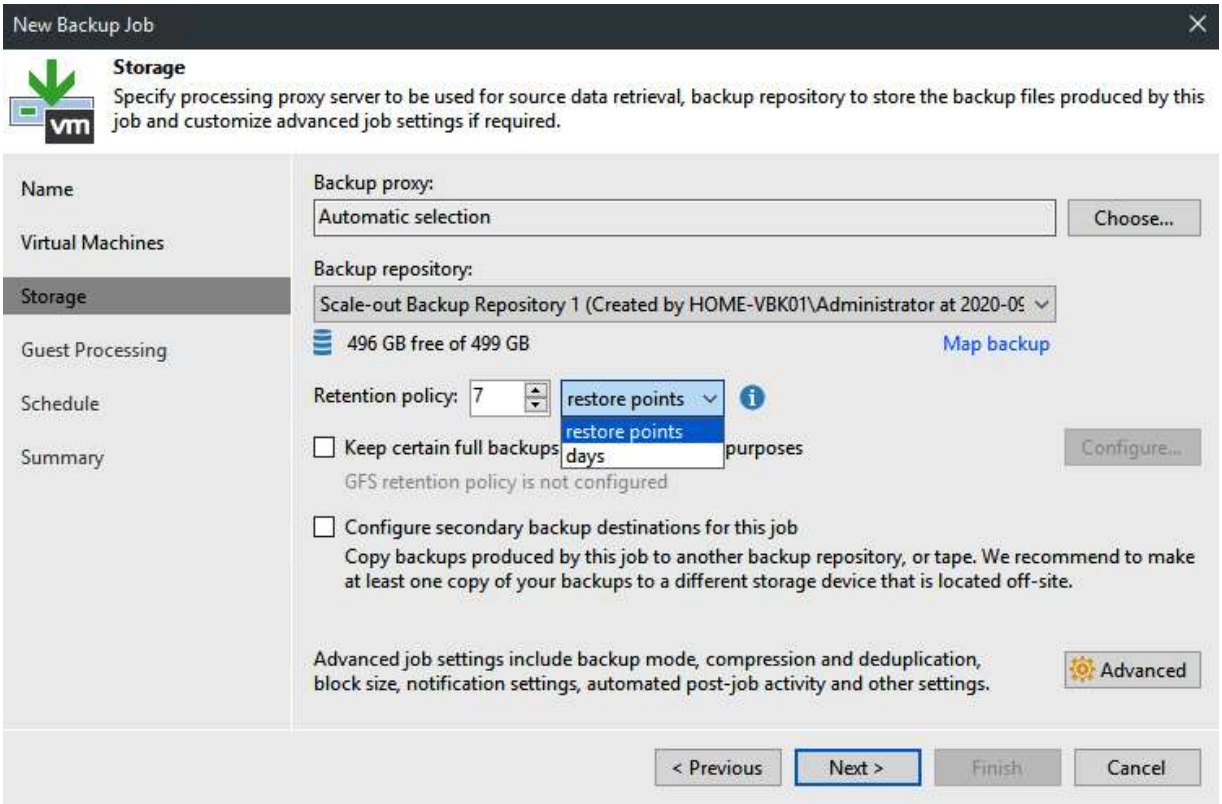

Veeam Backup & Replication Setup
SQL Server Instance
Choose SQL Server instance to create Veeam Backup & Replication databases on.
Install new instance of SQL Server (localhost\VEEAMSQL2016)
Use existing instance of SQL Server (HOSTNAME\INSTANCE)
HOME-VBK02\VEEAMSQL2016
Browse...
Veeam Backup & Replication database:
VeeamBackup
Connect to SQL Server using
Windows authentication credentials of service account
SQL Server authentication using the Login ID and password below:
Login ID:
sa
Password:
< Back
Next >
Cancel

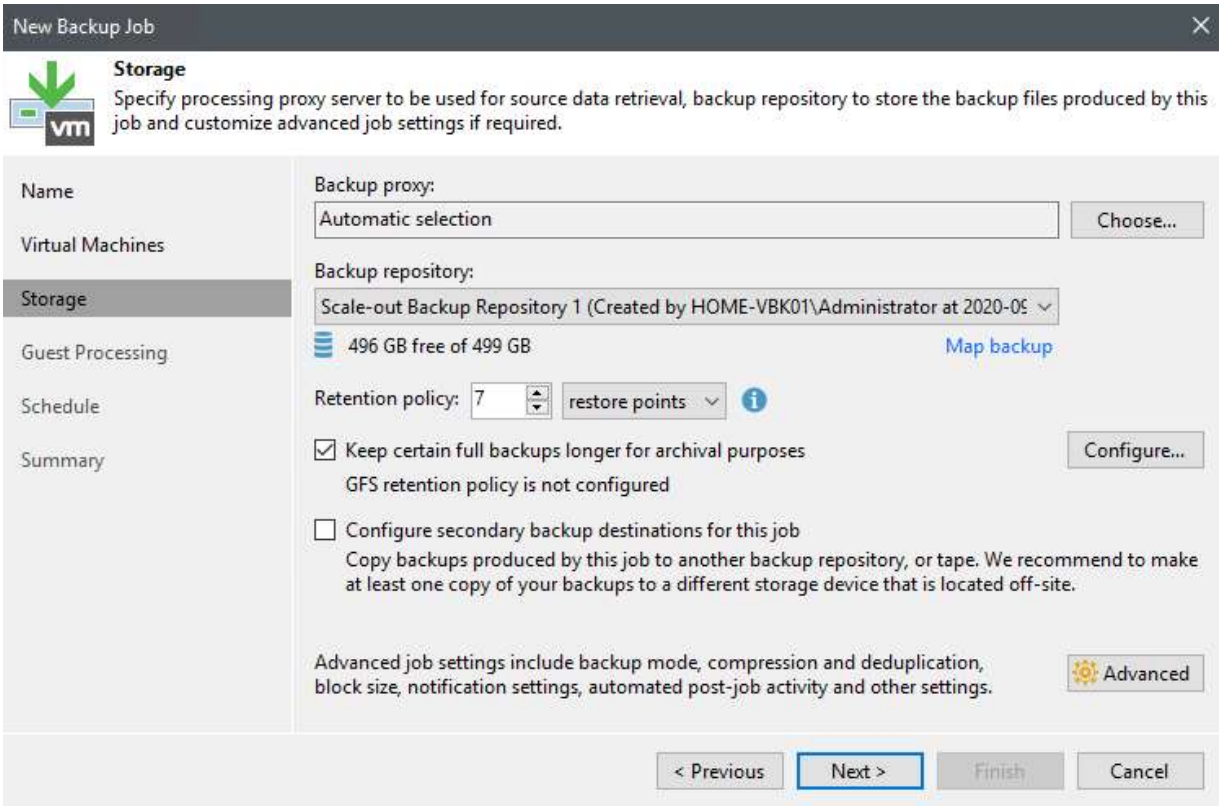

Veeam Backup & Replication Setup
Ready to Install
The wizard is ready to begin the installation.
Please note that the update will be installed on the backup server only. To update remote components, wait for this installation to finish, open the Veeam Backup & Replication console and follow the Upgrade wizard. Alternatively, we can initiate remote components update process for you.
Update remote components automatically
Click Install to begin Veeam Backup & Replication installation.
< Back
Install
Cancel

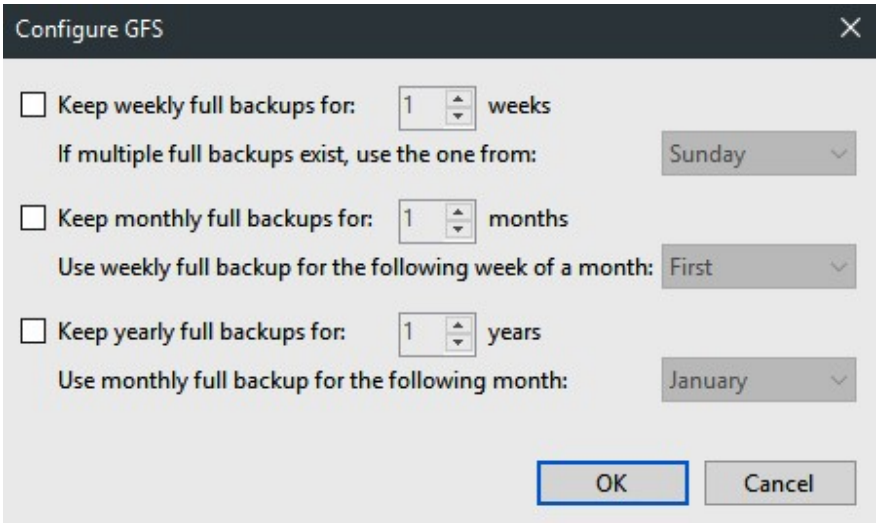

Veeam Backup & Replication Setup
Completing Veeam Backup & Replication 11a Setup Wizard
Installation succeeded.
Setup has finished installing Veeam Backup & Replication on your computer.
Click Finish to exit the wizard.
VEEAM
< Back
Next >
Finish

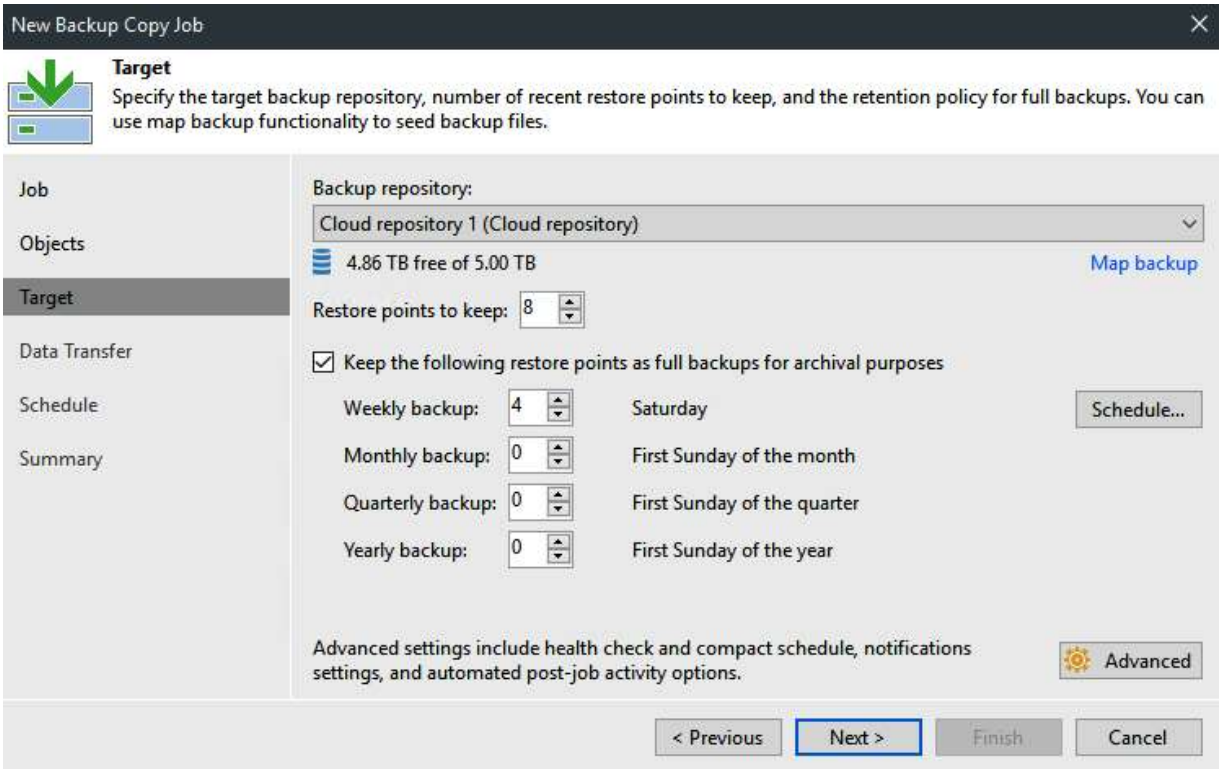

Veeam
Backup & Replication 11
Type in a backup server name or IP address, backup service port number, and user credentials to connect with.
localhost
9392
HOME-VBK02\Administrator
Password
Use Windows session authentication
Save shortcut
Connect
Close

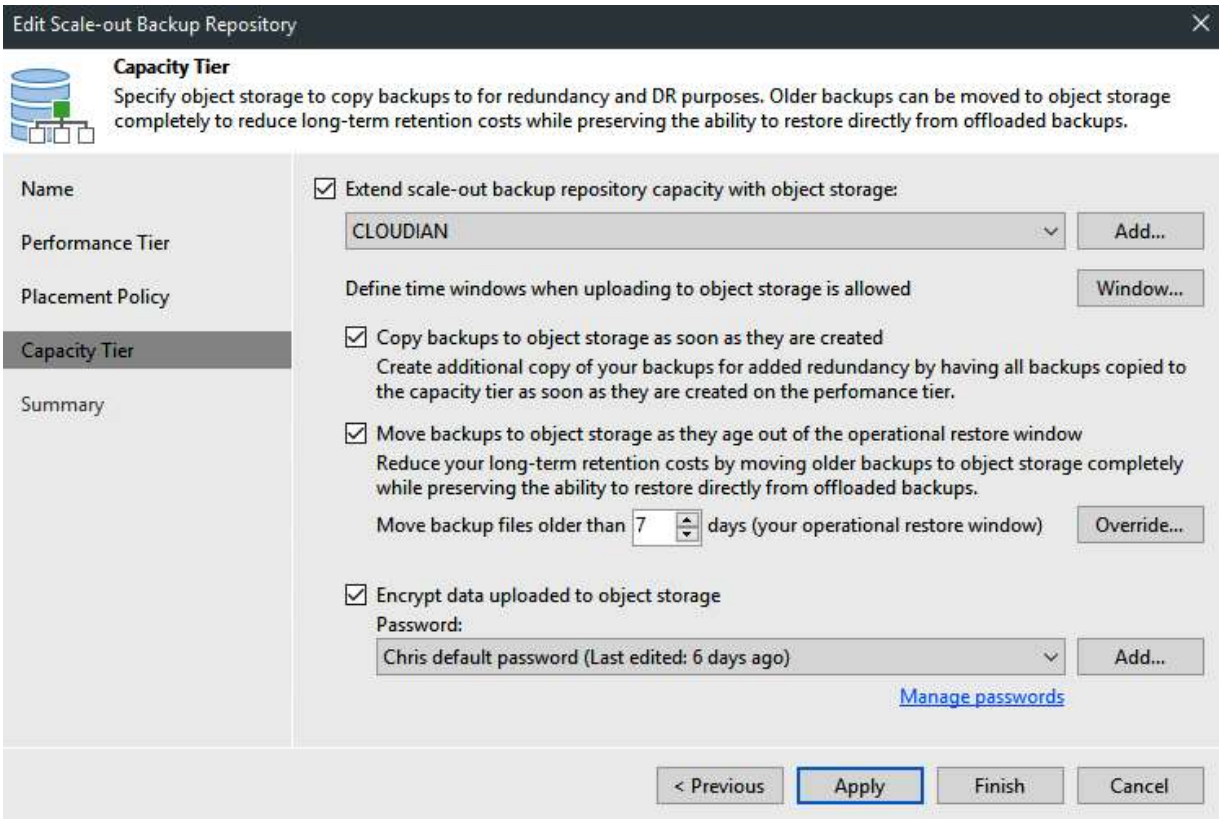
Chapter 2: The 3-2-1-1-0 Rule – Keeping Data Safe

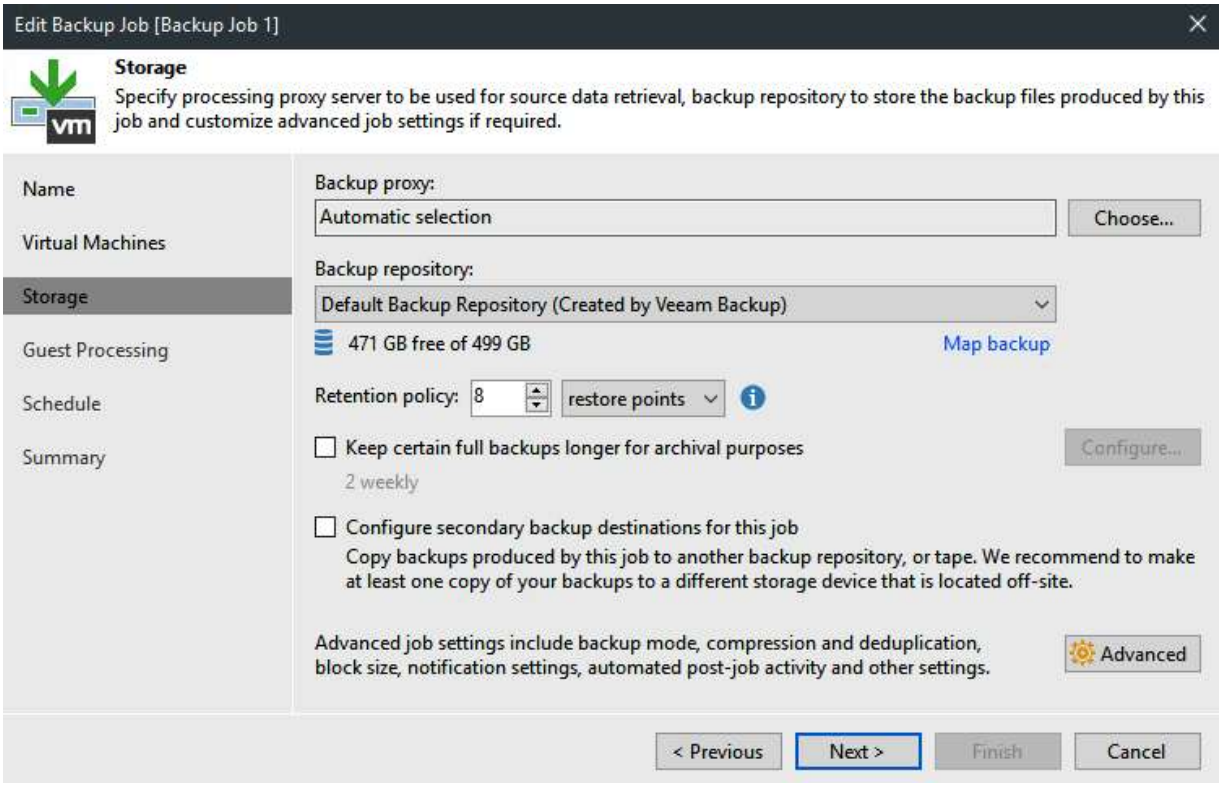


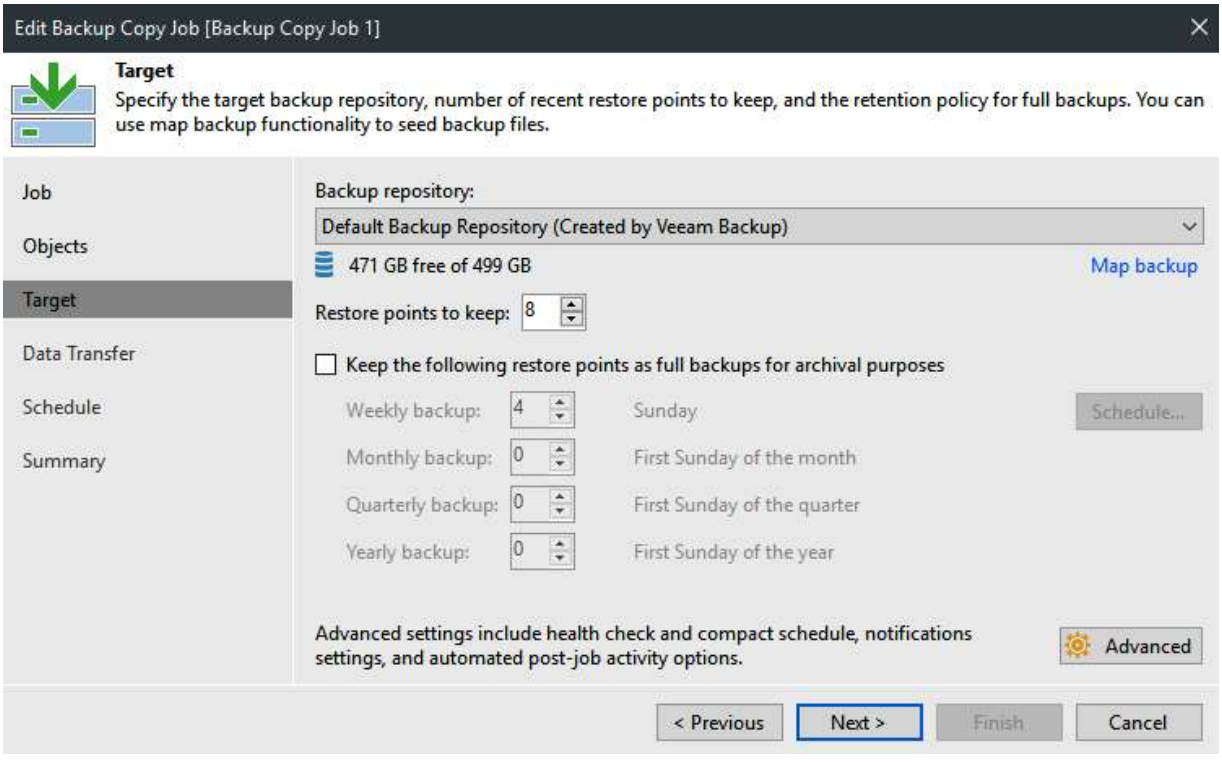

New Backup Job
Storage
Specify processing proxy server to be used for source data retrieval, backup repository to store the backup files produced by this job and customize advanced job settings if required.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Backup proxy:
Automatic selection
Choose...
Backup repository:
Scale-out Backup Repository 1 (Created by HOME-VBK01\Administrator at 2020-09
496 GB free of 499 GB
Map backup
Retention policy: 7 restore points
Keep certain full backups longer for archival purposes
Configure...
GFS retention policy is not configured
Configure secondary backup destinations for this job
Copy backups produced by this job to another backup repository, or tape. We recommend to make at least one copy of your backups to a different storage device that is located off-site.
Advanced job settings include backup mode, compression and deduplication, block size, notification settings, automated post-job activity and other settings.
Advanced
< Previous
Next >
Finish
Cancel

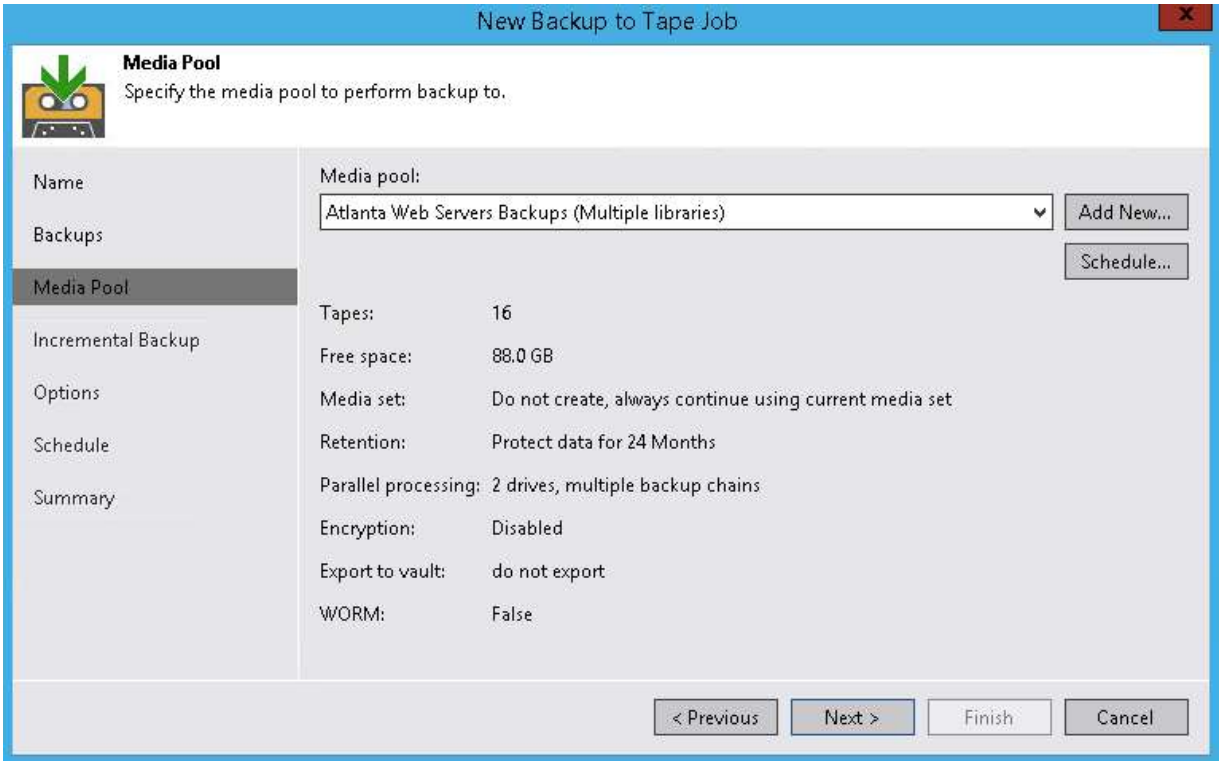

Configure GFS
Keep weekly full backups for: 1 weeks
If multiple full backups exist, use the one from: Sunday
Keep monthly full backups for: 1 months
Use weekly full backup for the following week of a month: First
Keep yearly full backups for: 1 years
Use monthly full backup for the following month: January
OK
Cancel

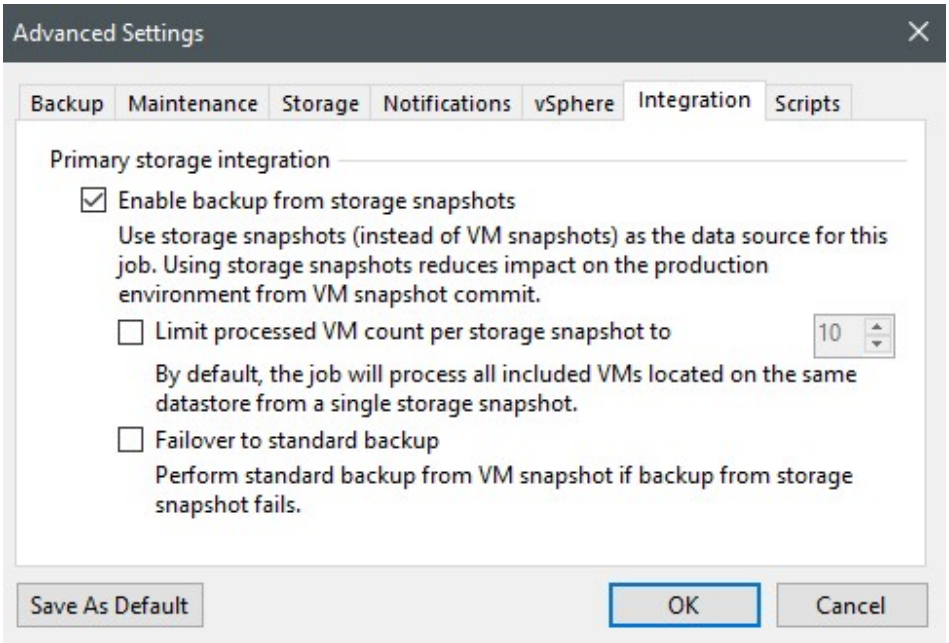

New Backup Copy Job
Target
Specify the target backup repository, number of recent restore points to keep, and the retention policy for full backups. You can use map backup functionality to seed backup files.
Job
Objects
Target
Data Transfer
Schedule
Summary
Backup repository:
Cloud repository 1 (Cloud repository)
4.86 TB free of 5.00 TB
Map backup
Restore points to keep: 8
Keep the following restore points as full backups for archival purposes
Weekly backup: 4 Saturday
Schedule...
Monthly backup: 0 First Sunday of the month
Quarterly backup: 0 First Sunday of the quarter
Yearly backup: 0 First Sunday of the year
Advanced settings include health check and compact schedule, notifications settings, and automated post-job activity options.
Advanced
< Previous
Next >
Finish
Cancel

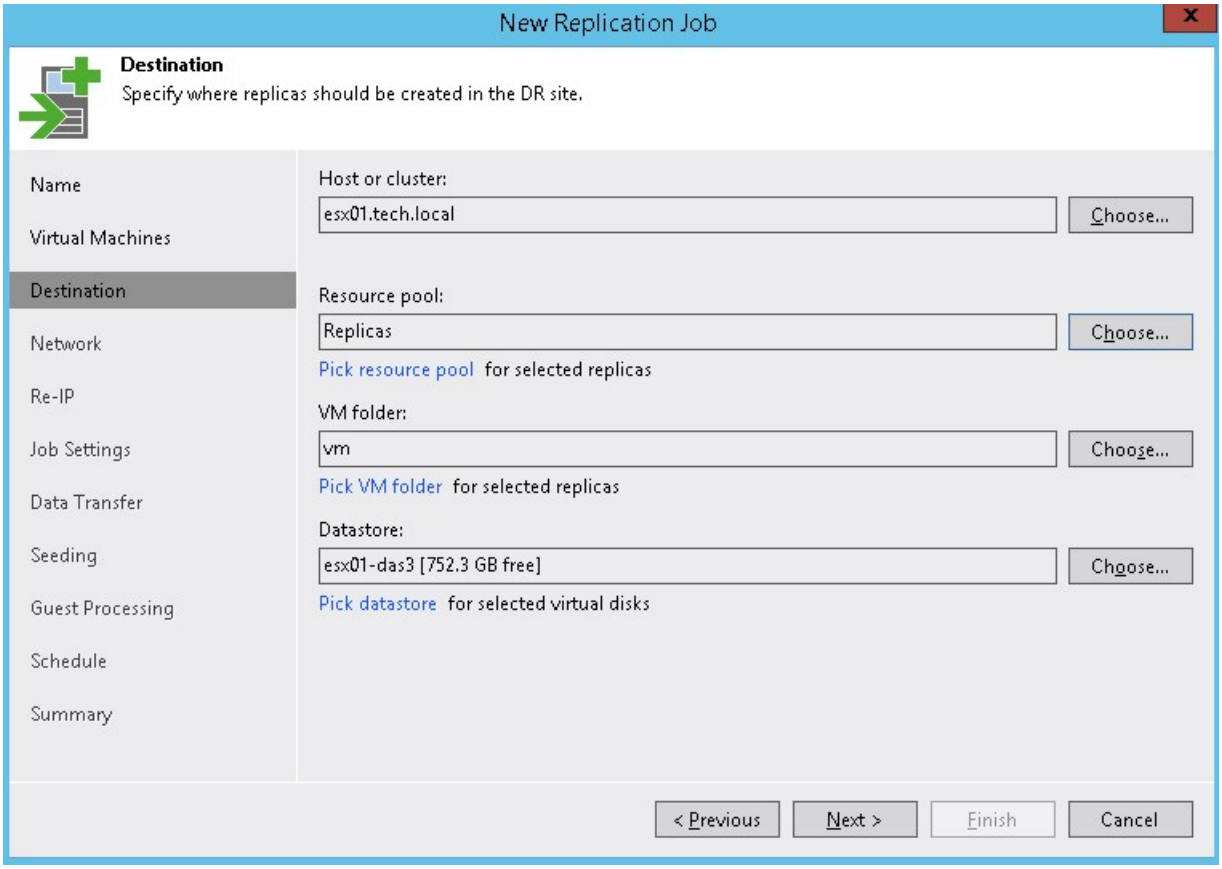

Edit Scale-out Backup Repository
Capacity Tier
Specify object storage to copy backups to for redundancy and DR purposes. Older backups can be moved to object storage completely to reduce long-term retention costs while preserving the ability to restore directly from offloaded backups.
Name
Performance Tier
Placement Policy
Capacity Tier
Summary
Extend scale-out backup repository capacity with object storage:
CLOUDIAN
Add...
Define time windows when uploading to object storage is allowed
Window...
Copy backups to object storage as soon as they are created
Create additional copy of your backups for added redundancy by having all backups copied to the capacity tier as soon as they are created on the perfomance tier.
Move backups to object storage as they age out of the operational restore window
Reduce your long-term retention costs by moving older backups to object storage completely while preserving the ability to restore directly from offloaded backups.
Move backup files older than 7 days (your operational restore window)
Override...
Encrypt data uploaded to object storage
Password:
Chris default password (Last edited: 6 days ago)
Add...
Manage passwords
< Previous
Apply
Finish
Cancel

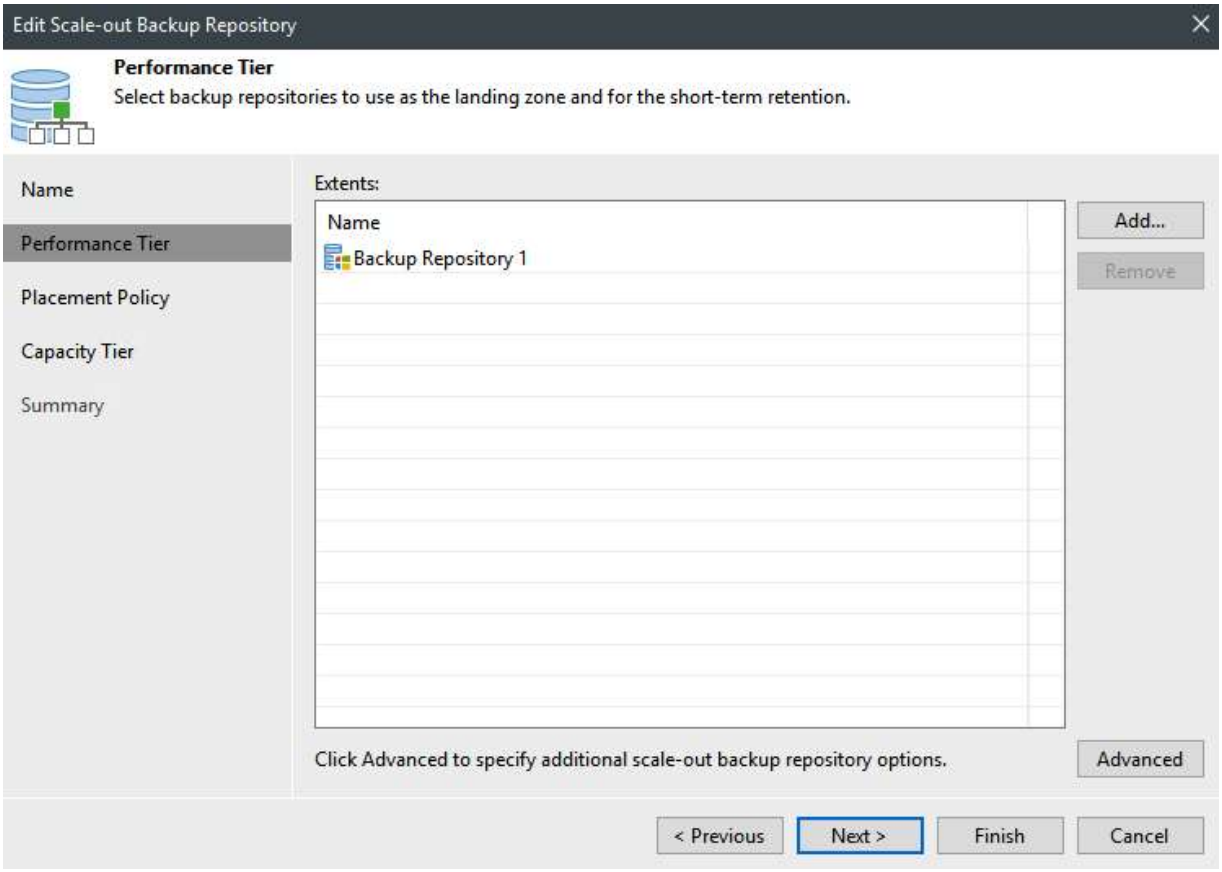

Edit Backup Job [Backup Job 1]
Storage
Specify processing proxy server to be used for source data retrieval, backup repository to store the backup files produced by this job and customize advanced job settings if required.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Backup proxy:
Automatic selection
Choose...
Backup repository:
Default Backup Repository (Created by Veeam Backup)
471 GB free of 499 GB
Map backup
Retention policy: 8 restore points
Keep certain full backups longer for archival purposes
Configure...
2 weekly
Configure secondary backup destinations for this job
Copy backups produced by this job to another backup repository, or tape. We recommend to make at least one copy of your backups to a different storage device that is located off-site.
Advanced job settings include backup mode, compression and deduplication, block size, notification settings, automated post-job activity and other settings.
Advanced
< Previous
Next >
Finish
Cancel

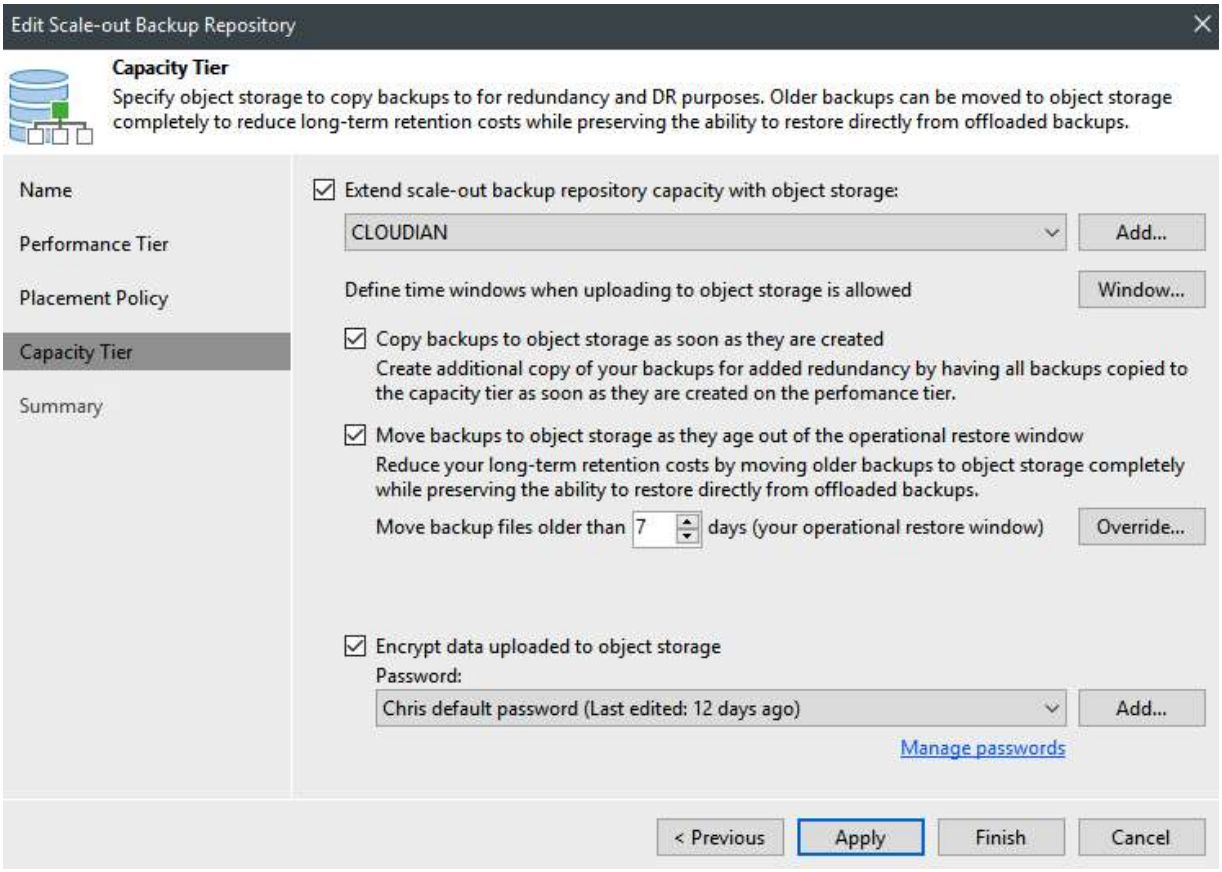

Edit Backup Copy Job [Backup Copy Job 1]
Target
Specify the target backup repository, number of recent restore points to keep, and the retention policy for full backups. You can use map backup functionality to seed backup files.
Job
Objects
Target
Data Transfer
Schedule
Summary
Backup repository:
Default Backup Repository (Created by Veeam Backup)
471 GB free of 499 GB
Map backup
Restore points to keep: 8
Keep the following restore points as full backups for archival purposes
Weekly backup: 4 Sunday
Schedule...
Monthly backup: 0 First Sunday of the month
Quarterly backup: 0 First Sunday of the quarter
Yearly backup: 0 First Sunday of the year
Advanced settings include health check and compact schedule, notifications settings, and automated post-job activity options.
Advanced
< Previous
Next >
Finish
Cancel

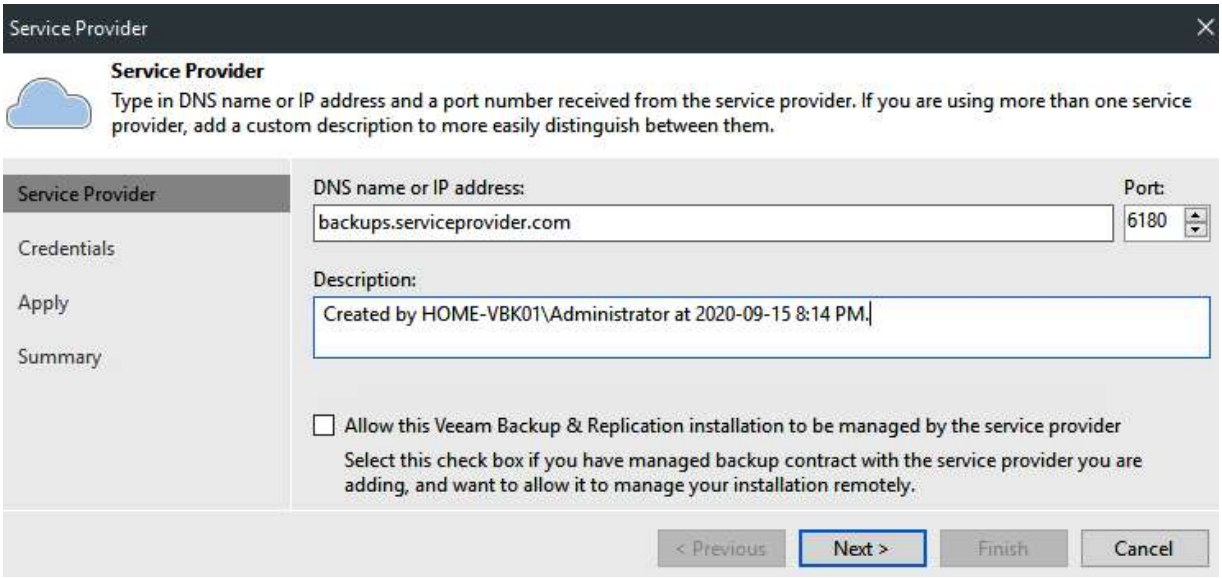

New Backup to Tape Job
Media Pool
Specify the media pool to perform backup to.
Name
Backups
Media Pool
Incremental Backup
Options
Schedule
Summary
Media pool:
Atlanta Web Servers Backups (Multiple libraries)
Add New...
Schedule...
Tapes: 16
Free space: 88.0 GB
Media set: Do not create, always continue using current media set
Retention: Protect data for 24 Months
Parallel processing: 2 drives, multiple backup chains
Encryption: Disabled
Export to vault: do not export
WORM: False
< Previous
Next >
Finish
Cancel

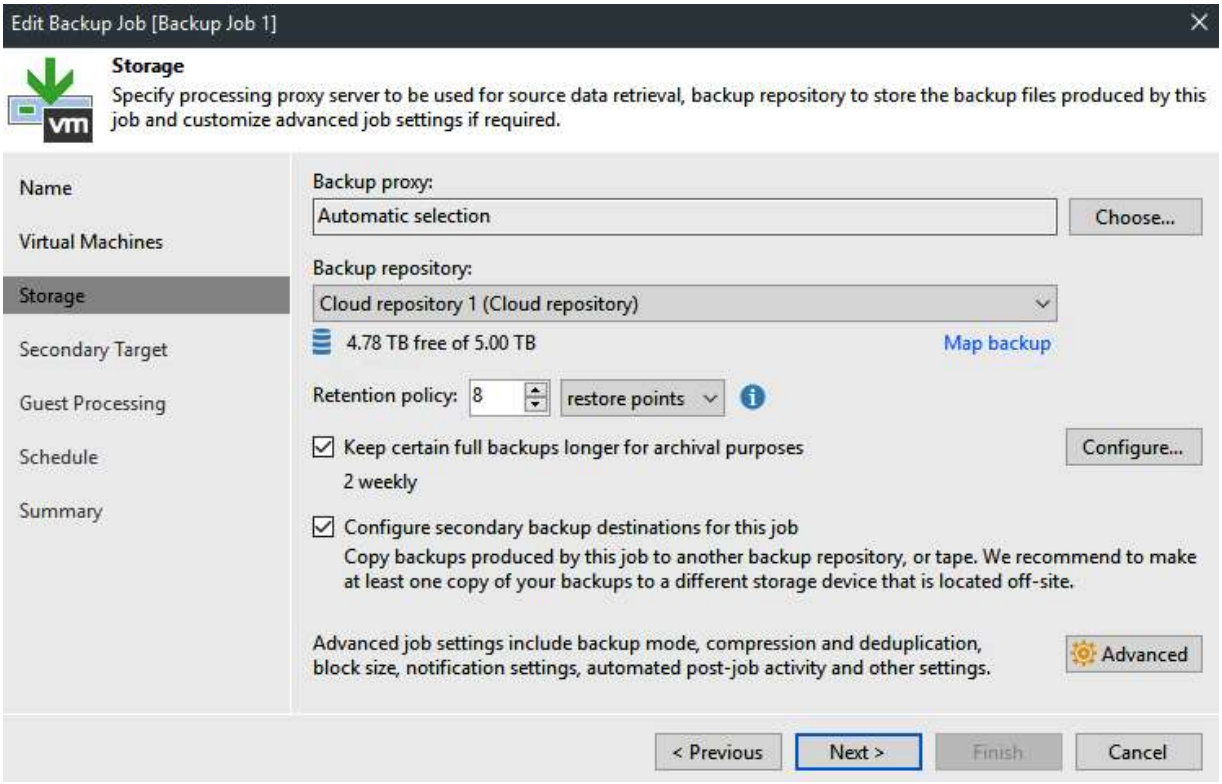

Advanced Settings
Backup
Maintenance
Storage
Notifications
vSphere
Integration
Scripts
Primary storage integration
Enable backup from storage snapshots
Use storage snapshots (instead of VM snapshots) as the data source for this job. Using storage snapshots reduces impact on the production environment from VM snapshot commit.
Limit processed VM count per storage snapshot to
10
By default, the job will process all included VMs located on the same datastore from a single storage snapshot.
Failover to standard backup
Perform standard backup from VM snapshot if backup from storage snapshot fails.
Save As Default
OK
Cancel


New Replication Job
Destination
Specify where replicas should be created in the DR site.
Name
Virtual Machines
Destination
Network
Re-IP
Job Settings
Data Transfer
Seeding
Guest Processing
Schedule
Summary
Host or cluster:
esx01.tech.local
Choose...
Resource pool:
Replicas
Choose...
Pick resource pool for selected replicas
VM folder:
vm
Choose...
Pick VM folder for selected replicas
Datastore:
esx01-das3 [752.3 GB free]
Choose...
Pick datastore for selected virtual disks
< Previous
Next >
Finish
Cancel

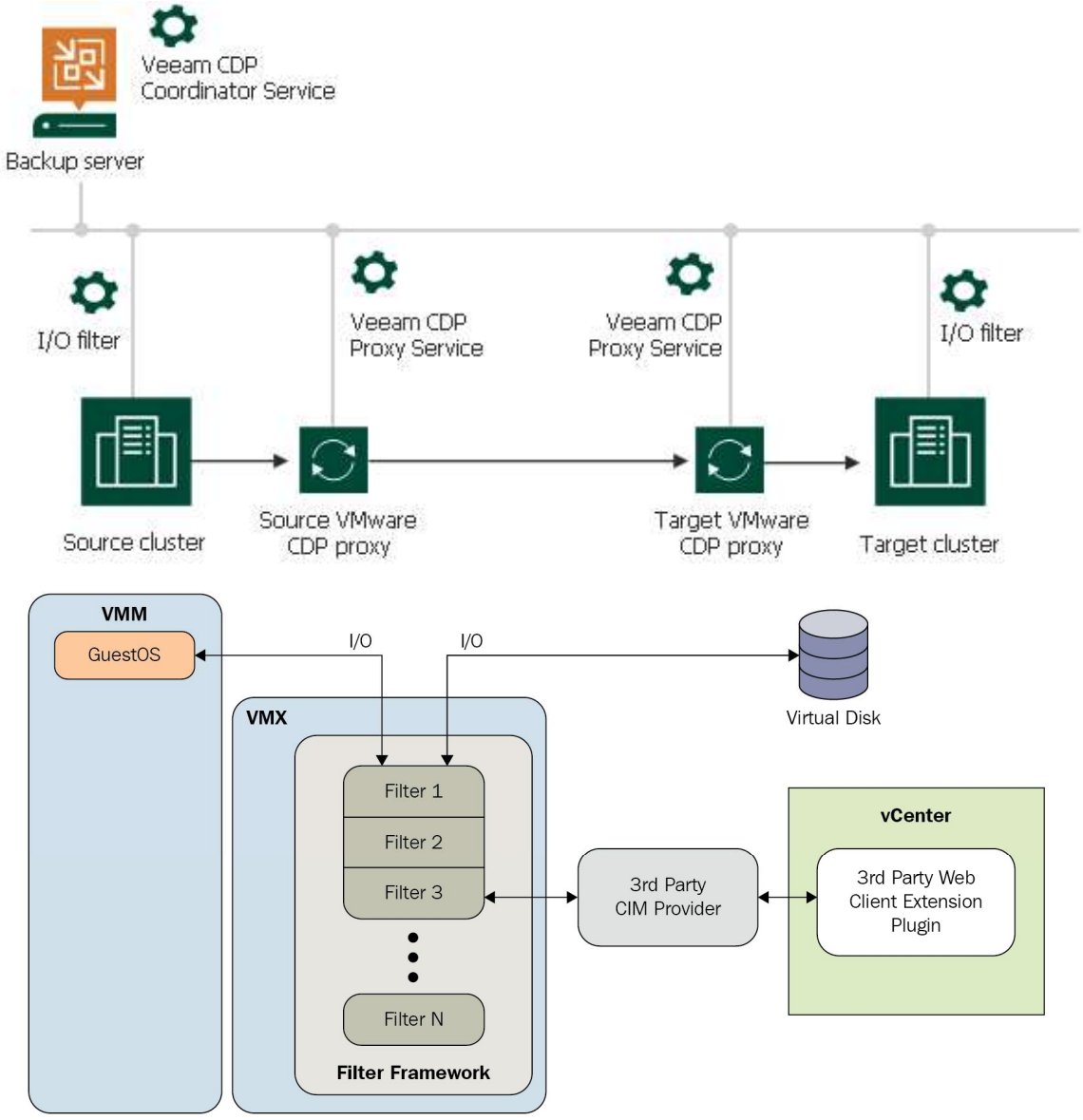

Edit Scale-out Backup Repository
Performance Tier
Select backup repositories to use as the landing zone and for the short-term retention.
Name
Performance Tier
Placement Policy
Capacity Tier
Summary
Extents:
Name
Backup Repository 1
Add...
Remove
Click Advanced to specify additional scale-out backup repository options.
Advanced
< Previous
Next >
Finish
Cancel

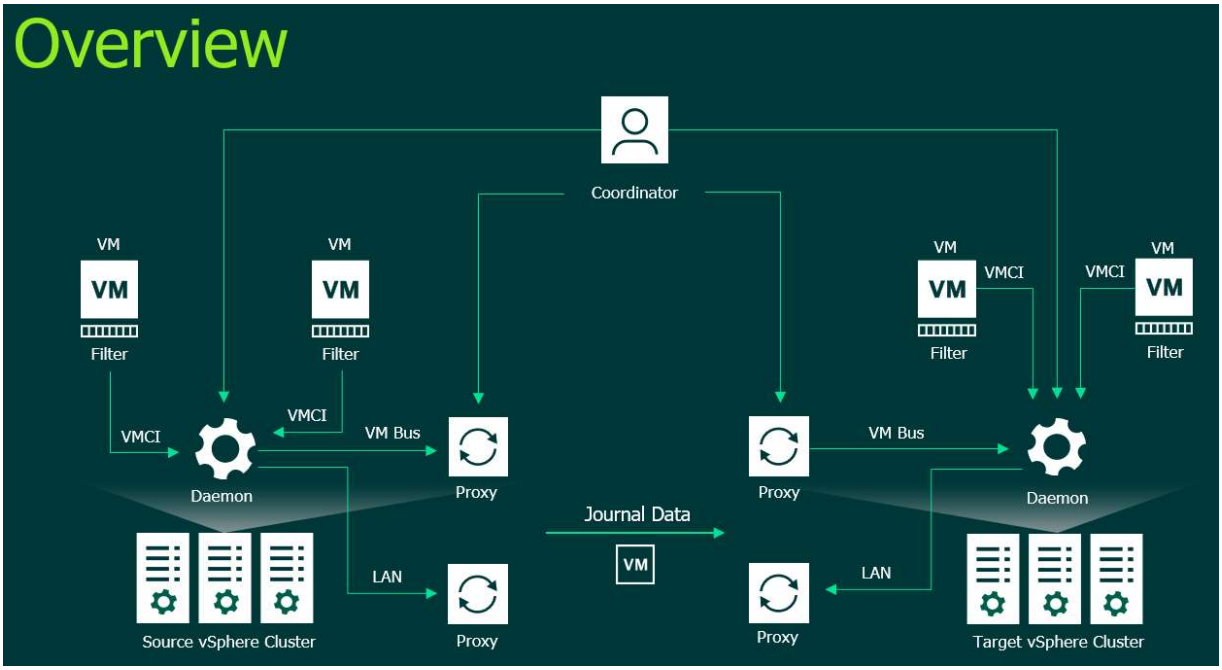

Edit Scale-out Backup Repository
Capacity Tier
Specify object storage to copy backups to for redundancy and DR purposes. Older backups can be moved to object storage completely to reduce long-term retention costs while preserving the ability to restore directly from offloaded backups.
Name
Performance Tier
Placement Policy
Capacity Tier
Summary
Extend scale-out backup repository capacity with object storage:
CLOUDIAN
Add...
Define time windows when uploading to object storage is allowed
Window...
Copy backups to object storage as soon as they are created
Create additional copy of your backups for added redundancy by having all backups copied to the capacity tier as soon as they are created on the perfomance tier.
Move backups to object storage as they age out of the operational restore window
Reduce your long-term retention costs by moving older backups to object storage completely while preserving the ability to restore directly from offloaded backups.
Move backup files older than 7 days (your operational restore window)
Override...
Encrypt data uploaded to object storage
Password:
Chris default password (Last edited: 12 days ago)
Add...
Manage passwords
< Previous
Apply
Finish
Cancel

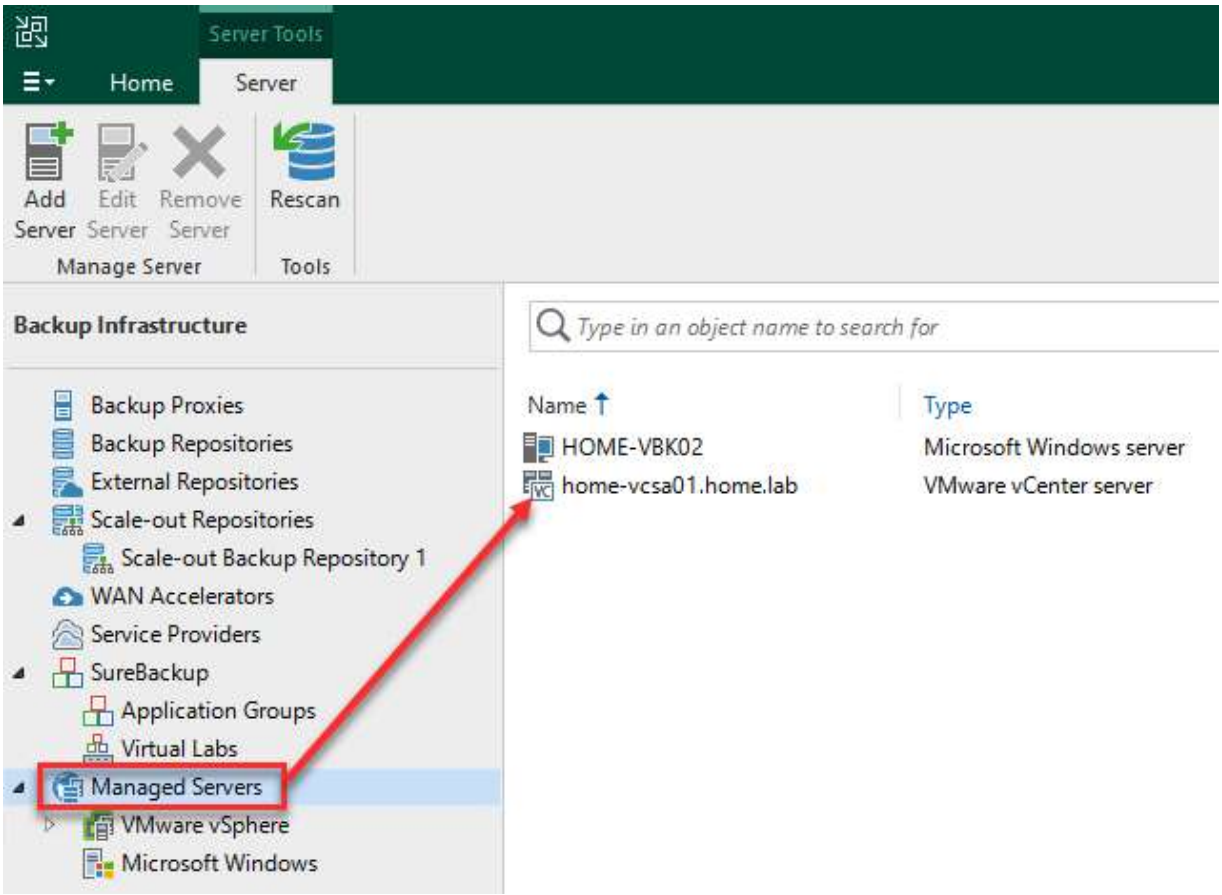

Service Provider
Service Provider
Type in DNS name or IP address and a port number received from the service provider. If you are using more than one service provider, add a custom description to more easily distinguish between them.
Service Provider
Credentials
Apply
Summary
DNS name or IP address:
Port:
backups.serviceprovider.com
6180
Description:
Created by HOME-VBK01\Administrator at 2020-09-15 8:14 PM.
Allow this Veeam Backup & Replication installation to be managed by the service provider
Select this check box if you have managed backup contract with the service provider you are adding, and want to allow it to manage your installation remotely.
< Previous
Next >
Finish
Cancel

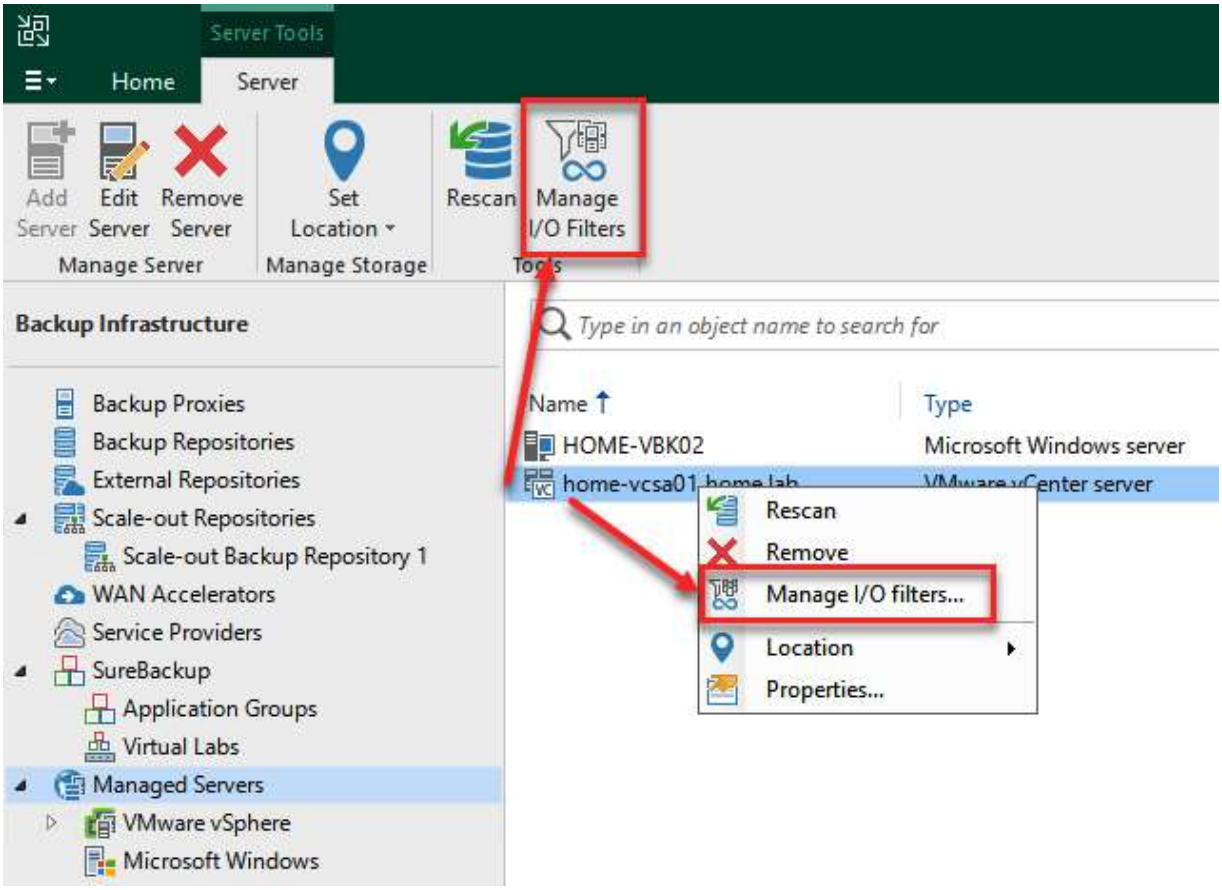

Edit Backup Job [Backup Job 1]
Storage
Specify processing proxy server to be used for source data retrieval, backup repository to store the backup files produced by this job and customize advanced job settings if required.
Name
Virtual Machines
Storage
Secondary Target
Guest Processing
Schedule
Summary
Backup proxy:
Automatic selection
Choose...
Backup repository:
Cloud repository 1 (Cloud repository)
4.78 TB free of 5.00 TB
Map backup
Retention policy: 8
restore points
Keep certain full backups longer for archival purposes
Configure...
2 weekly
Configure secondary backup destinations for this job
Copy backups produced by this job to another backup repository, or tape. We recommend to make at least one copy of your backups to a different storage device that is located off-site.
Advanced job settings include backup mode, compression and deduplication, block size, notification settings, automated post-job activity and other settings.
Advanced
< Previous
Next >
Finish
Cancel

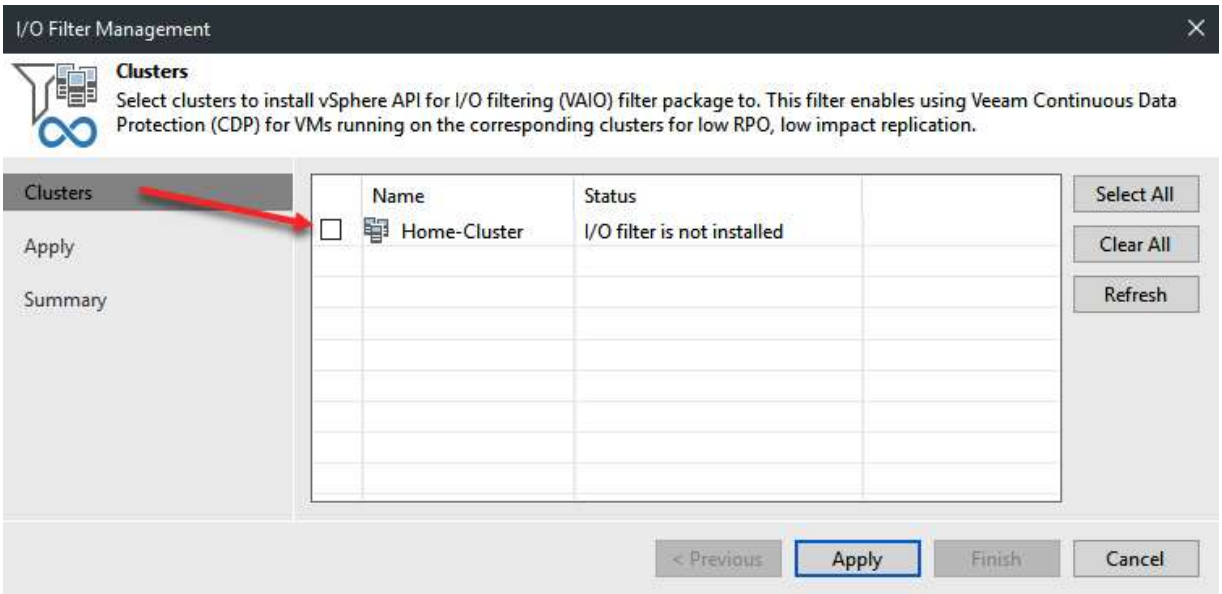
Chapter 3: CDP – Continuous Data Protection

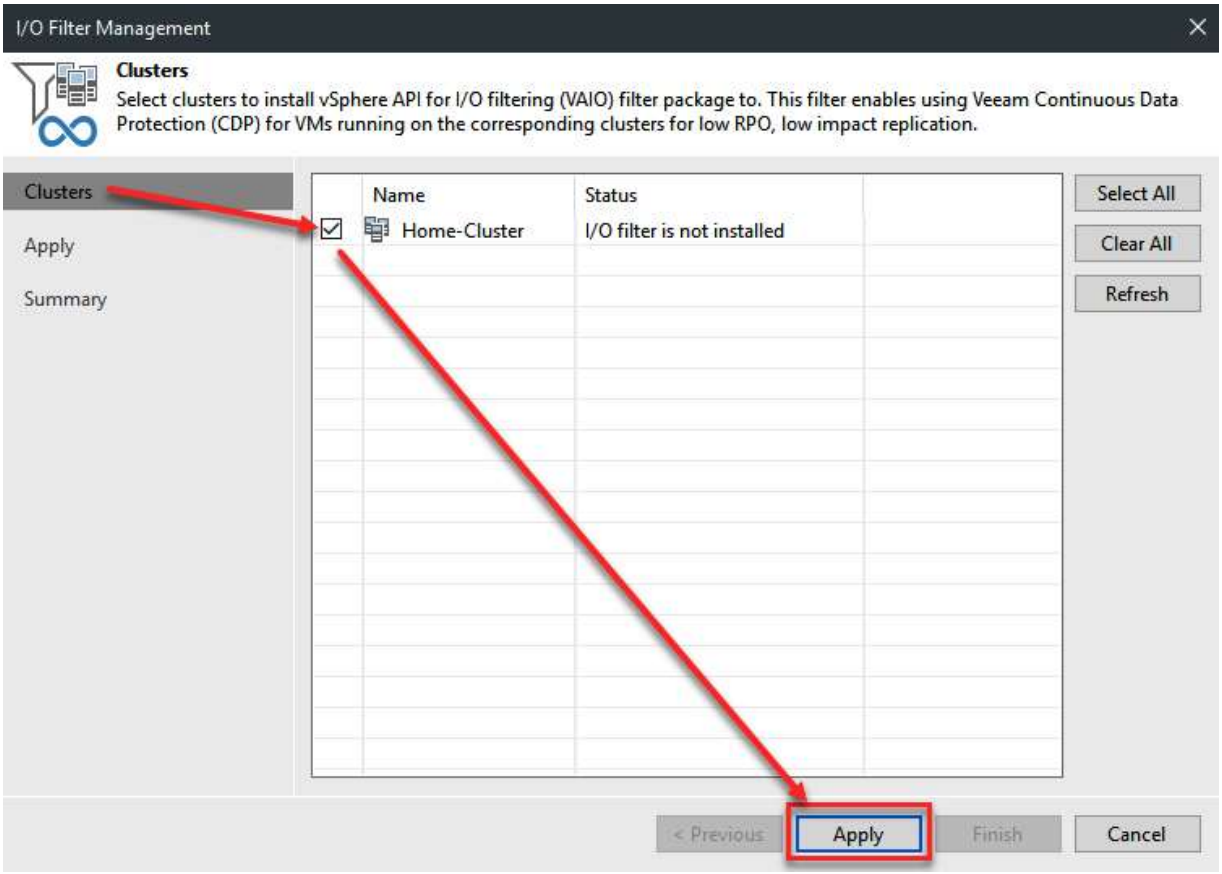


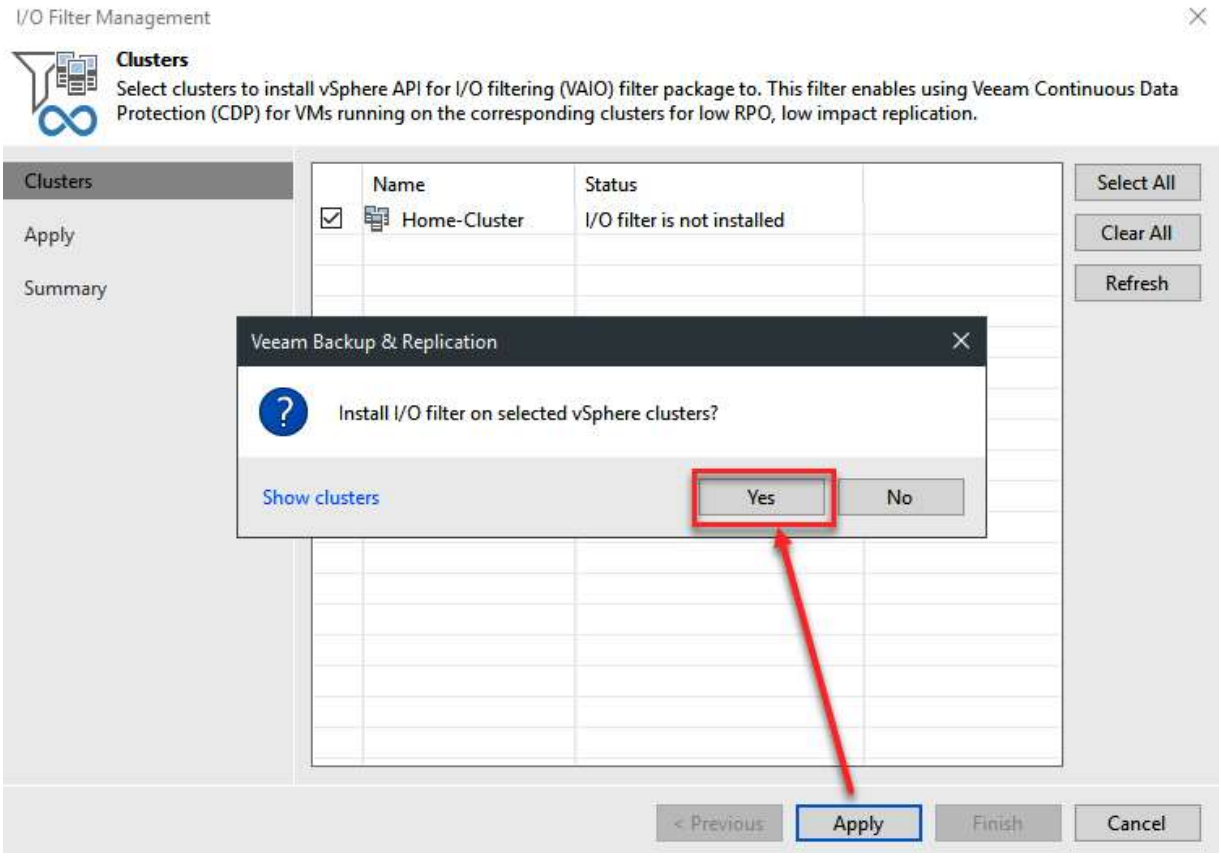

Overview
Coordinator
VM
Filter
VMCI
VM Bus
Daemon
Proxy
Journal Data
LAN
Source vSphere Cluster
Target vSphere Cluster

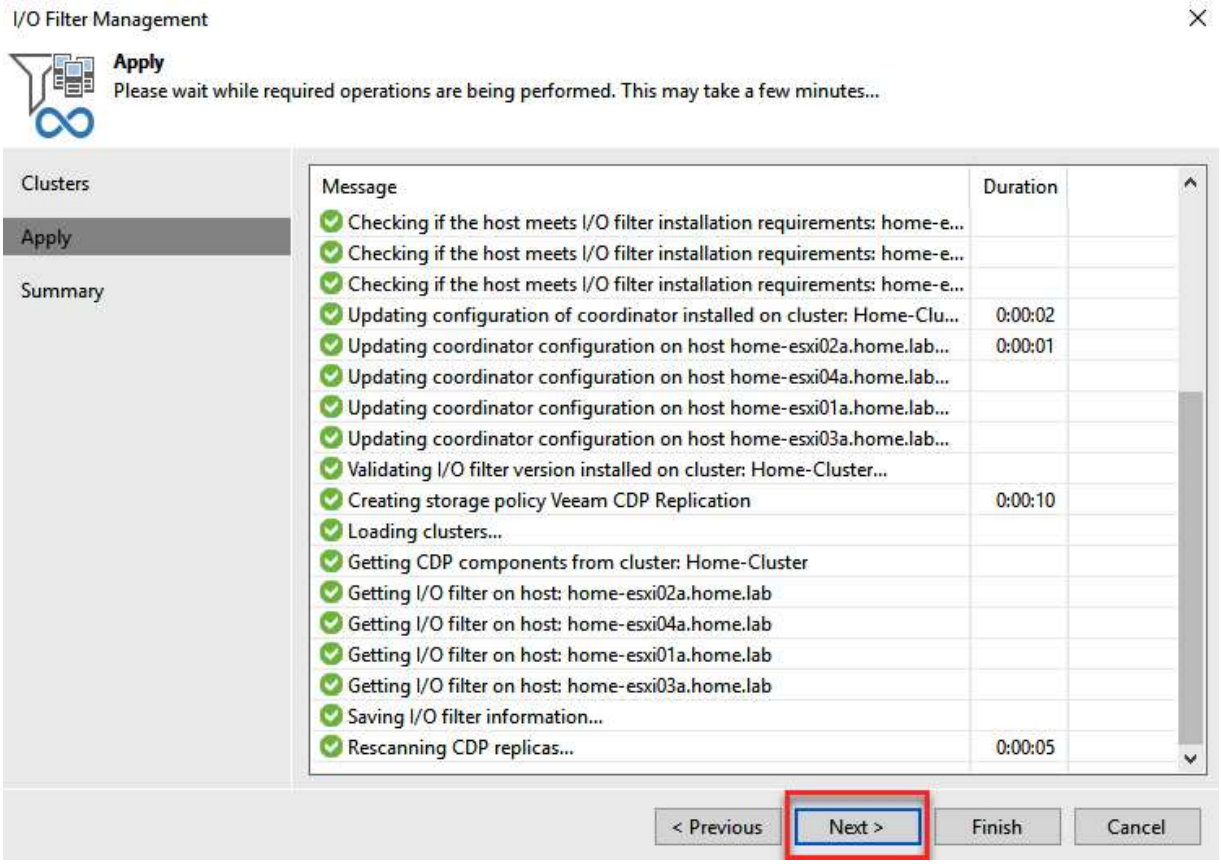

Server Tools
Home
Server
Add Server
Edit Server
Remove Server
Rescan
Manage Server
Tools
Backup Infrastructure
Type in an object name to search for
Name
Type
HOME-VBK02
Microsoft Windows server
home-vcsa01.home.lab
VMware vCenter server
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows

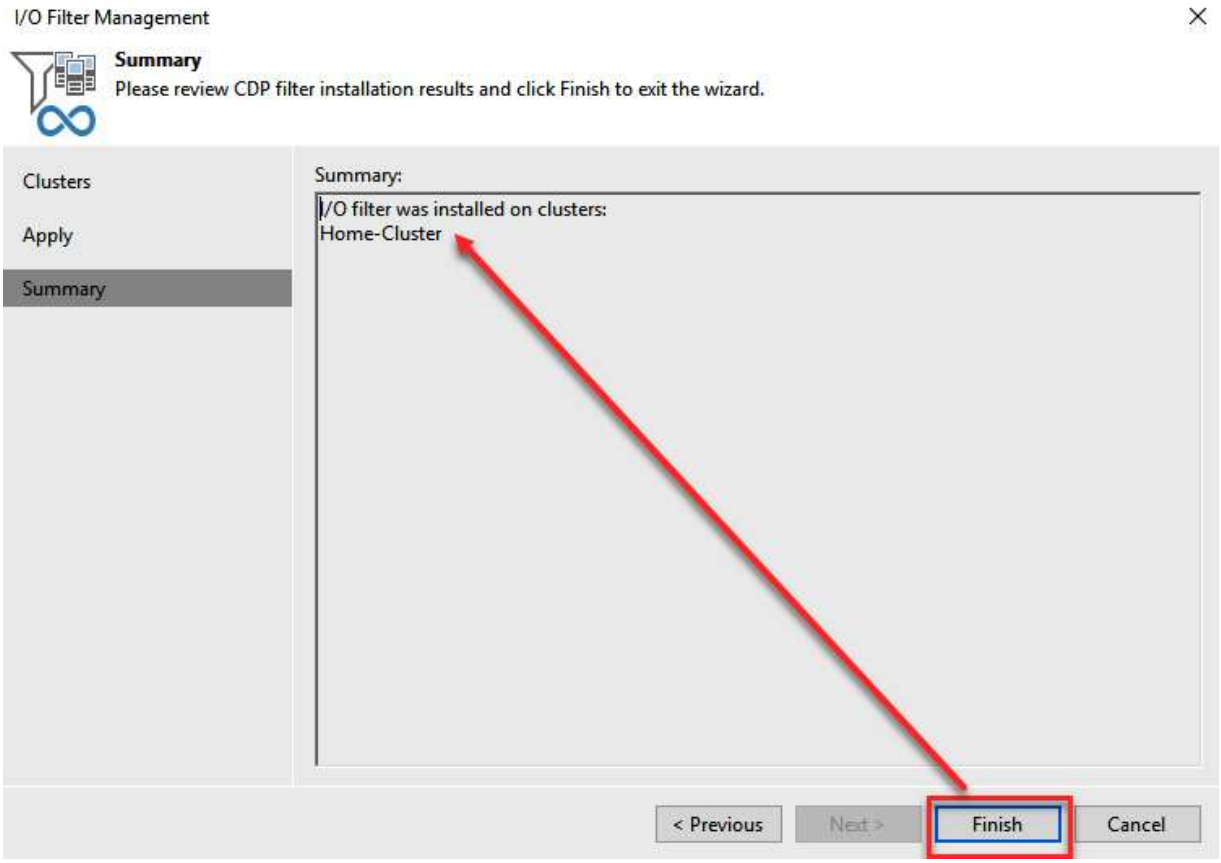

Server Tools
Home
Server
Add Server
Edit Server
Remove Server
Set Location
Rescan
Manage I/O Filters
Manage Server
Manage Storage
Tools
Backup Infrastructure
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Type in an object name to search for
Name
Type
HOME-VBK02
Microsoft Windows server
Rescan
Remove
Manage I/O filters...
Location
Properties...

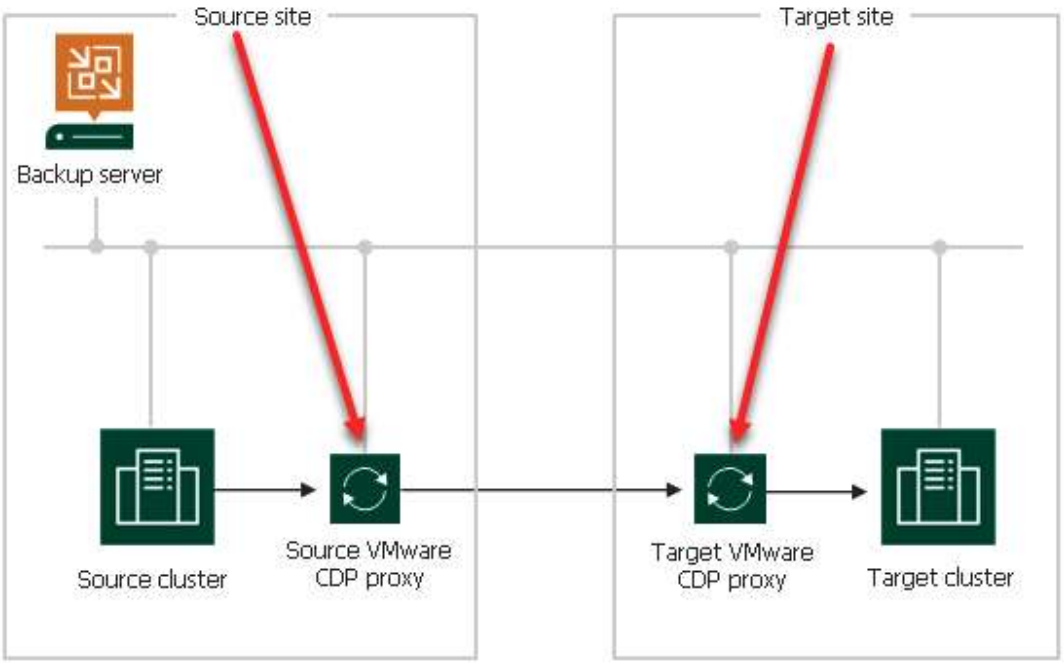

I/O Filter Management
Clusters
Select clusters to install vSphere API for I/O filtering (VAIO) filter package to. This filter enables using Veeam Continuous Data Protection (CDP) for VMs running on the corresponding clusters for low RPO, low impact replication.
Clusters
Apply
Summary
Name
Status
Home-Cluster
I/O filter is not installed
Select All
Clear All
Refresh
< Previous
Apply
Finish
Cancel

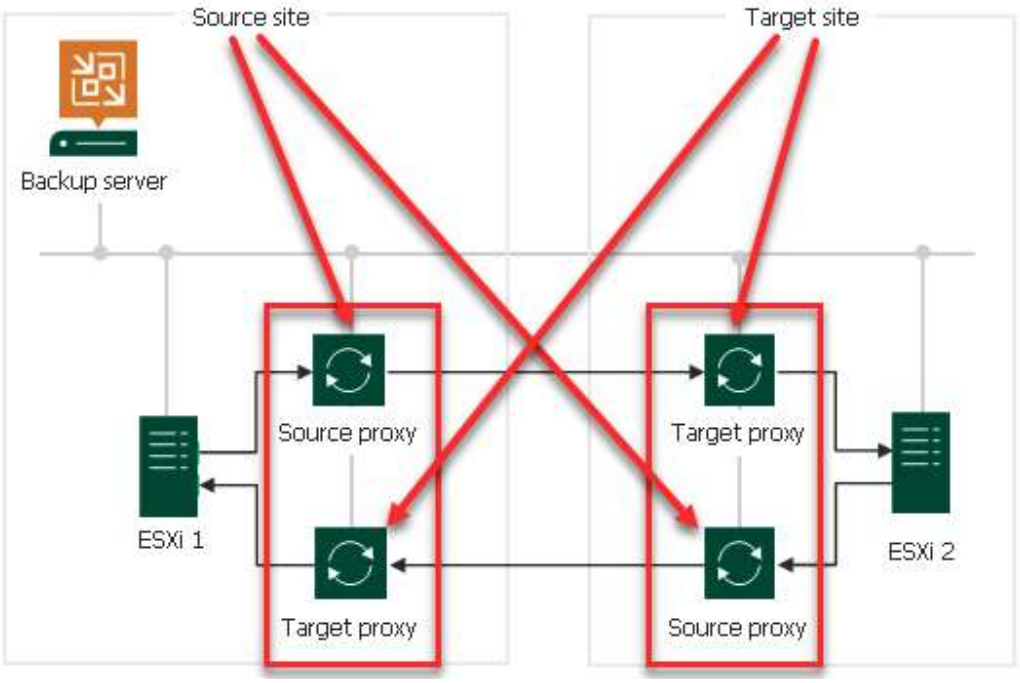

I/O Filter Management
Clusters
Select clusters to install vSphere API for I/O filtering (VAIO) filter package to. This filter enables using Veeam Continuous Data Protection (CDP) for VMs running on the corresponding clusters for low RPO, low impact replication.
Clusters
Apply
Summary
Name
Status
Home-Cluster
I/O filter is not installed
Select All
Clear All
Refresh
< Previous
Apply
Finish
Cancel

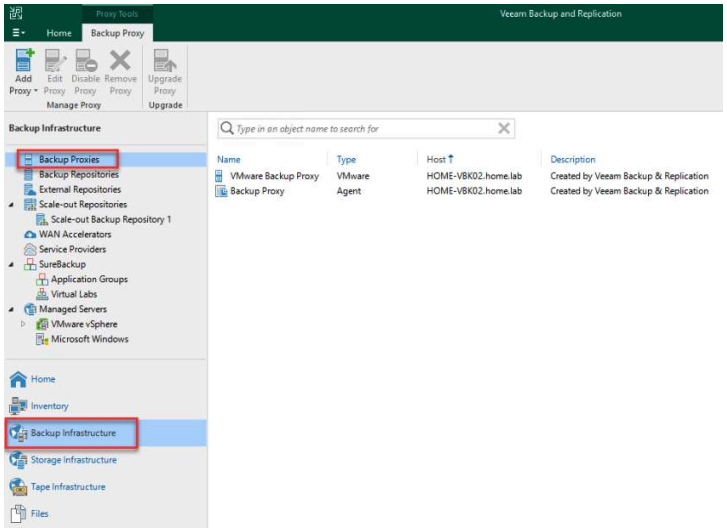

I/O Filter Management
Clusters
Select clusters to install vSphere API for I/O filtering (VAIO) filter package to. This filter enables using Veeam Continuous Data Protection (CDP) for VMs running on the corresponding clusters for low RPO, low impact replication.
Clusters
Apply
Summary
Name
Status
Home-Cluster
I/O filter is not installed
Select All
Clear All
Refresh
Veeam Backup & Replication
Install I/O filter on selected vSphere clusters?
Show clusters
Yes
No
< Previous
Apply
Finish
Cancel

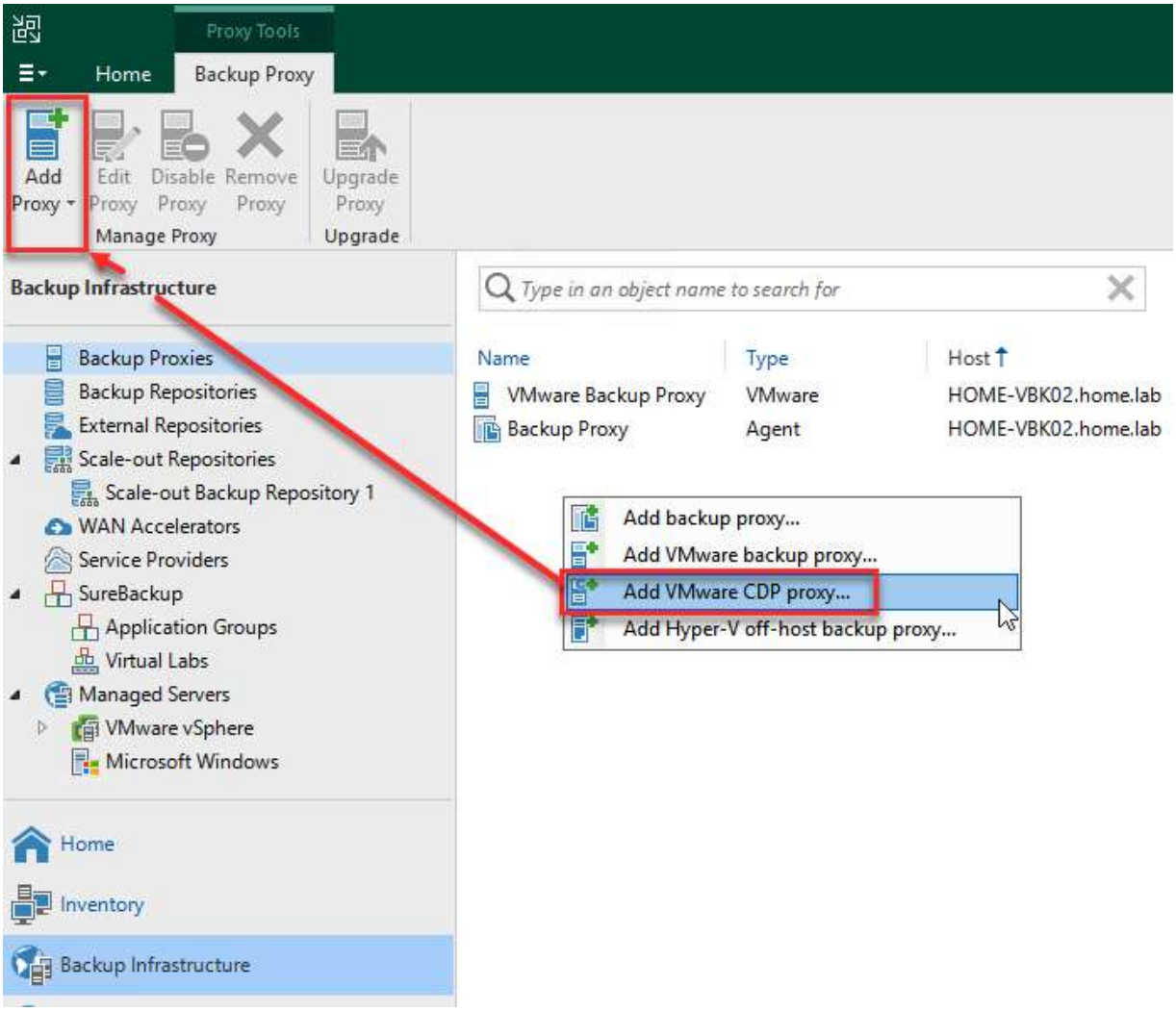

I/O Filter Management
Apply
Please wait while required operations are being performed. This may take a few minutes...
Clusters
Apply
Summary
Message
Duration
Checking if the host meets I/O filter installation requirements: home-e...
Checking if the host meets I/O filter installation requirements: home-e...
Checking if the host meets I/O filter installation requirements: home-e...
Updating configuration of coordinator installed on cluster: Home-Clu... 0:00:02
Updating coordinator configuration on host home-esxi02a.home.lab... 0:00:01
Updating coordinator configuration on host home-esxi04a.home.lab...
Updating coordinator configuration on host home-esxi01a.home.lab...
Updating coordinator configuration on host home-esxi03a.home.lab...
Validating I/O filter version installed on cluster: Home-Cluster...
Creating storage policy Veeam CDP Replication 0:00:10
Loading clusters...
Getting CDP components from cluster: Home-Cluster
Getting I/O filter on host: home-esxi02a.home.lab
Getting I/O filter on host: home-esxi04a.home.lab
Getting I/O filter on host: home-esxi01a.home.lab
Getting I/O filter on host: home-esxi03a.home.lab
Saving I/O filter information...
Rescanning CDP replicas... 0:00:05
< Previous
Next >
Finish
Cancel

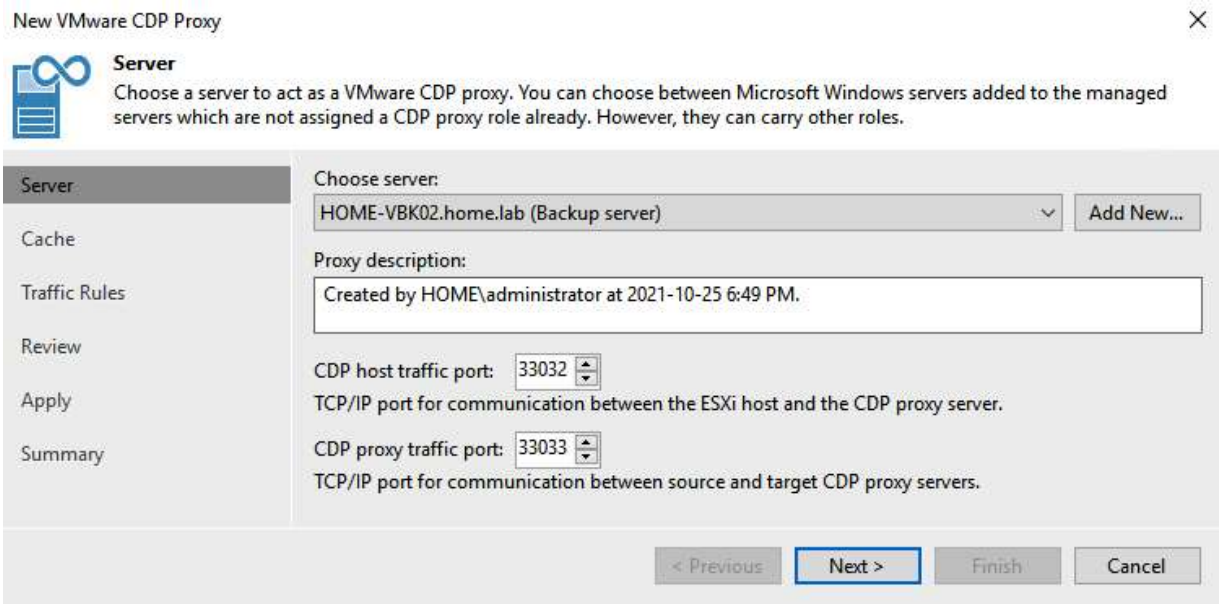

I/O Filter Management
Summary
Please review CDP filter installation results and click Finish to exit the wizard.
Clusters
Apply
Summary
Summary:
I/O filter was installed on clusters:
Home-Cluster
< Previous
Next >
Finish
Cancel

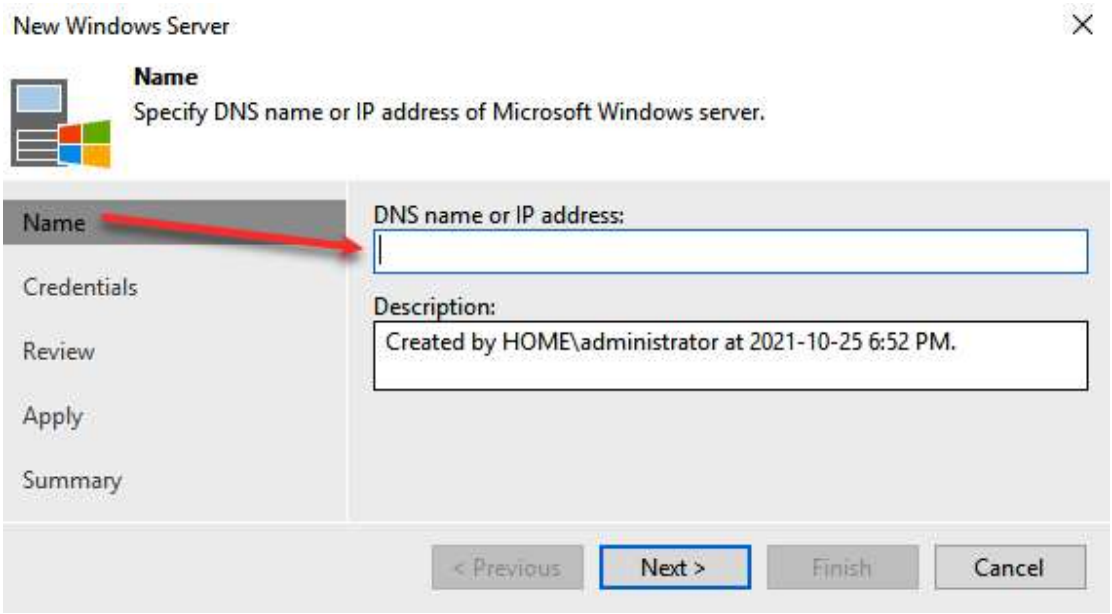

Source site
Target site
Backup server
Source cluster
Source VMware
CDP proxy
Target VMware
CDP proxy
Target cluster

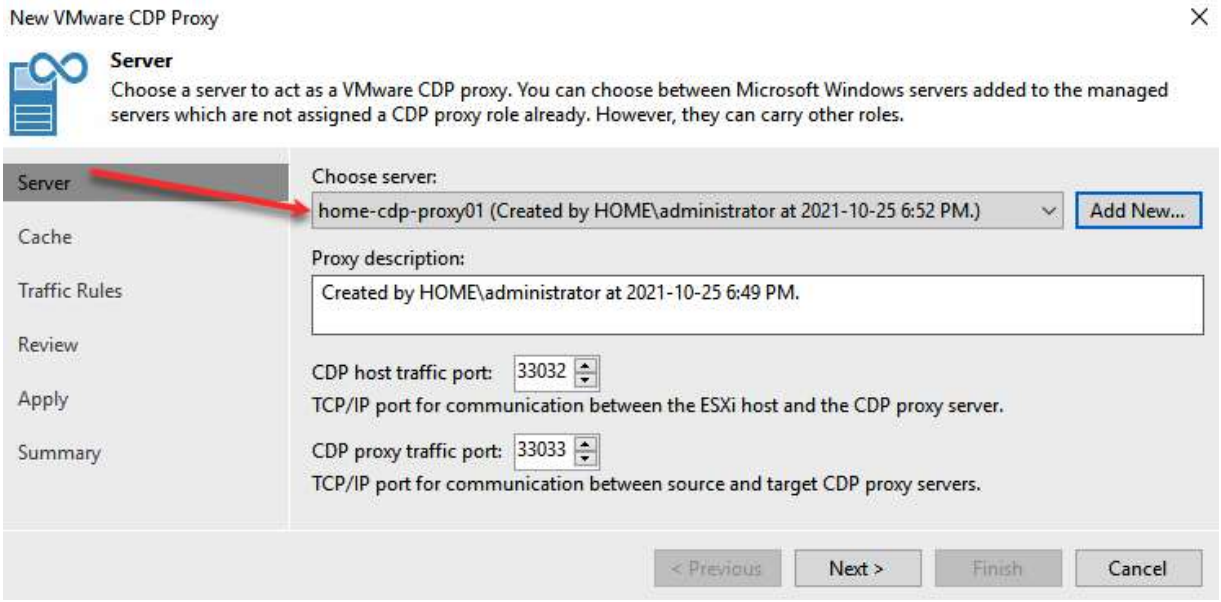

Source site
Target site
Backup server
Source proxy
Target proxy
ESXi 1
ESXi 2
Target proxy
Source proxy

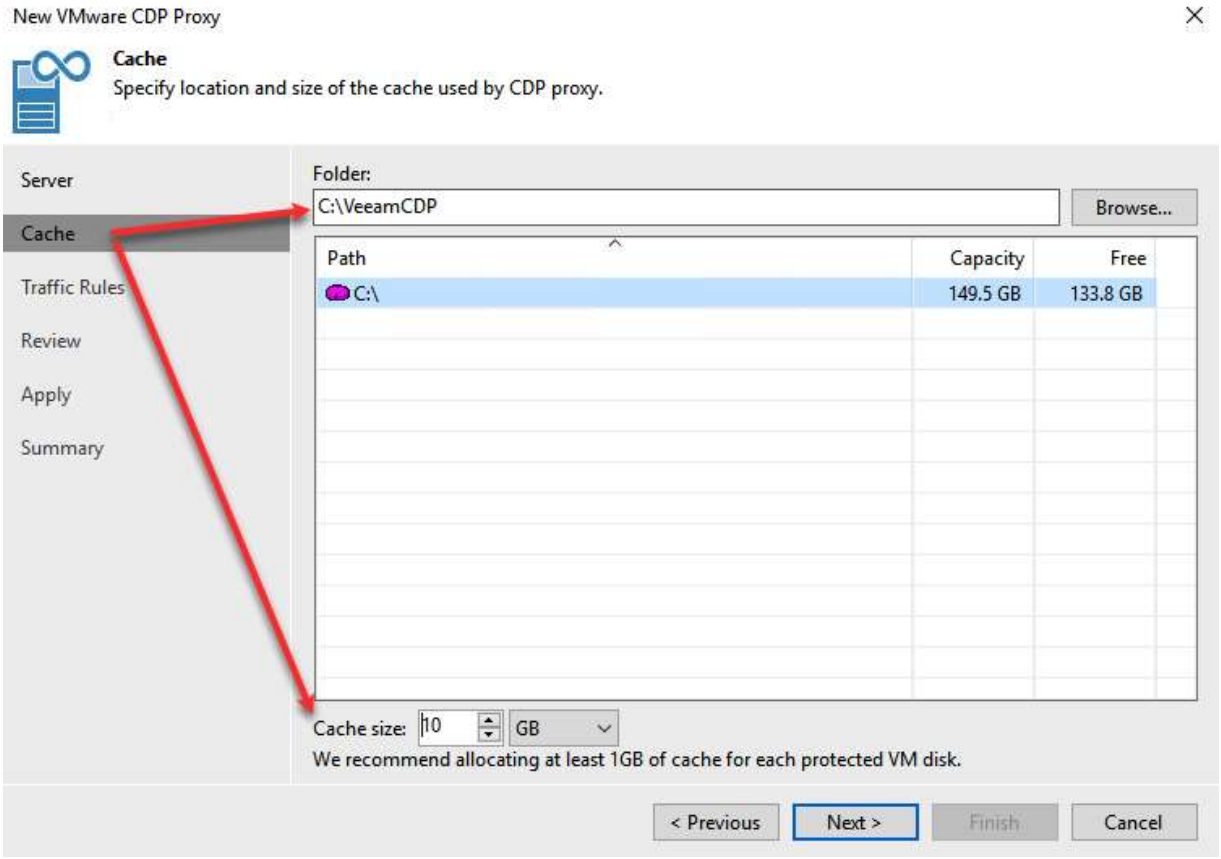

Proxy Tools
Veeam Backup and Replication
Home
Backup Proxy
Add Proxy
Edit Proxy
Disable Proxy
Remove Proxy
Manage Proxy
Upgrade Proxy
Upgrade
Backup Infrastructure
Type in an object name to search for
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Name
Type
Host
Description
VMware Backup Proxy
VMware
HOME-VBK02.home.lab
Created by Veeam Backup & Replication
Backup Proxy
Agent
HOME-VBK02.home.lab
Created by Veeam Backup & Replication
Home
Inventory
Backup Infrastructure
Storage Infrastructure
Tape Infrastructure
Files

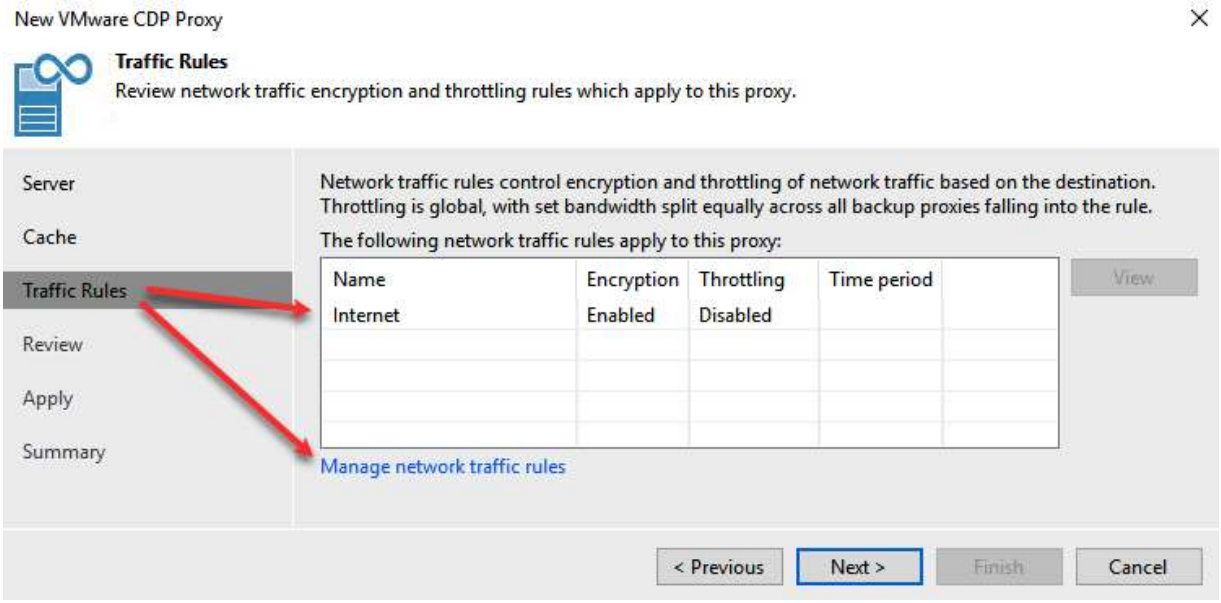

Proxy Tools
Home
Backup Proxy
Add Proxy
Edit Proxy
Disable Proxy
Remove Proxy
Manage Proxy
Upgrade Proxy
Upgrade
Backup Infrastructure
Type in an object name to search for
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Home
Inventory
Backup Infrastructure
Name
Type
Host
VMware Backup Proxy
VMware
HOME-VBK02.home.lab
Backup Proxy
Agent
HOME-VBK02.home.lab
Add backup proxy...
Add VMware backup proxy...
Add VMware CDP proxy...
Add Hyper-V off-host backup proxy...

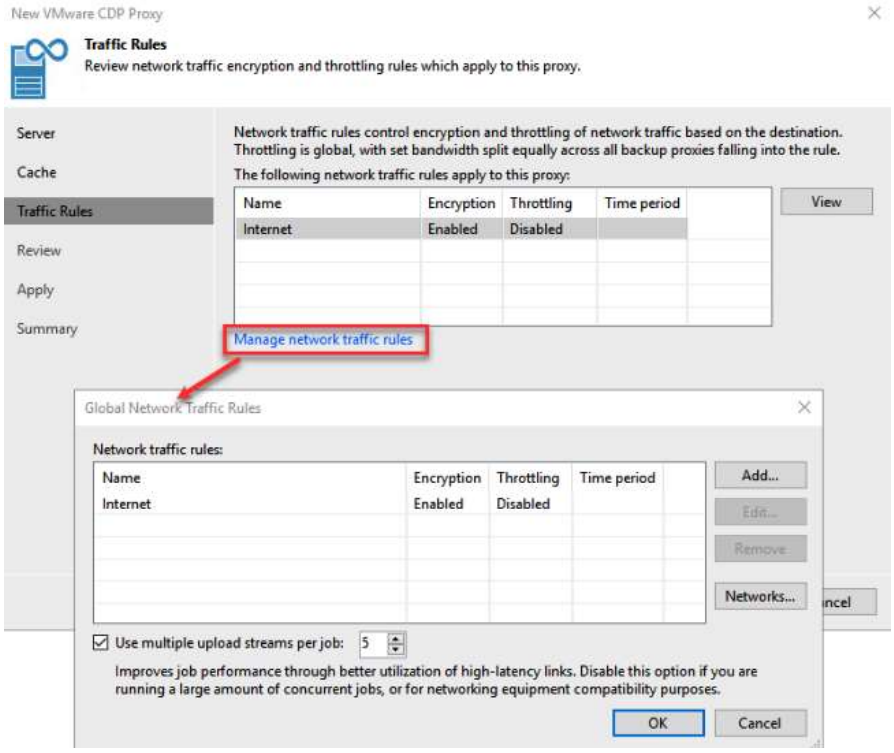

New VMware CDP Proxy
Server
Choose a server to act as a VMware CDP proxy. You can choose between Microsoft Windows servers added to the managed servers which are not assigned a CDP proxy role already. However, they can carry other roles.
Server
Cache
Traffic Rules
Review
Apply
Summary
Choose server:
HOME-VBK02.home.lab (Backup server)
Add New...
Proxy description:
Created by HOME\administrator at 2021-10-25 6:49 PM.
CDP host traffic port:
33032
TCP/IP port for communication between the ESXi host and the CDP proxy server.
CDP proxy traffic port:
33033
TCP/IP port for communication between source and target CDP proxy servers.
< Previous
Next >
Finish
Cancel

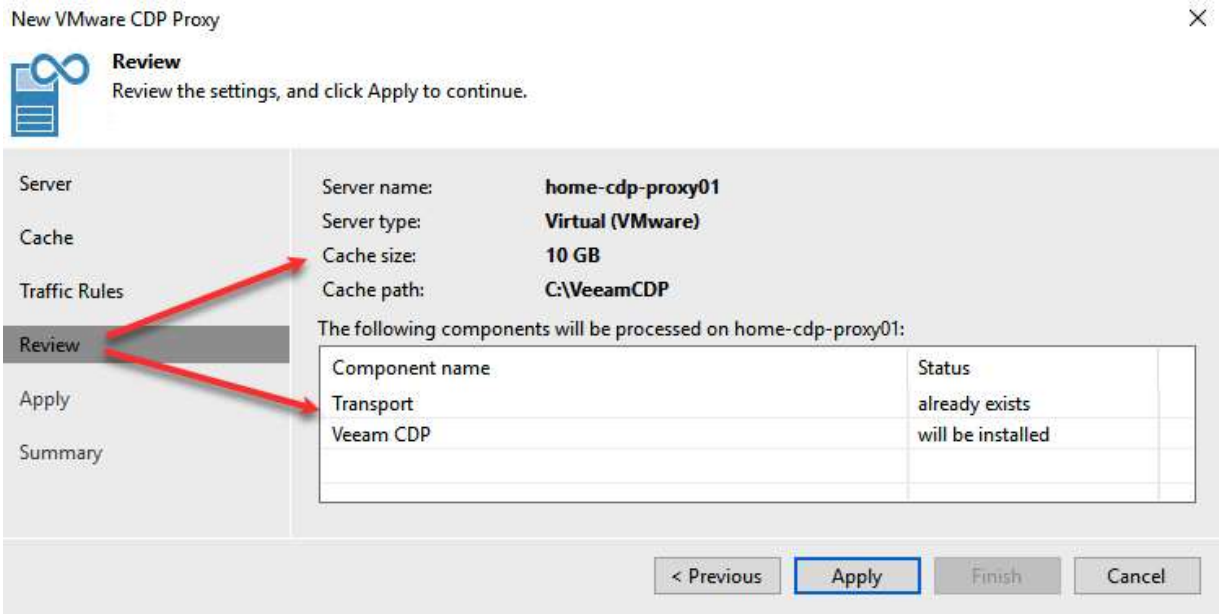

New Windows Server
Name
Specify DNS name or IP address of Microsoft Windows server.
Name
Credentials
Review
Apply
Summary
DNS name or IP address:
Description:
Created by HOME\administrator at 2021-10-25 6:52 PM.
< Previous
Next >
Finish
Cancel

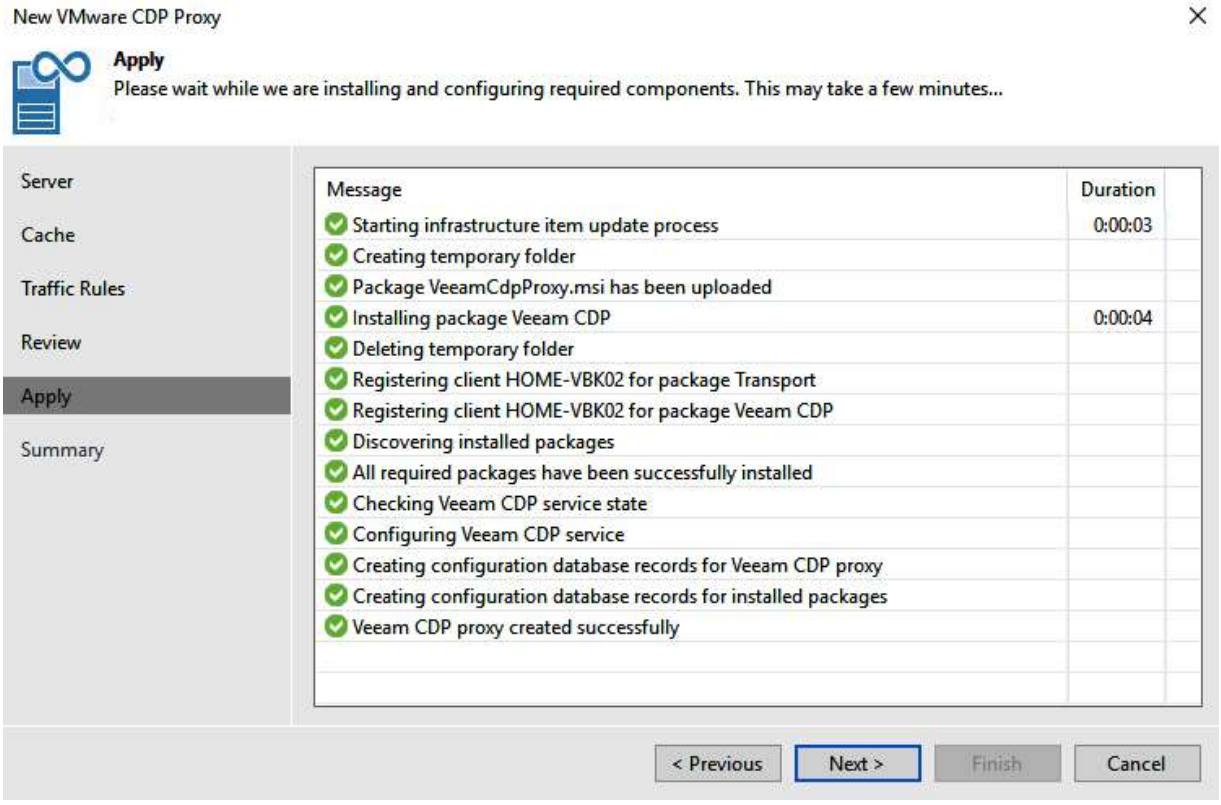

New VMware CDP Proxy
Server
Choose a server to act as a VMware CDP proxy. You can choose between Microsoft Windows servers added to the managed servers which are not assigned a CDP proxy role already. However, they can carry other roles.
Server
Cache
Traffic Rules
Review
Apply
Summary
Choose server:
home-cdp-proxy01 (Created by HOME\administrator at 2021-10-25 6:52 PM.)
Add New...
Proxy description:
Created by HOME\administrator at 2021-10-25 6:49 PM.
CDP host traffic port: 33032
TCP/IP port for communication between the ESXi host and the CDP proxy server.
CDP proxy traffic port: 33033
TCP/IP port for communication between source and target CDP proxy servers.
< Previous
Next >
Finish
Cancel

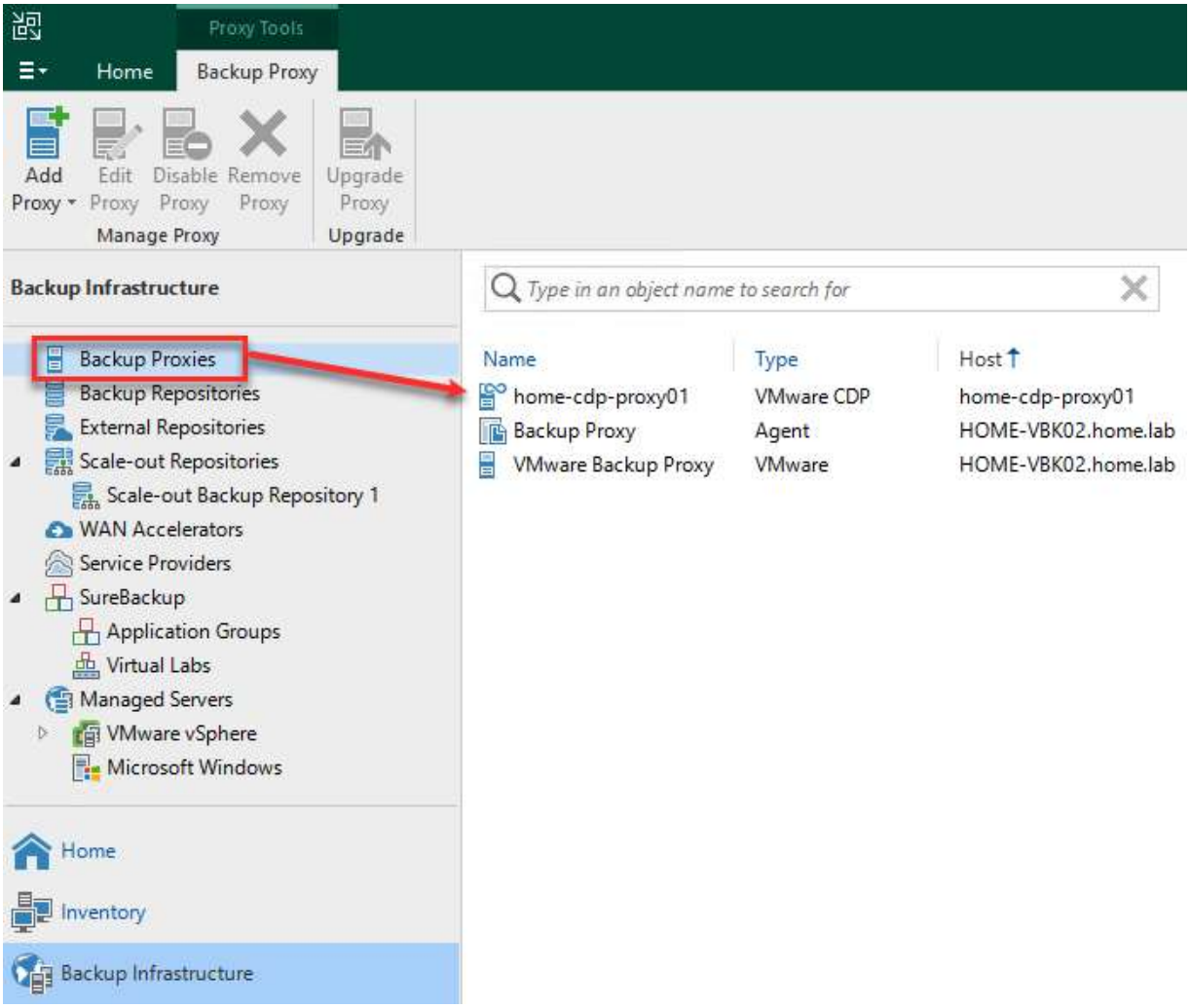

New VMware CDP Proxy
Cache
Specify location and size of the cache used by CDP proxy.
Server
Cache
Traffic Rules
Review
Apply
Summary
Folder:
C:\VeeamCDP
Browse...
Path
Capacity
Free
C:\
149.5 GB
133.8 GB
Cache size: 10 GB
We recommend allocating at least 1GB of cache for each protected VM disk.
< Previous
Next >
Finish
Cancel

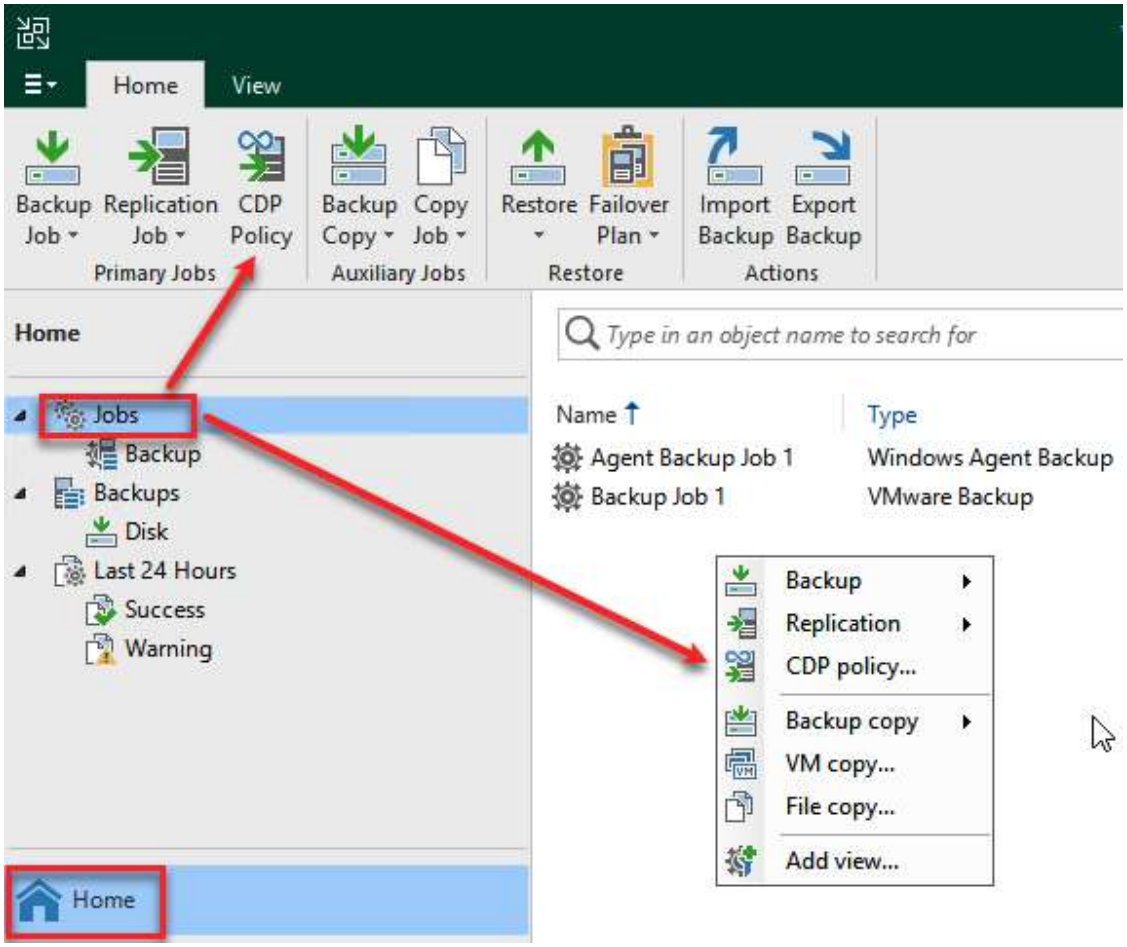

New VMware CDP Proxy
Traffic Rules
Review network traffic encryption and throttling rules which apply to this proxy.
Server
Cache
Traffic Rules
Review
Apply
Summary
Network traffic rules control encryption and throttling of network traffic based on the destination.
Throttling is global, with set bandwidth split equally across all backup proxies falling into the rule.
The following network traffic rules apply to this proxy:
Name
Encryption
Throttling
Time period
Internet
Enabled
Disabled
View
Manage network traffic rules
< Previous
Next >
Finish
Cancel

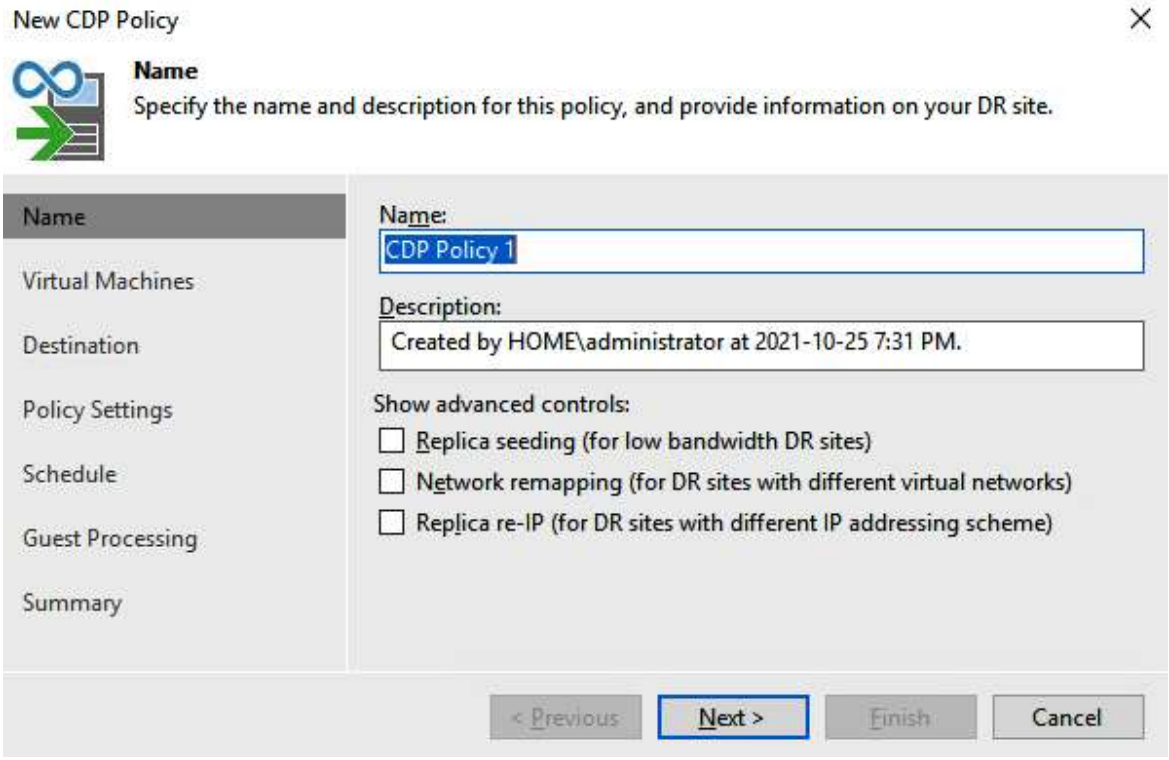

New VMware CDP Proxy
Traffic Rules
Review network traffic encryption and throttling rules which apply to this proxy.
Server
Cache
Traffic Rules
Review
Apply
Summary
Network traffic rules control encryption and throttling of network traffic based on the destination.
Throttling is global, with set bandwidth split equally across all backup proxies falling into the rule.
The following network traffic rules apply to this proxy:
Name
Encryption
Throttling
Time period
Internet
Enabled
Disabled
View
Manage network traffic rules
Global Network Traffic Rules
Network traffic rules:
Name
Encryption
Throttling
Time period
Internet
Enabled
Disabled
Add...
Edit...
Remove
Networks...
Use multiple upload streams per job:
5
Improves job performance through better utilization of high-latency links. Disable this option if you are running a large amount of concurrent jobs, or for networking equipment compatibility purposes.
OK
Cancel

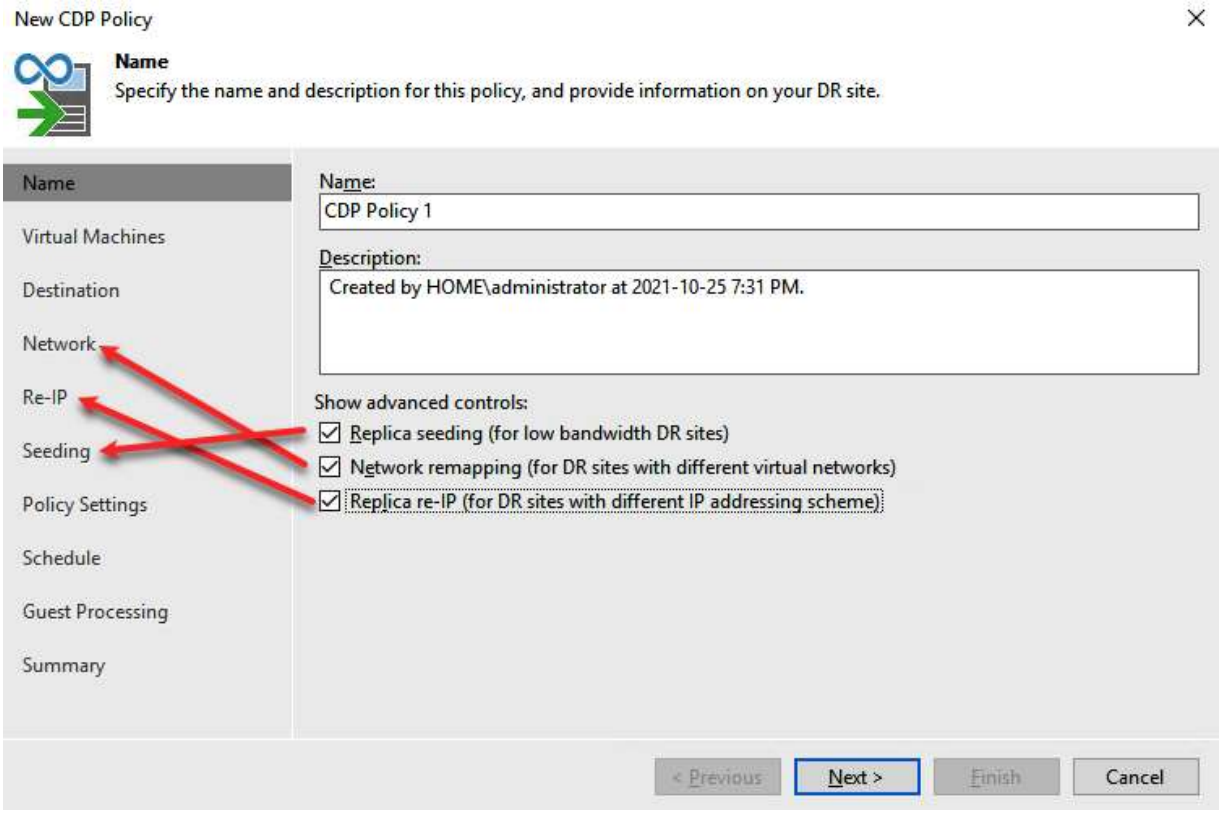

New VMware CDP Proxy
Review
Review the settings, and click Apply to continue.
Server
Cache
Traffic Rules
Review
Apply
Summary
Server name: home-cdp-proxy01
Server type: Virtual (VMware)
Cache size: 10 GB
Cache path: C:\VeeamCDP
The following components will be processed on home-cdp-proxy01:
Component name
Status
Transport
already exists
Veeam CDP
will be installed
< Previous
Apply
Finish
Cancel

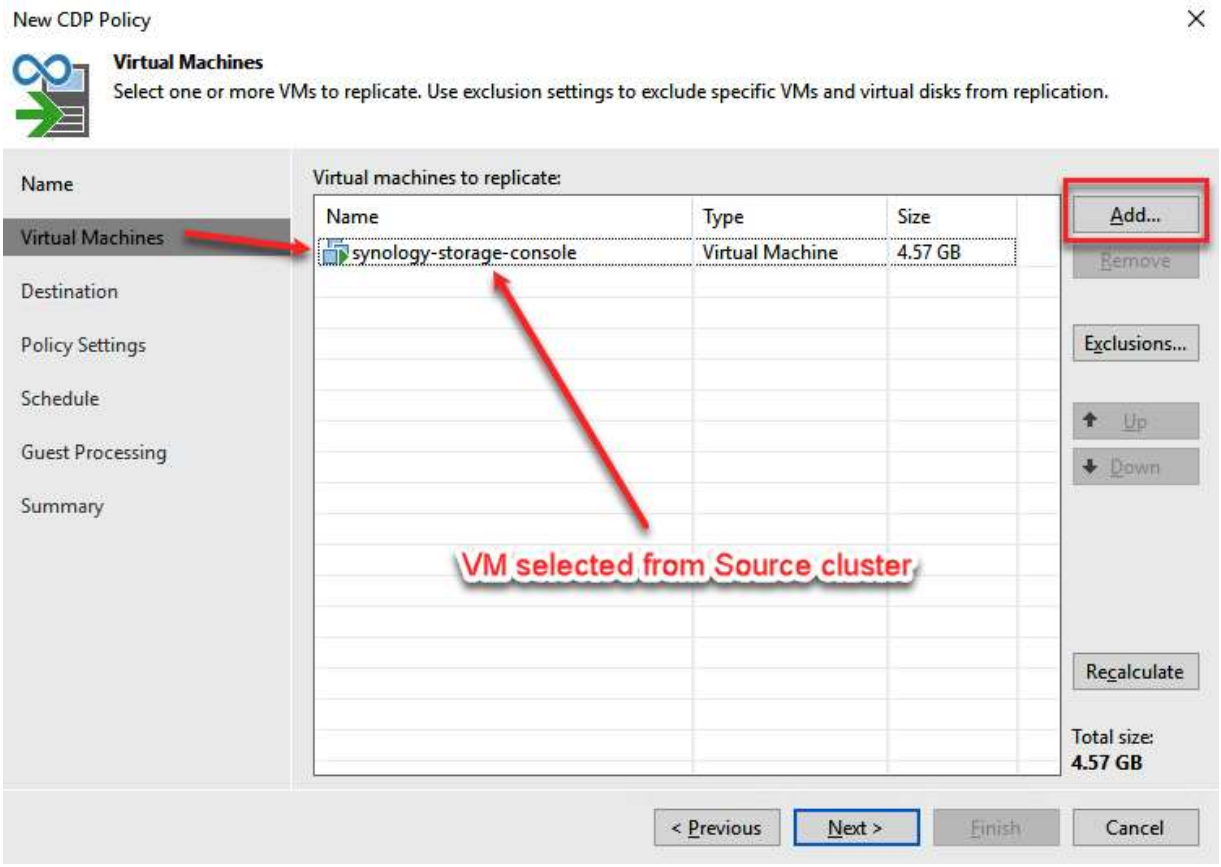

New VMware CDP Proxy
Apply
Please wait while we are installing and configuring required components. This may take a few minutes...
Server
Cache
Traffic Rules
Review
Apply
Summary
Message
Duration
Starting infrastructure item update process
0:00:03
Creating temporary folder
Package VeeamCdpProxy.msi has been uploaded
Installing package Veeam CDP
0:00:04
Deleting temporary folder
Registering client HOME-VBK02 for package Transport
Registering client HOME-VBK02 for package Veeam CDP
Discovering installed packages
All required packages have been successfully installed
Checking Veeam CDP service state
Configuring Veeam CDP service
Creating configuration database records for Veeam CDP proxy
Creating configuration database records for installed packages
Veeam CDP proxy created successfully
< Previous
Next >
Finish
Cancel

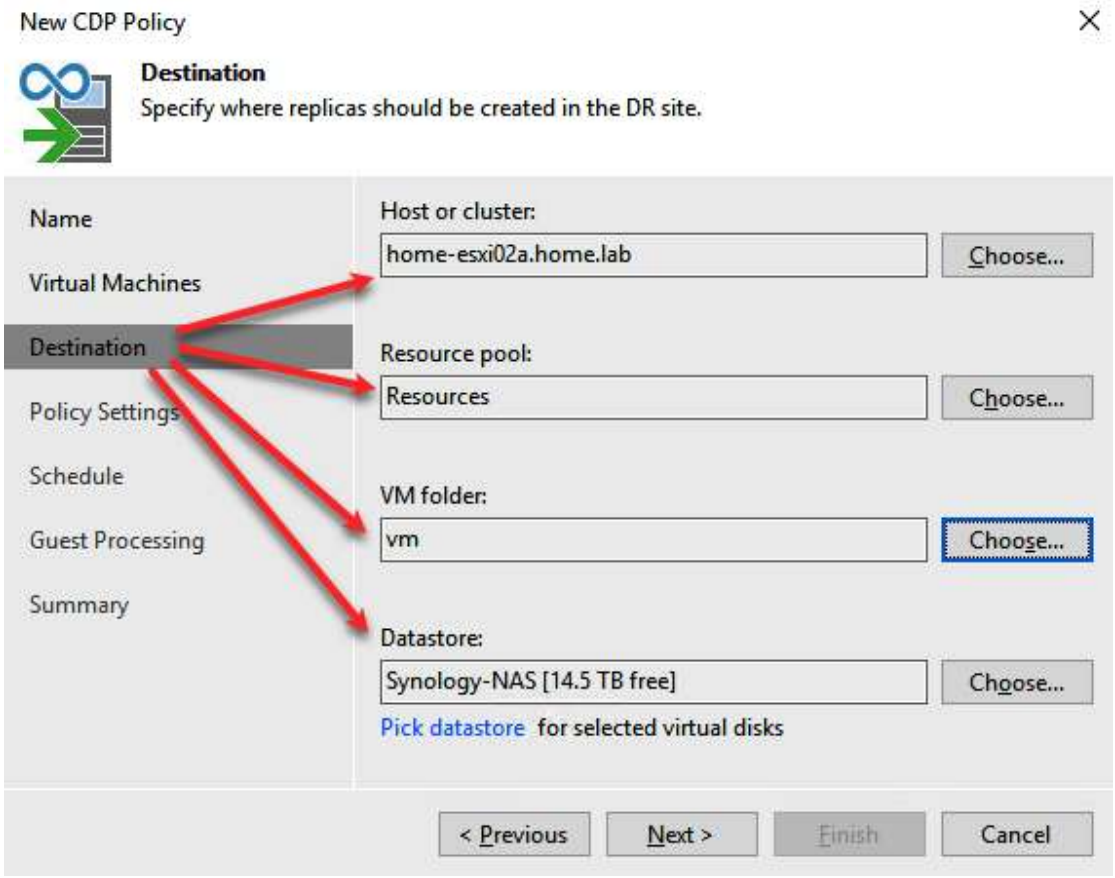

Proxy Tools
Home
Backup Proxy
Add Proxy
Edit Proxy
Disable Proxy
Remove Proxy
Manage Proxy
Upgrade Proxy
Upgrade
Backup Infrastructure
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Home
Inventory
Backup Infrastructure
Type in an object name to search for
Name
Type
Host
home-cdp-proxy01
VMware CDP
home-cdp-proxy01
Backup Proxy
Agent
HOME-VBK02.home.lab
VMware Backup Proxy
VMware
HOME-VBK02.home.lab

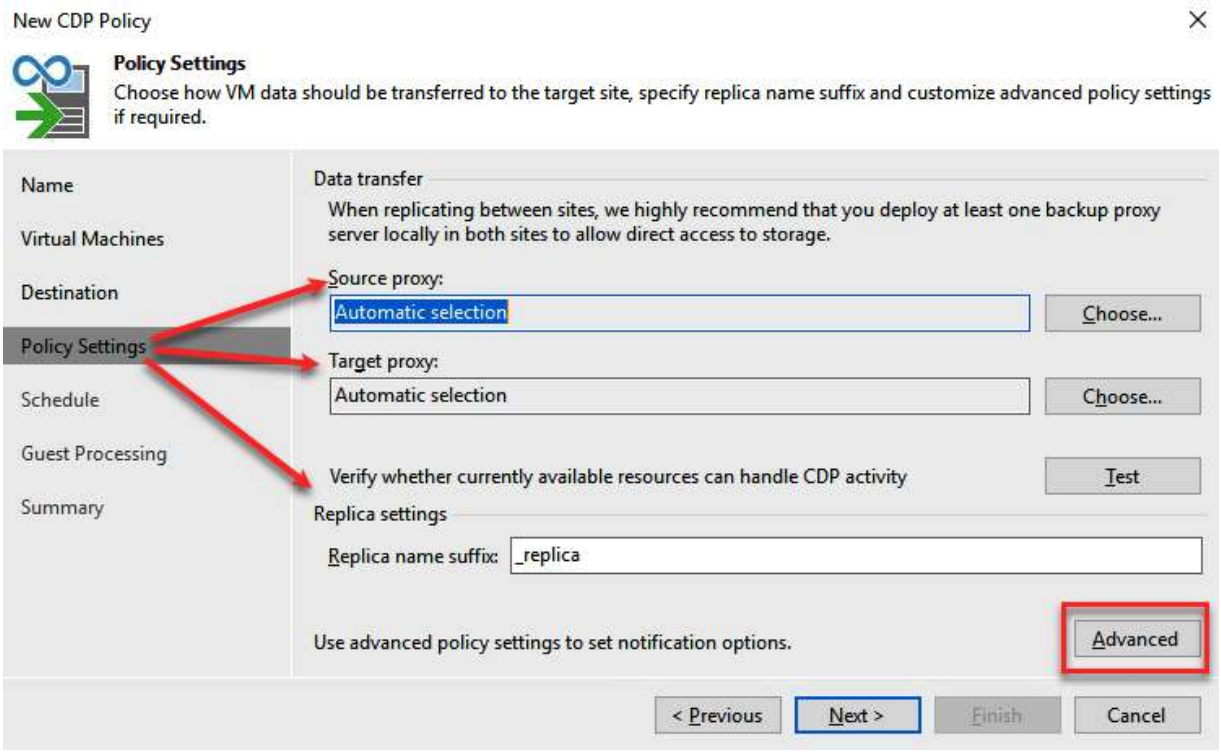

Home
View
Backup Job
Replication Job
CDP Policy
Backup Copy
Copy Job
Restore
Failover Plan
Import Backup
Export Backup
Primary Jobs
Auxiliary Jobs
Restore
Actions
Home
Type in an object name to search for
Jobs
Backup
Backups
Disk
Last 24 Hours
Success
Warning
Name
Type
Agent Backup Job 1
Windows Agent Backup
Backup Job 1
VMware Backup
Backup
Replication
CDP policy...
Backup copy
VM copy...
File copy...
Add view...
Home

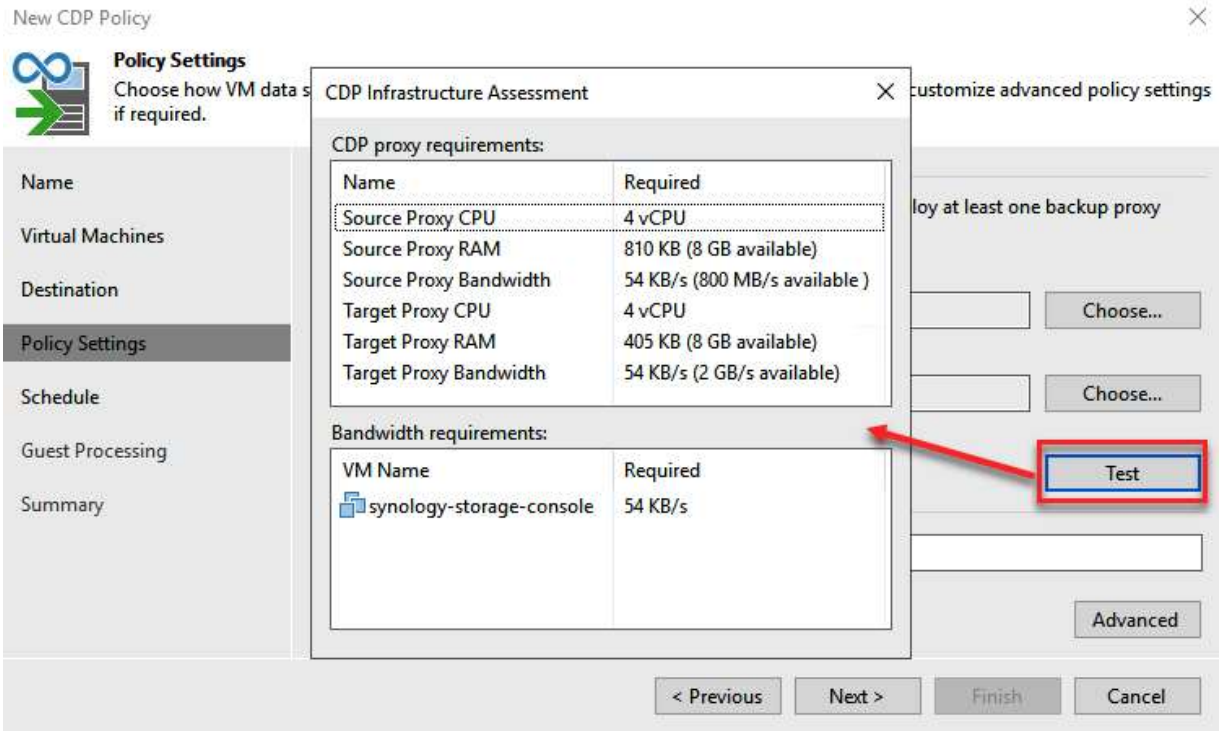

New CDP Policy
Name
Specify the name and description for this policy, and provide information on your DR site.
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Name:
CDP Policy 1
Description:
Created by HOME\administrator at 2021-10-25 7:31 PM.
Show advanced controls:
Replica seeding (for low bandwidth DR sites)
Network remapping (for DR sites with different virtual networks)
Replica re-IP (for DR sites with different IP addressing scheme)
< Previous
Next >
Finish
Cancel

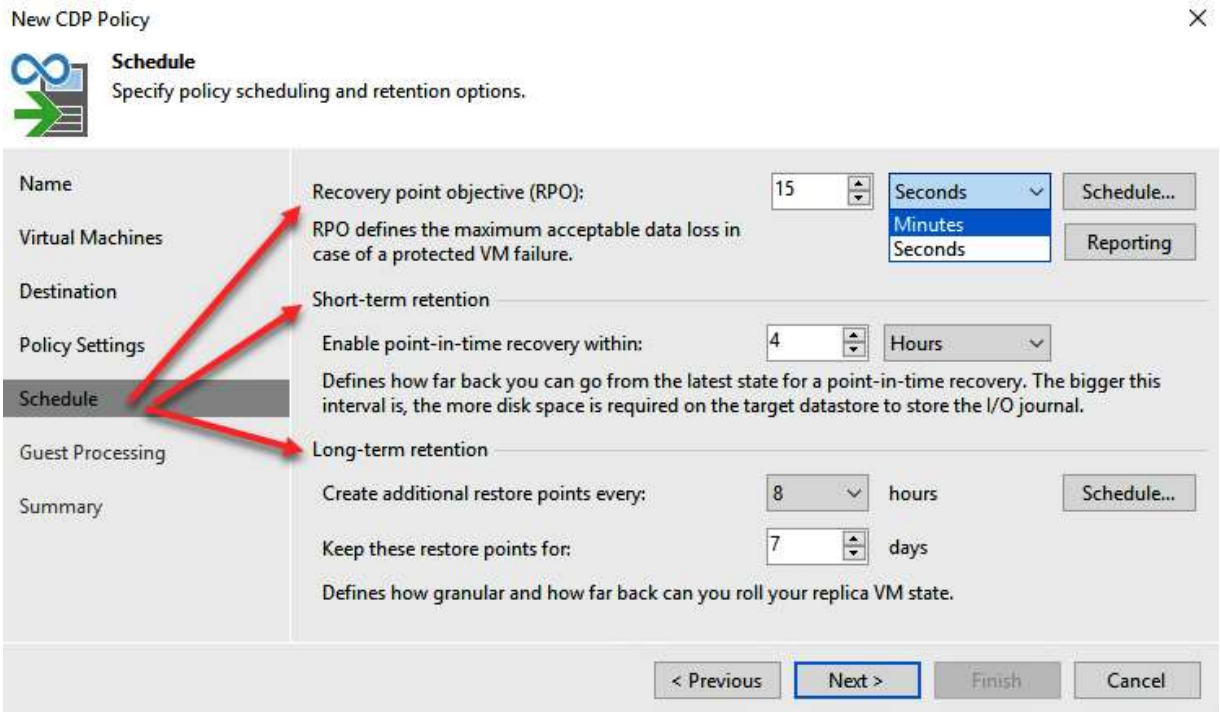

New CDP Policy
Name
Specify the name and description for this policy, and provide information on your DR site.
Name
Virtual Machines
Destination
Network
Re-IP
Seeding
Policy Settings
Schedule
Guest Processing
Summary
Name:
CDP Policy 1
Description:
Created by HOME\administrator at 2021-10-25 7:31 PM.
Show advanced controls:
Replica seeding (for low bandwidth DR sites)
Network remapping (for DR sites with different virtual networks)
Replica re-IP (for DR sites with different IP addressing scheme)
< Previous
Next >
Finish
Cancel

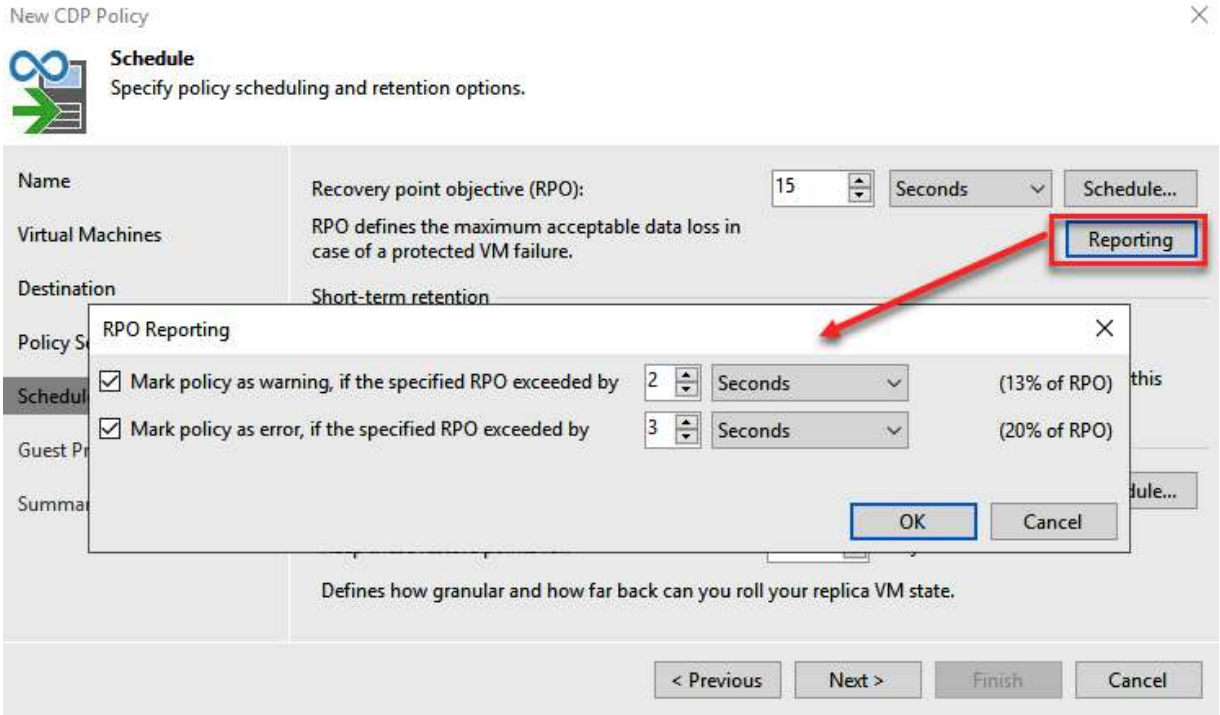

New CDP Policy
Virtual Machines
Select one or more VMs to replicate. Use exclusion settings to exclude specific VMs and virtual disks from replication.
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Virtual machines to replicate:
Name
Type
Size
synology-storage-console
Virtual Machine
4.57 GB
VM selected from Source cluster
Add...
Remove
Exclusions...
Up
Down
Recalculate
Total size:
4.57 GB
< Previous
Next >
Finish
Cancel

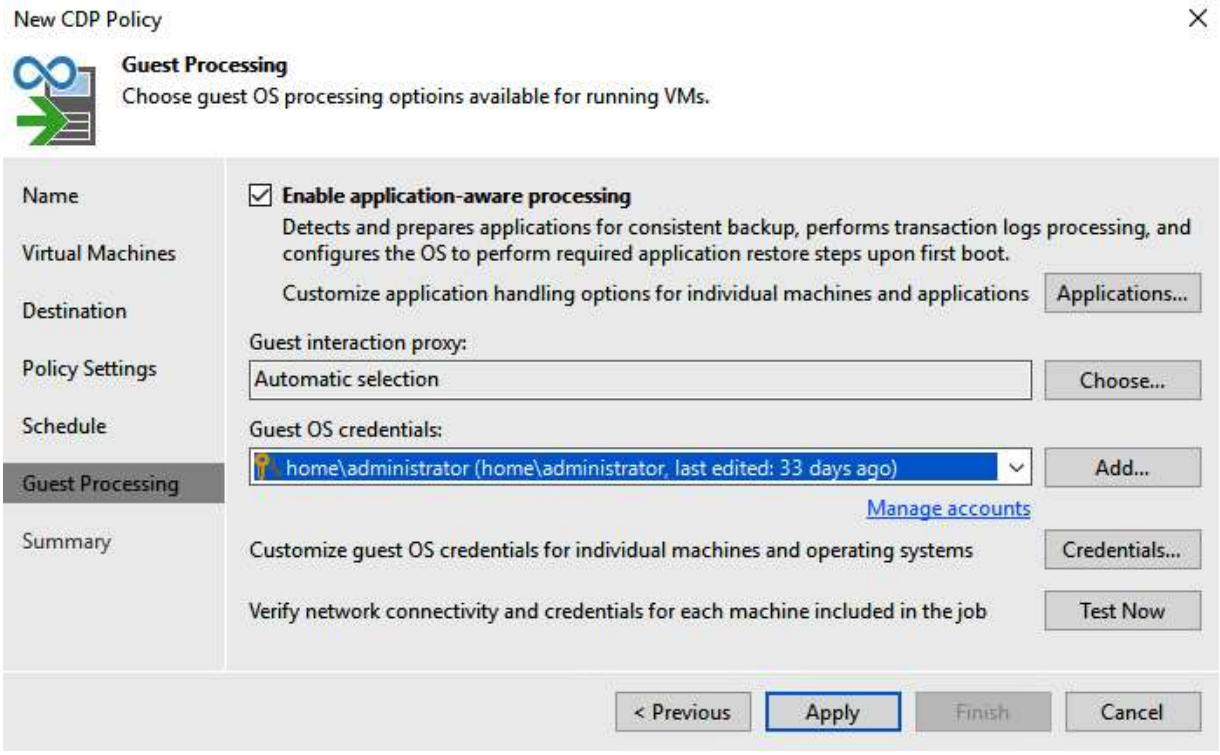

New CDP Policy
Destination
Specify where replicas should be created in the DR site.
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Host or cluster:
home-esxi02a.home.lab
Choose...
Resource pool:
Resources
Choose...
VM folder:
vm
Choose...
Datastore:
Synology-NAS [14.5 TB free]
Choose...
Pick datastore for selected virtual disks
< Previous
Next >
Finish
Cancel

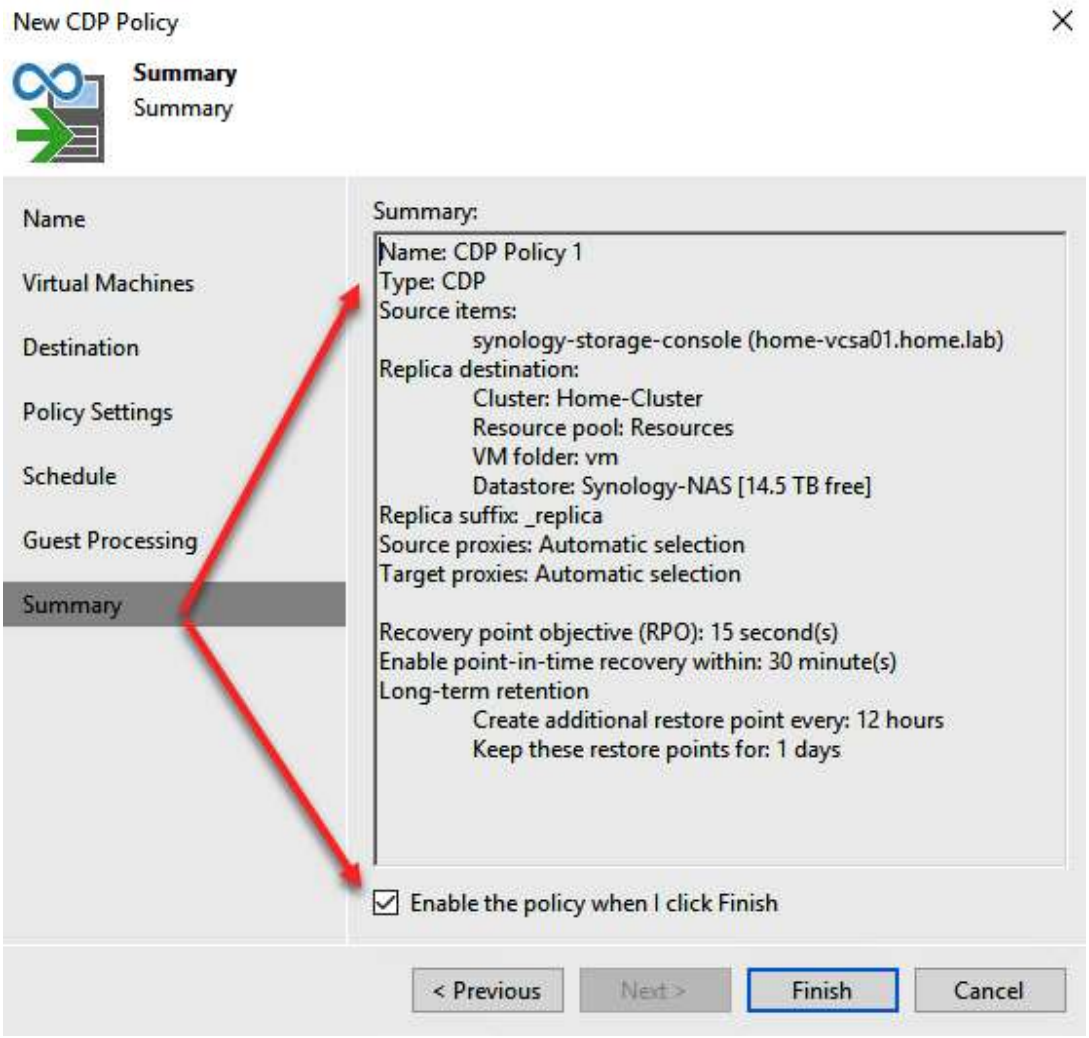

New CDP Policy
Policy Settings
Choose how VM data should be transferred to the target site, specify replica name suffix and customize advanced policy settings if required.
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Data transfer
When replicating between sites, we highly recommend that you deploy at least one backup proxy server locally in both sites to allow direct access to storage.
Source proxy:
Automatic selection
Choose...
Target proxy:
Automatic selection
Choose...
Verify whether currently available resources can handle CDP activity
Test
Replica settings
Replica name suffix: _replica
Use advanced policy settings to set notification options.
Advanced
< Previous
Next >
Finish
Cancel

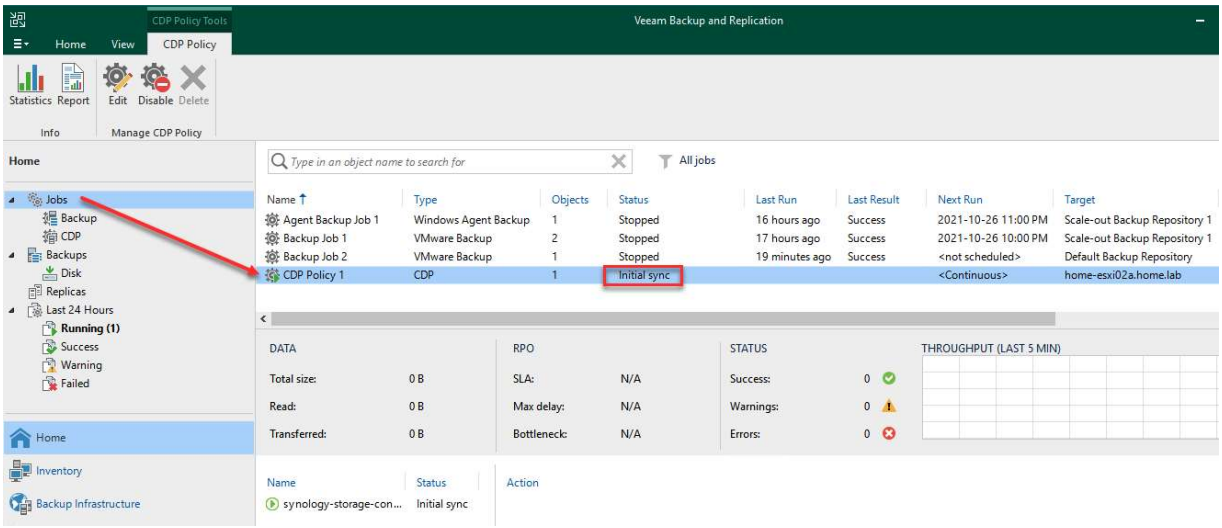

New CDP Policy
Policy Settings
Choose how VM data s
if required.
customize advanced policy settings
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
loy at least one backup proxy
Choose...
Choose...
Test
Advanced
< Previous
Next >
Finish
Cancel
CDP Infrastructure Assessment
CDP proxy requirements:
Name
Required
Source Proxy CPU
4 vCPU
Source Proxy RAM
810 KB (8 GB available)
Source Proxy Bandwidth
54 KB/s (800 MB/s available)
Target Proxy CPU
4 vCPU
Target Proxy RAM
405 KB (8 GB available)
Target Proxy Bandwidth
54 KB/s (2 GB/s available)
Bandwidth requirements:
VM Name
Required
synology-storage-console
54 KB/s

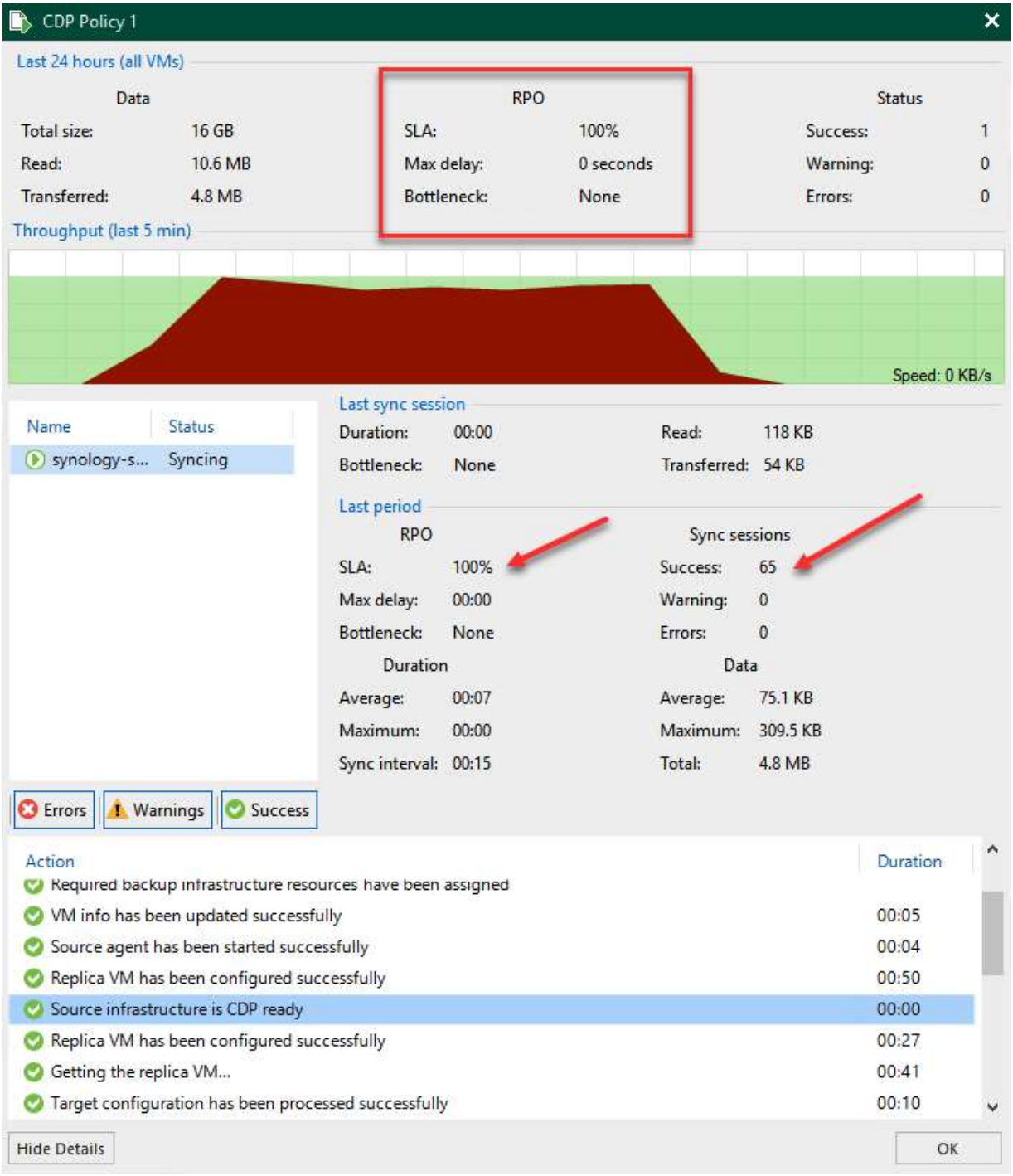

New CDP Policy
Schedule
Specify policy scheduling and retention options.
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Recovery point objective (RPO):
15
Seconds
Minutes
Seconds
Schedule...
RPO defines the maximum acceptable data loss in case of a protected VM failure.
Reporting
Short-term retention
Enable point-in-time recovery within:
4
Hours
Defines how far back you can go from the latest state for a point-in-time recovery. The bigger this interval is, the more disk space is required on the target datastore to store the I/O journal.
Long-term retention
Create additional restore points every:
8
hours
Schedule...
Keep these restore points for:
7
days
Defines how granular and how far back can you roll your replica VM state.
< Previous
Next >
Finish
Cancel


New CDP Policy
Schedule
Specify policy scheduling and retention options.
Name
Virtual Machines
Destination
Recovery point objective (RPO):
15
Seconds
Schedule...
RPO defines the maximum acceptable data loss in case of a protected VM failure.
Reporting
Short-term retention
RPO Reporting
Mark policy as warning, if the specified RPO exceeded by
2
Seconds
(13% of RPO)
Mark policy as error, if the specified RPO exceeded by
3
Seconds
(20% of RPO)
OK
Cancel
Defines how granular and how far back can you roll your replica VM state.
< Previous
Next >
Finish
Cancel

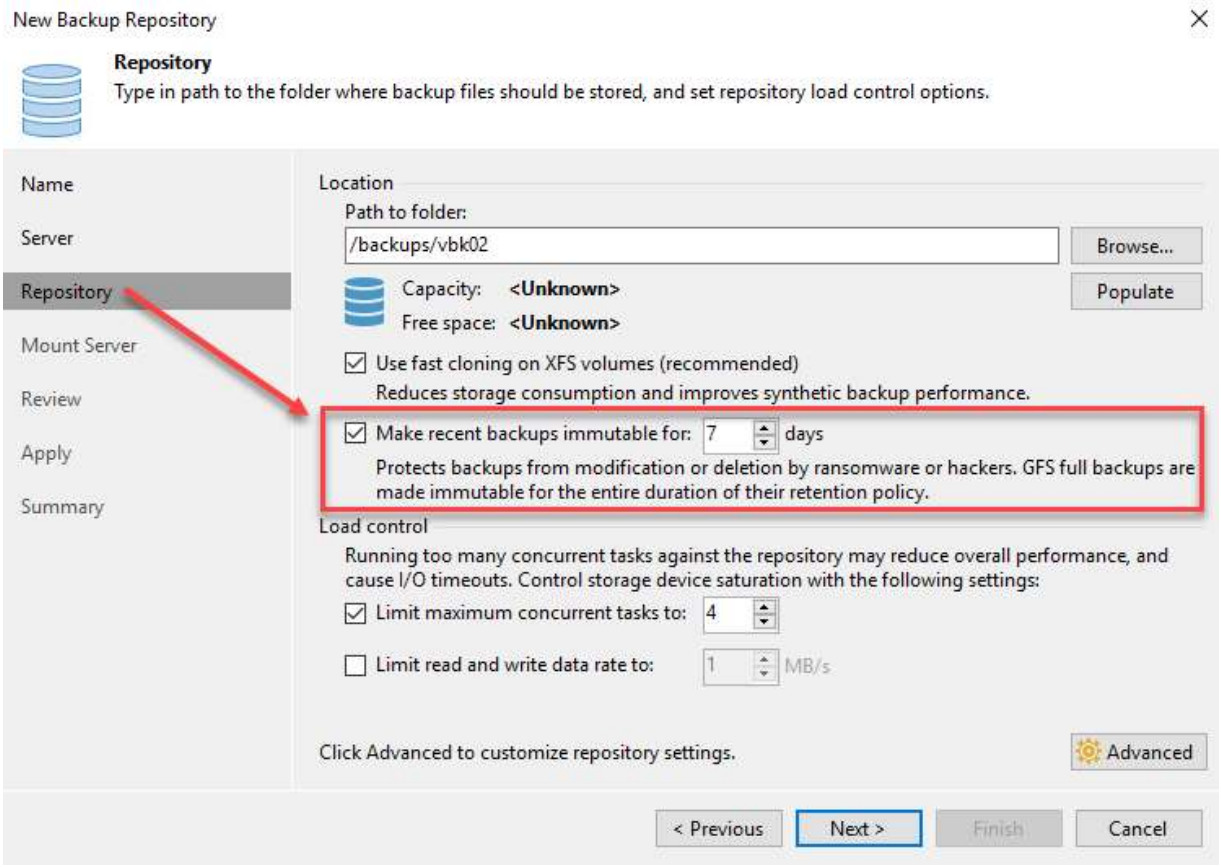

New CDP Policy
Guest Processing
Choose guest OS processing optioins available for running VMs.
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Enable application-aware processing
Detects and prepares applications for consistent backup, performs transaction logs processing, and configures the OS to perform required application restore steps upon first boot.
Customize application handling options for individual machines and applications
Applications...
Guest interaction proxy:
Automatic selection
Choose...
Guest OS credentials:
home\administrator (home\administrator, last edited: 33 days ago)
Add...
Manage accounts
Customize guest OS credentials for individual machines and operating systems
Credentials...
Verify network connectivity and credentials for each machine included in the job
Test Now
< Previous
Apply
Finish
Cancel

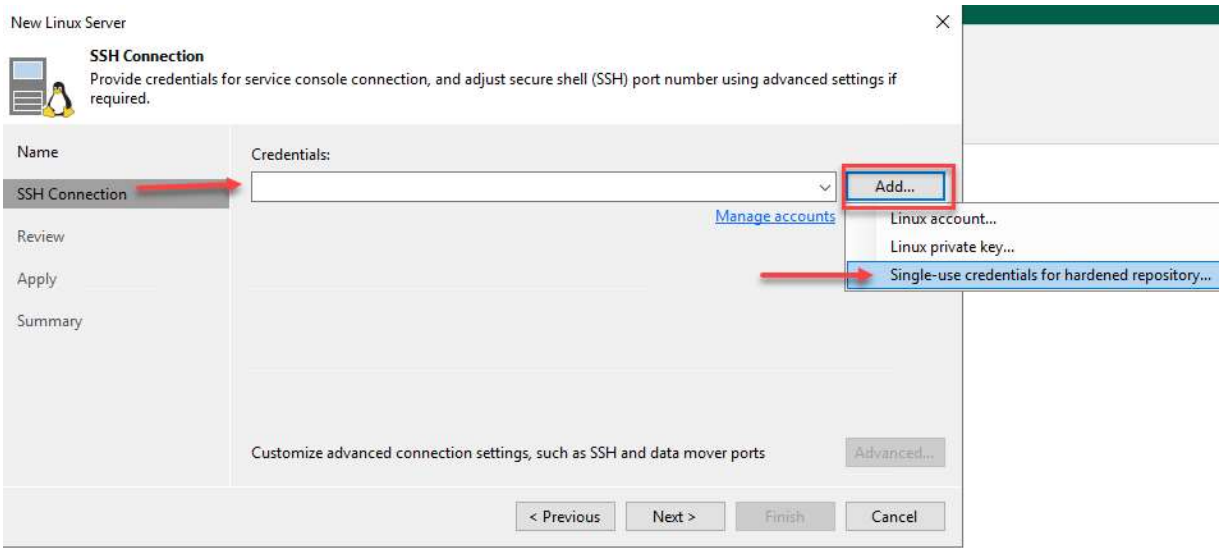

New CDP Policy
Summary
Summary
Name
Virtual Machines
Destination
Policy Settings
Schedule
Guest Processing
Summary
Summary:
Name: CDP Policy 1
Type: CDP
Source items:
synology-storage-console (home-vcsa01.home.lab)
Replica destination:
Cluster: Home-Cluster
Resource pool: Resources
VM folder: vm
Datastore: Synology-NAS [14.5 TB free]
Replica suffix: _replica
Source proxies: Automatic selection
Target proxies: Automatic selection
Recovery point objective (RPO): 15 second(s)
Enable point-in-time recovery within: 30 minute(s)
Long-term retention
Create additional restore point every: 12 hours
Keep these restore points for: 1 days
Enable the policy when I click Finish
< Previous
Next >
Finish
Cancel

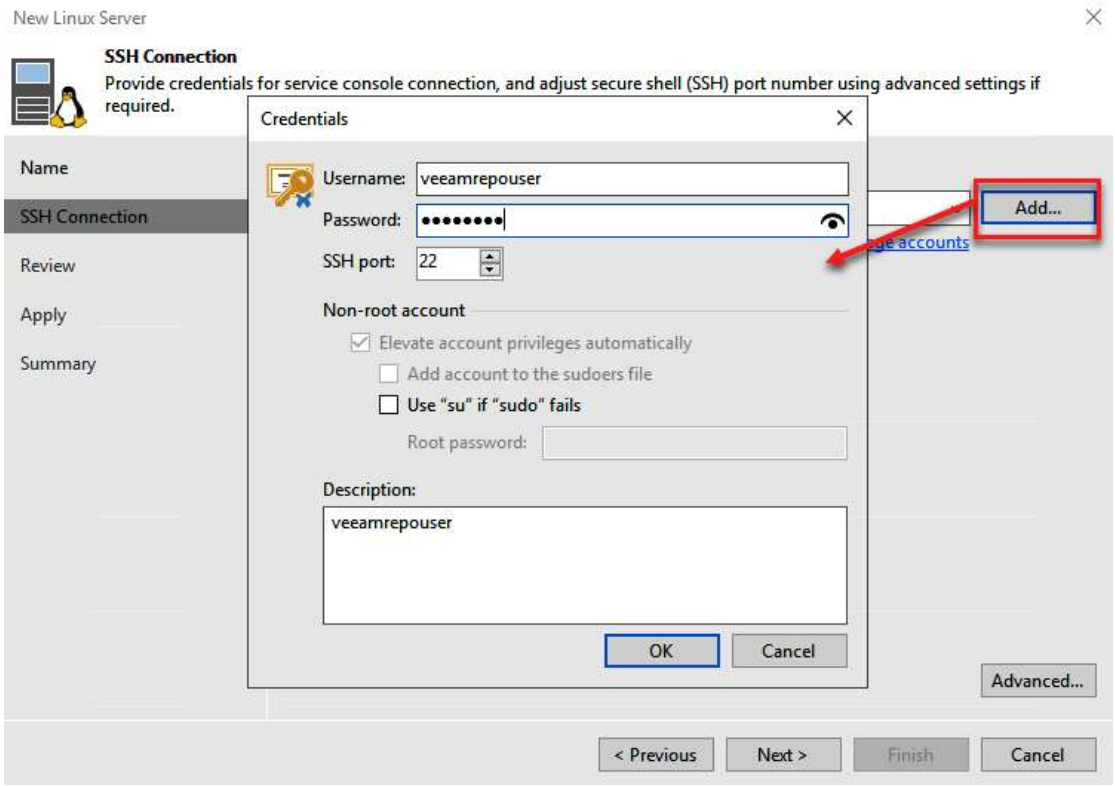

Veeam Backup and Replication
CDP Policy Tools
Home
View
CDP Policy
Statistics
Report
Edit
Disable
Delete
Info
Manage CDP Policy
Home
Jobs
Backup
CDP
Backups
Disk
Replicas
Last 24 Hours
Running (1)
Success
Warning
Failed
Type in an object name to search for
All jobs
Name
Type
Objects
Status
Last Run
Last Result
Next Run
Target
Agent Backup Job 1
Windows Agent Backup
1
Stopped
16 hours ago
Success
2021-10-26 11:00 PM
Scale-out Backup Repository 1
Backup Job 1
VMware Backup
2
Stopped
17 hours ago
Success
2021-10-26 10:00 PM
Scale-out Backup Repository 1
Backup Job 2
VMware Backup
1
Stopped
19 minutes ago
Success
<not scheduled>
Default Backup Repository
CDP Policy 1
CDP
1
Initial sync
<Continuous>
home-esxi02a.home.lab
DATA
Total size:
0 B
Read:
0 B
Transferred:
0 B
RPO
SLA:
N/A
Max delay:
N/A
Bottleneck:
N/A
STATUS
Success:
0
Warnings:
0
Errors:
0
THROUGHPUT (LAST 5 MIN)
Home
Inventory
Backup Infrastructure
Name
Status
Action
synology-storage-con...
Initial sync

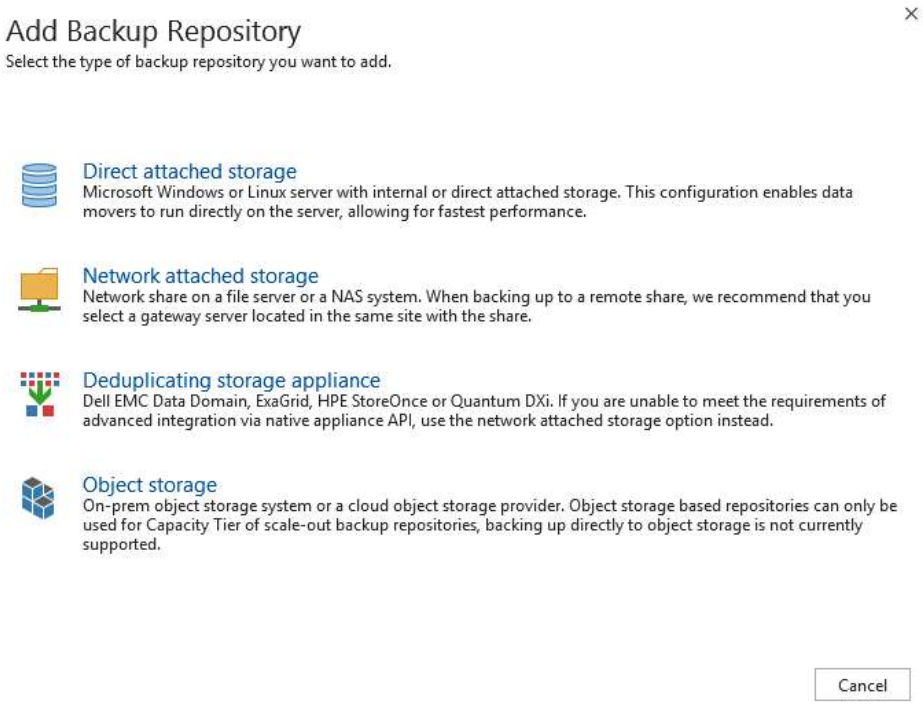

CDP Policy 1
Last 24 hours (all VMs)
Data
Total size: 16 GB
Read: 10.6 MB
Transferred: 4.8 MB
RPO
SLA: 100%
Max delay: 0 seconds
Bottleneck: None
Status
Success: 1
Warning: 0
Errors: 0
Throughput (last 5 min)
Speed: 0 KB/s
Name
Status
synology-s...
Syncing
Last sync session
Duration: 00:00
Bottleneck: None
Read: 118 KB
Transferred: 54 KB
Last period
RPO
SLA: 100%
Max delay: 00:00
Bottleneck: None
Sync sessions
Success: 65
Warning: 0
Errors: 0
Duration
Average: 00:07
Maximum: 00:00
Sync interval: 00:15
Data
Average: 75.1 KB
Maximum: 309.5 KB
Total: 4.8 MB
Errors
Warnings
Success
Action
Duration
Required backup infrastructure resources have been assigned
VM info has been updated successfully 00:05
Source agent has been started successfully 00:04
Replica VM has been configured successfully 00:50
Source infrastructure is CDP ready 00:00
Replica VM has been configured successfully 00:27
Getting the replica VM... 00:41
Target configuration has been processed successfully 00:10
Hide Details
OK

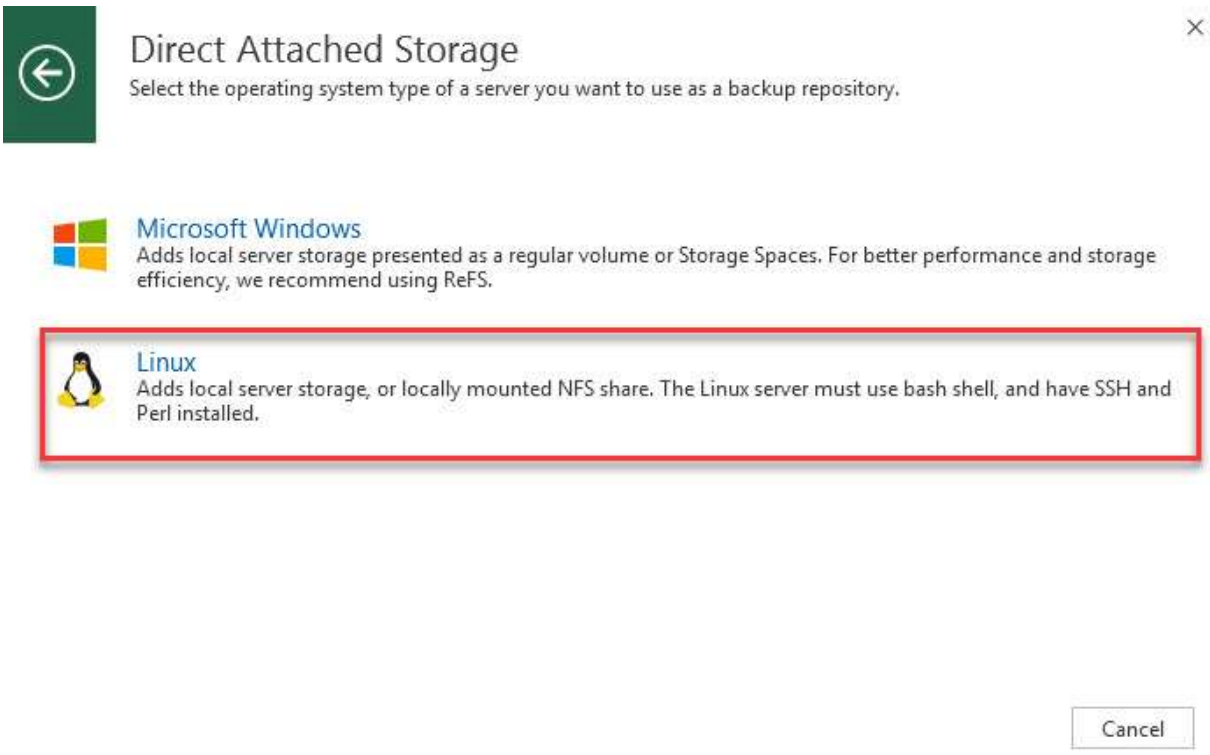
Chapter 4: Immutability – Hardened Repositories

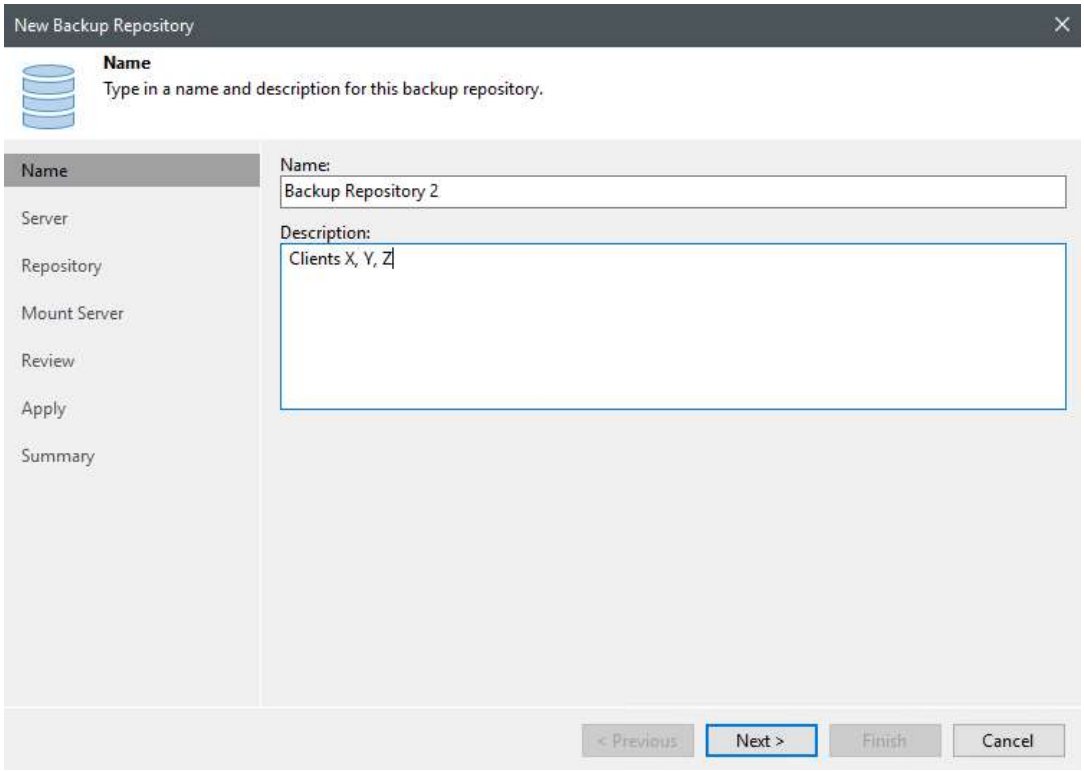


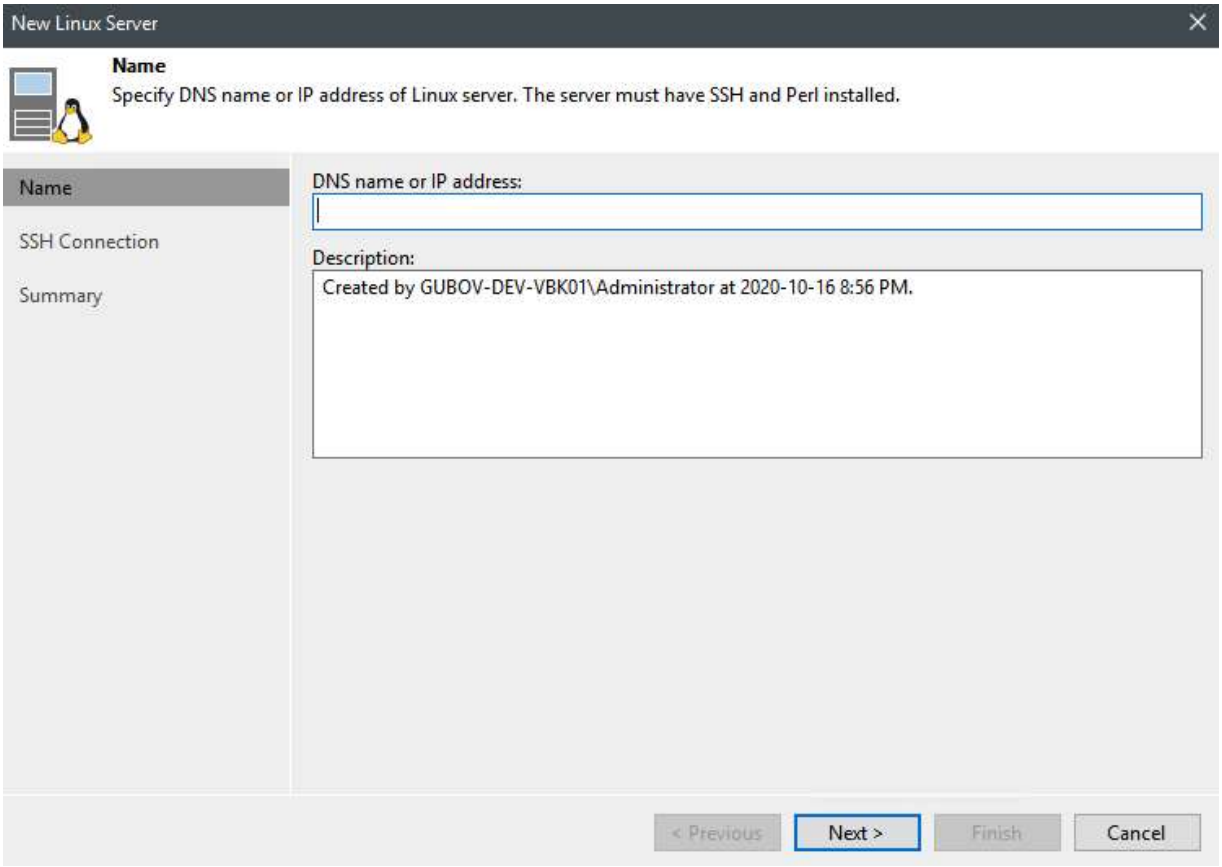


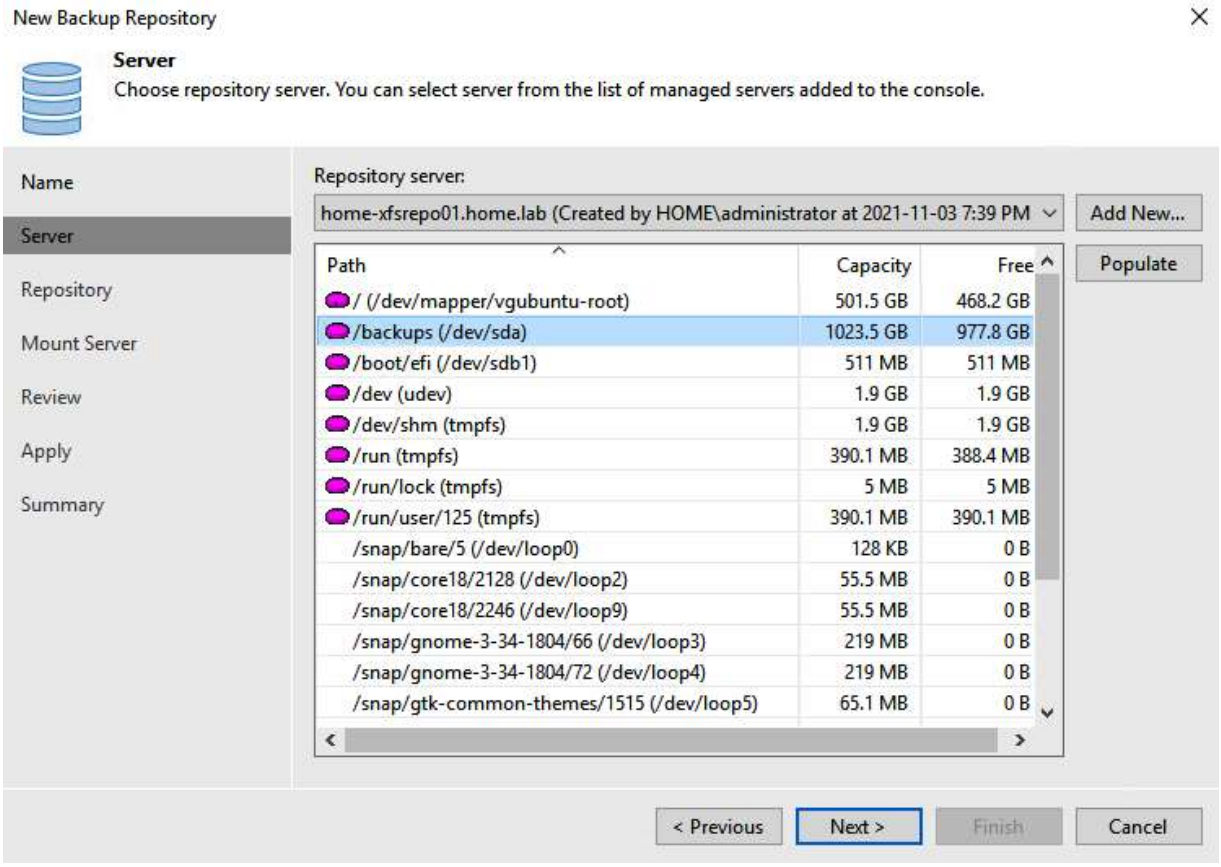

New Linux Server
SSH Connection
Provide credentials for service console connection, and adjust secure shell (SSH) port number using advanced settings if required.
Name
SSH Connection
Review
Apply
Summary
Credentials
Username: veeamrepouser
Password: ••••••••
SSH port: 22
Non-root account
Elevate account privileges automatically
Add account to the sudoers file
Use "su" if "sudo" fails
Root password:
Description:
veeamrepouser
OK
Cancel
Add...
Advanced...
< Previous
Next >
Finish
Cancel

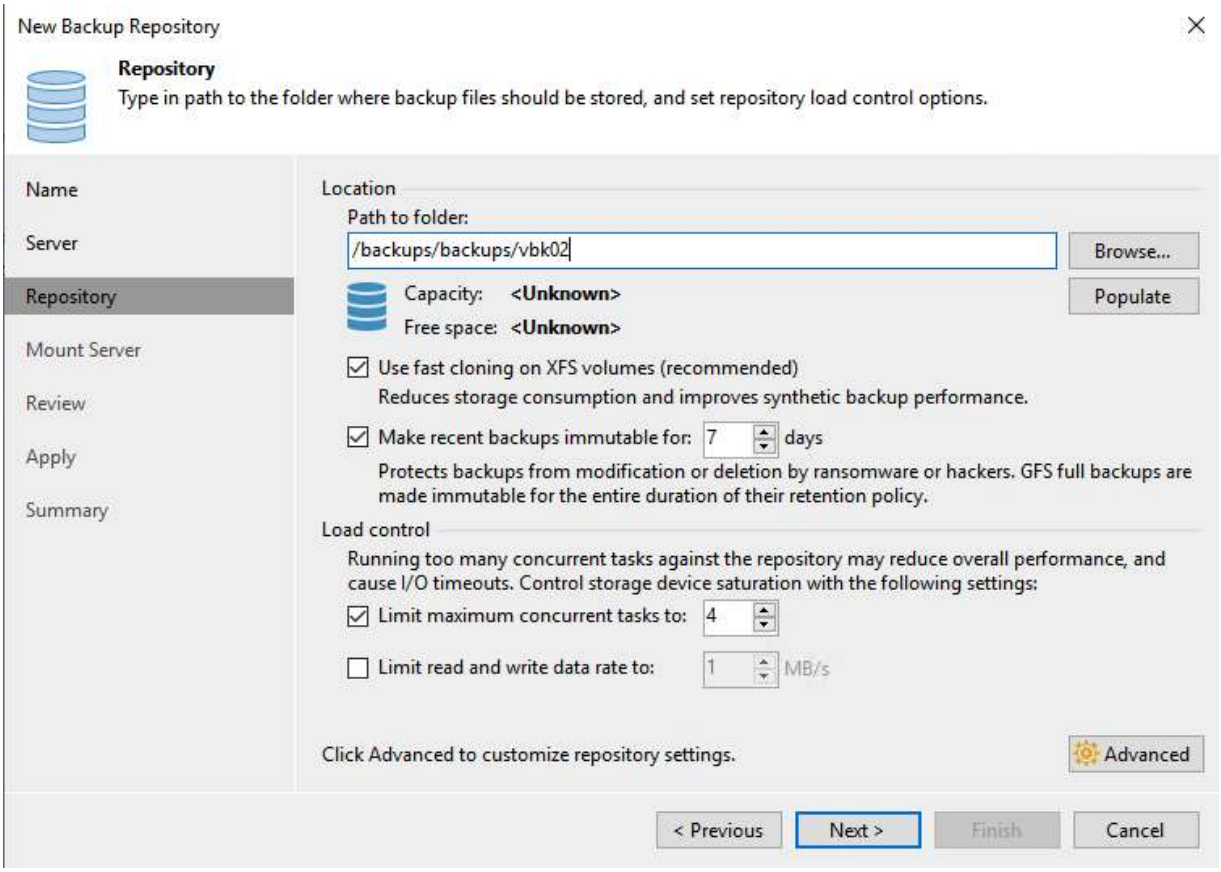

Add Backup Repository
Select the type of backup repository you want to add.
Direct attached storage
Microsoft Windows or Linux server with internal or direct attached storage. This configuration enables data movers to run directly on the server, allowing for fastest performance.
Network attached storage
Network share on a file server or a NAS system. When backing up to a remote share, we recommend that you select a gateway server located in the same site with the share.
Deduplicating storage appliance
Dell EMC Data Domain, ExaGrid, HPE StoreOnce or Quantum DXi. If you are unable to meet the requirements of advanced integration via native appliance API, use the network attached storage option instead.
Object storage
On-prem object storage system or a cloud object storage provider. Object storage based repositories can only be used for Capacity Tier of scale-out backup repositories, backing up directly to object storage is not currently supported.
Cancel

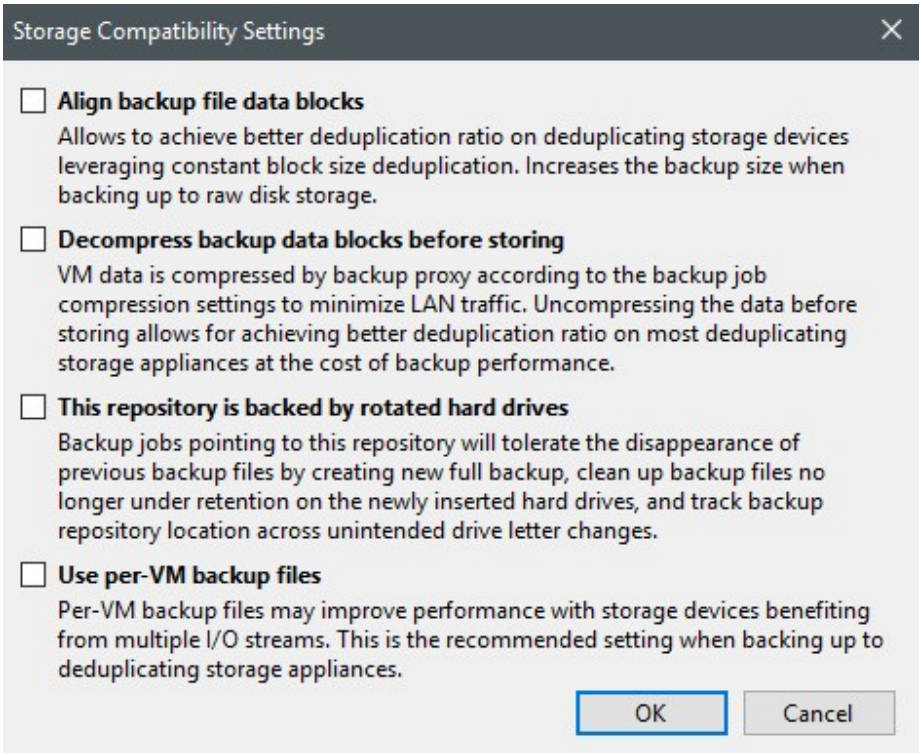

Direct Attached Storage
Select the operating system type of a server you want to use as a backup repository.
Microsoft Windows
Adds local server storage presented as a regular volume or Storage Spaces. For better performance and storage efficiency, we recommend using ReFS.
Linux
Adds local server storage, or locally mounted NFS share. The Linux server must use bash shell, and have SSH and Perl installed.
Cancel

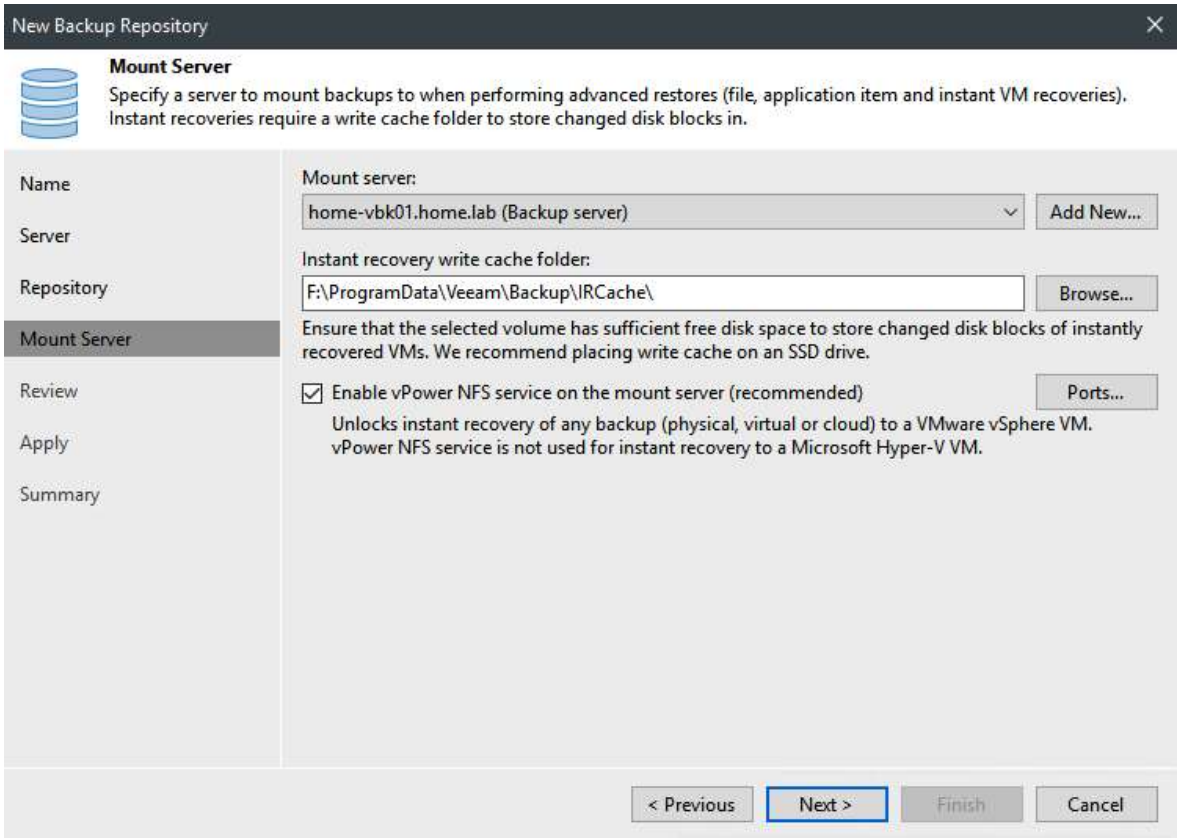

New Backup Repository
Name
Type in a name and description for this backup repository.
Name
Server
Repository
Mount Server
Review
Apply
Summary
Name:
Backup Repository 2
Description:
Clients X, Y, Z
< Previous
Next >
Finish
Cancel

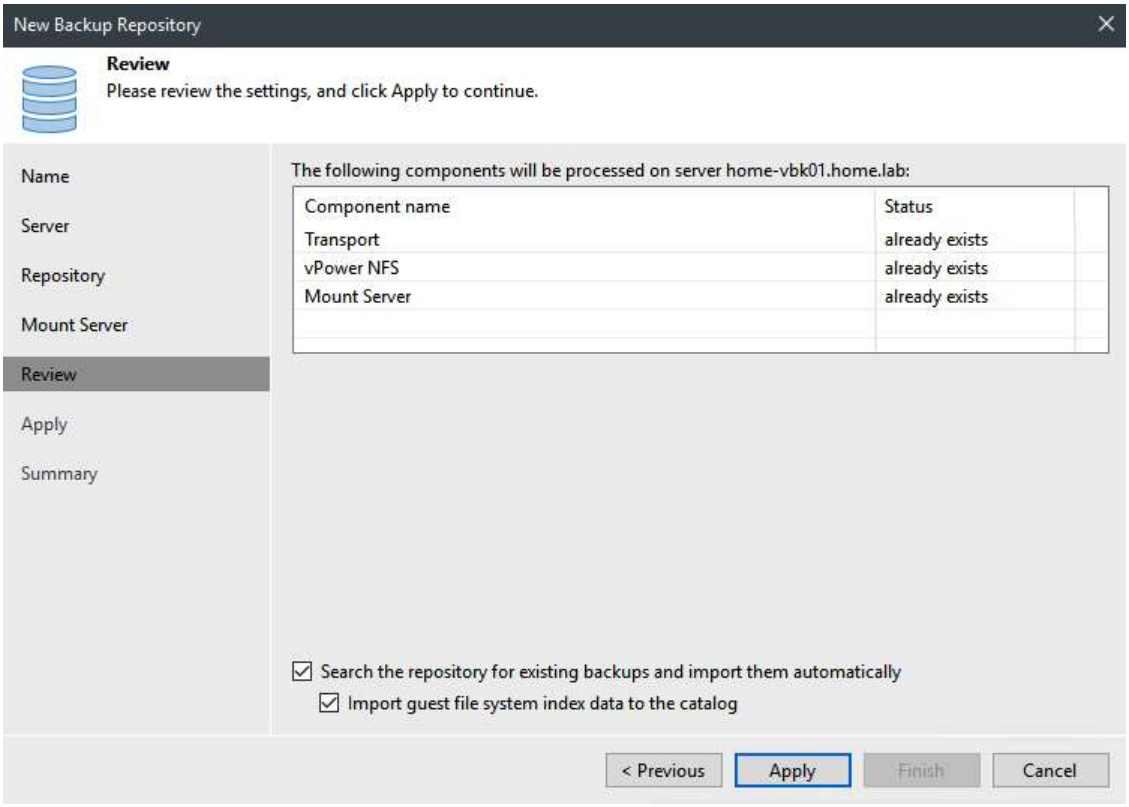

New Linux Server
Name
Specify DNS name or IP address of Linux server. The server must have SSH and Perl installed.
Name
SSH Connection
Summary
DNS name or IP address:
Description:
Created by GUBOV-DEV-VBK01\Administrator at 2020-10-16 8:56 PM.
< Previous
Next >
Finish
Cancel

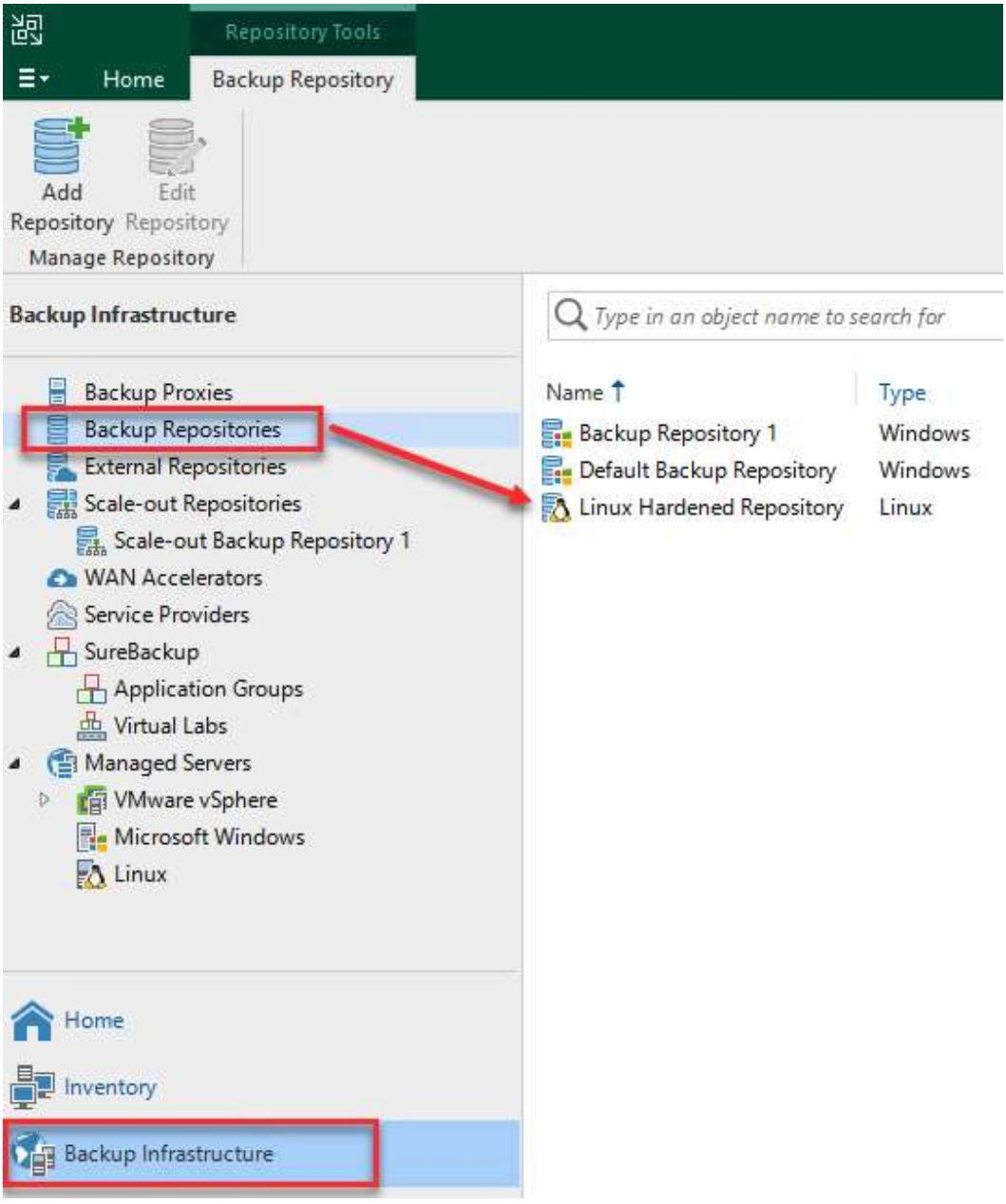

New Backup Repository
Server
Choose repository server. You can select server from the list of managed servers added to the console.
Name
Server
Repository
Mount Server
Review
Apply
Summary
Repository server:
home-xfsrepo01.home.lab (Created by HOME\administrator at 2021-11-03 7:39 PM
Add New...
Populate
Path
Capacity
Free
/ (/dev/mapper/vgubuntu-root) 501.5 GB 468.2 GB
/backups (/dev/sda) 1023.5 GB 977.8 GB
/boot/efi (/dev/sdb1) 511 MB 511 MB
/dev (udev) 1.9 GB 1.9 GB
/dev/shm (tmpfs) 1.9 GB 1.9 GB
/run (tmpfs) 390.1 MB 388.4 MB
/run/lock (tmpfs) 5 MB 5 MB
/run/user/125 (tmpfs) 390.1 MB 390.1 MB
/snap/bare/5 (/dev/loop0) 128 KB 0 B
/snap/core18/2128 (/dev/loop2) 55.5 MB 0 B
/snap/core18/2246 (/dev/loop9) 55.5 MB 0 B
/snap/gnome-3-34-1804/66 (/dev/loop3) 219 MB 0 B
/snap/gnome-3-34-1804/72 (/dev/loop4) 219 MB 0 B
/snap/gtk-common-themes/1515 (/dev/loop5) 65.1 MB 0 B
< Previous
Next >
Finish
Cancel

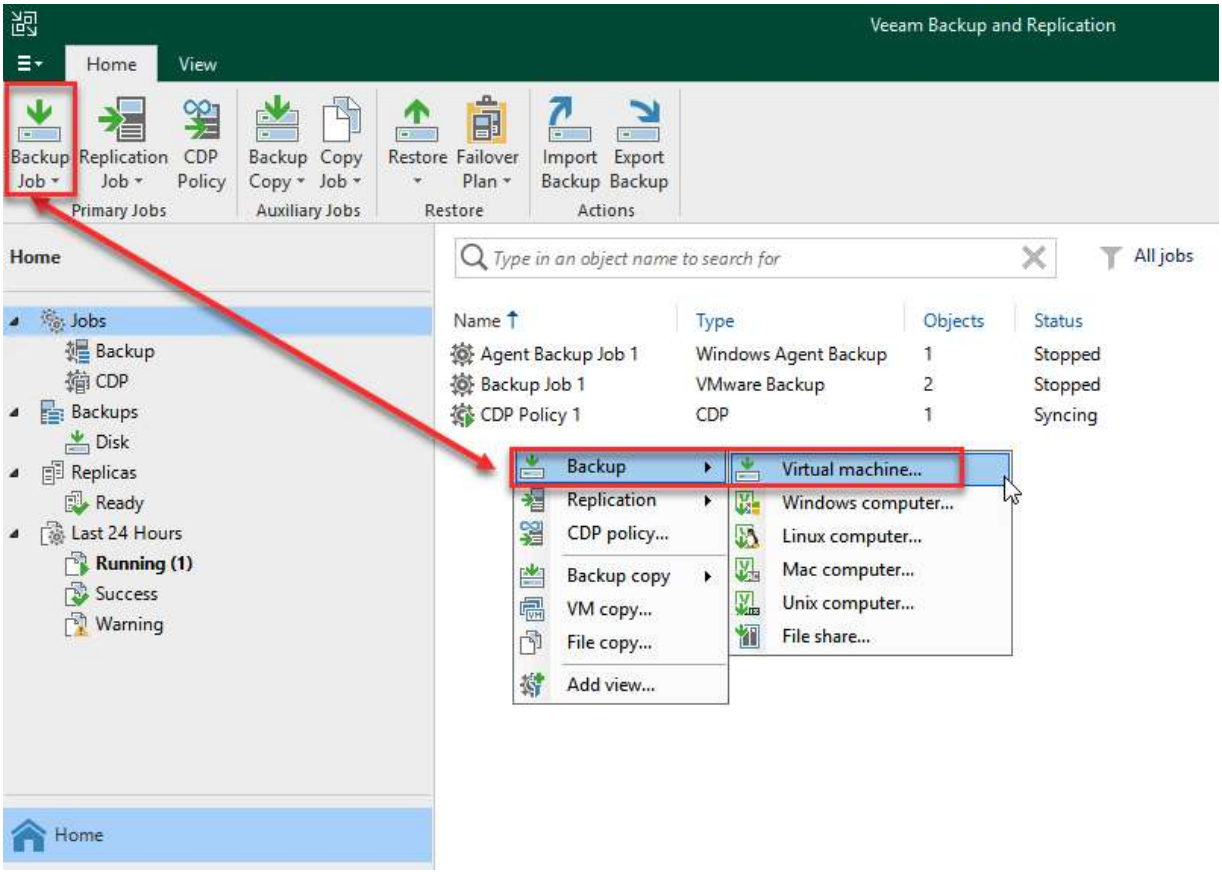

New Backup Repository
Repository
Type in path to the folder where backup files should be stored, and set repository load control options.
Name
Server
Repository
Mount Server
Review
Apply
Summary
Location
Path to folder:
/backups/backups/vbk02
Browse...
Capacity: <Unknown>
Free space: <Unknown>
Populate
Use fast cloning on XFS volumes (recommended)
Reduces storage consumption and improves synthetic backup performance.
Make recent backups immutable for: 7 days
Protects backups from modification or deletion by ransomware or hackers. GFS full backups are made immutable for the entire duration of their retention policy.
Load control
Running too many concurrent tasks against the repository may reduce overall performance, and cause I/O timeouts. Control storage device saturation with the following settings:
Limit maximum concurrent tasks to: 4
Limit read and write data rate to: 1 MB/s
Click Advanced to customize repository settings.
Advanced
< Previous
Next >
Finish
Cancel

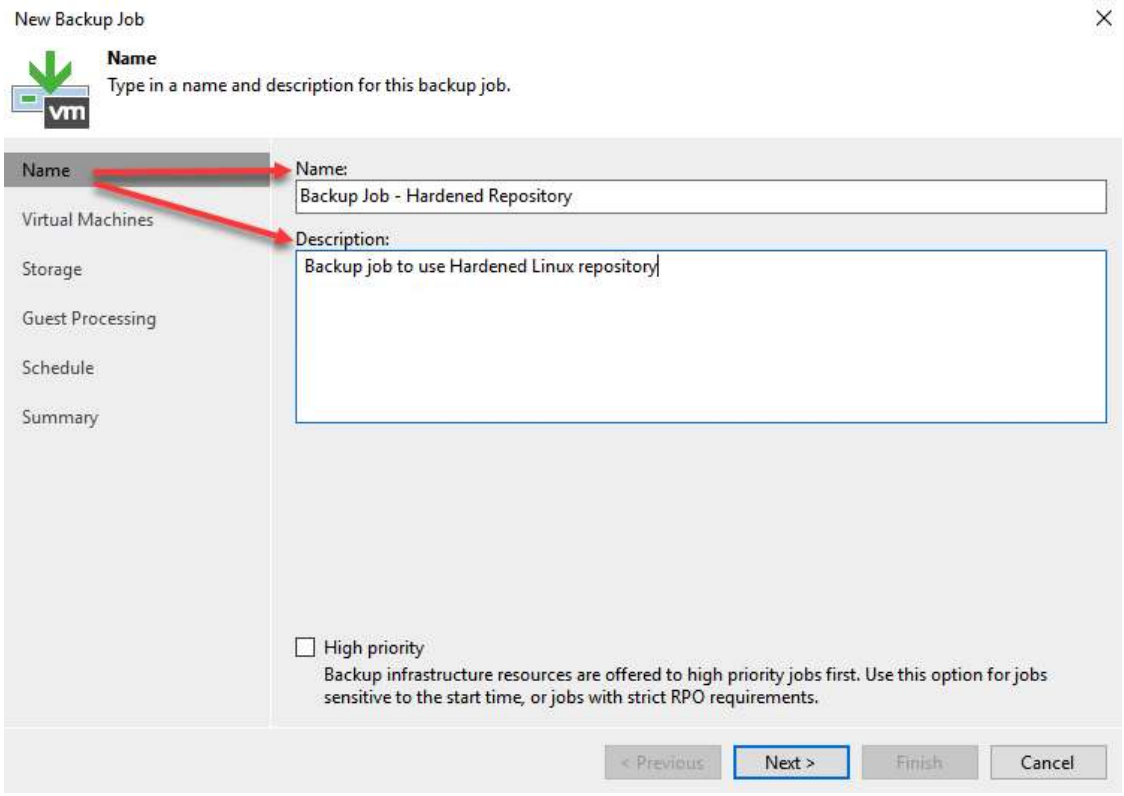

Storage Compatibility Settings
Align backup file data blocks
Allows to achieve better deduplication ratio on deduplicating storage devices leveraging constant block size deduplication. Increases the backup size when backing up to raw disk storage.
Decompress backup data blocks before storing
VM data is compressed by backup proxy according to the backup job compression settings to minimize LAN traffic. Uncompressing the data before storing allows for achieving better deduplication ratio on most deduplicating storage appliances at the cost of backup performance.
This repository is backed by rotated hard drives
Backup jobs pointing to this repository will tolerate the disappearance of previous backup files by creating new full backup, clean up backup files no longer under retention on the newly inserted hard drives, and track backup repository location across unintended drive letter changes.
Use per-VM backup files
Per-VM backup files may improve performance with storage devices benefiting from multiple I/O streams. This is the recommended setting when backing up to deduplicating storage appliances.
OK
Cancel

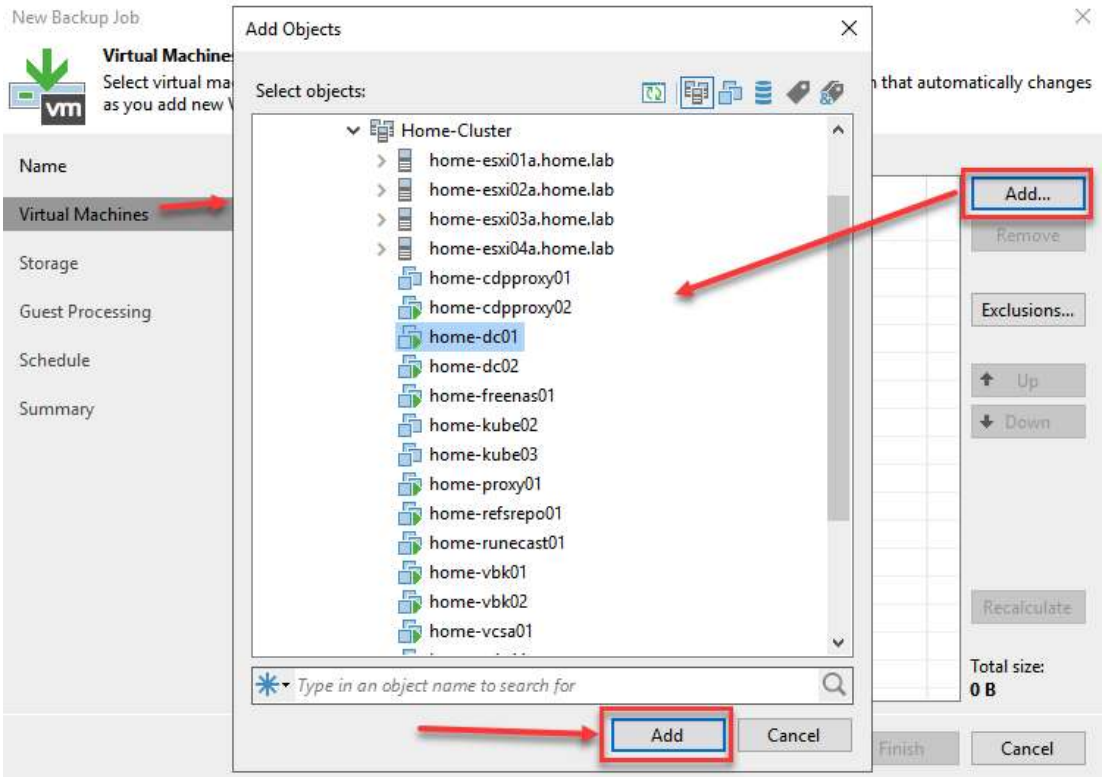

New Backup Repository
Mount Server
Specify a server to mount backups to when performing advanced restores (file, application item and instant VM recoveries). Instant recoveries require a write cache folder to store changed disk blocks in.
Name
Server
Repository
Mount Server
Review
Apply
Summary
Mount server:
home-vbk01.home.lab (Backup server)
Add New...
Instant recovery write cache folder:
F:\ProgramData\Veeam\Backup\IRCache\
Browse...
Ensure that the selected volume has sufficient free disk space to store changed disk blocks of instantly recovered VMs. We recommend placing write cache on an SSD drive.
Enable vPower NFS service on the mount server (recommended)
Ports...
Unlocks instant recovery of any backup (physical, virtual or cloud) to a VMware vSphere VM. vPower NFS service is not used for instant recovery to a Microsoft Hyper-V VM.
< Previous
Next >
Finish
Cancel

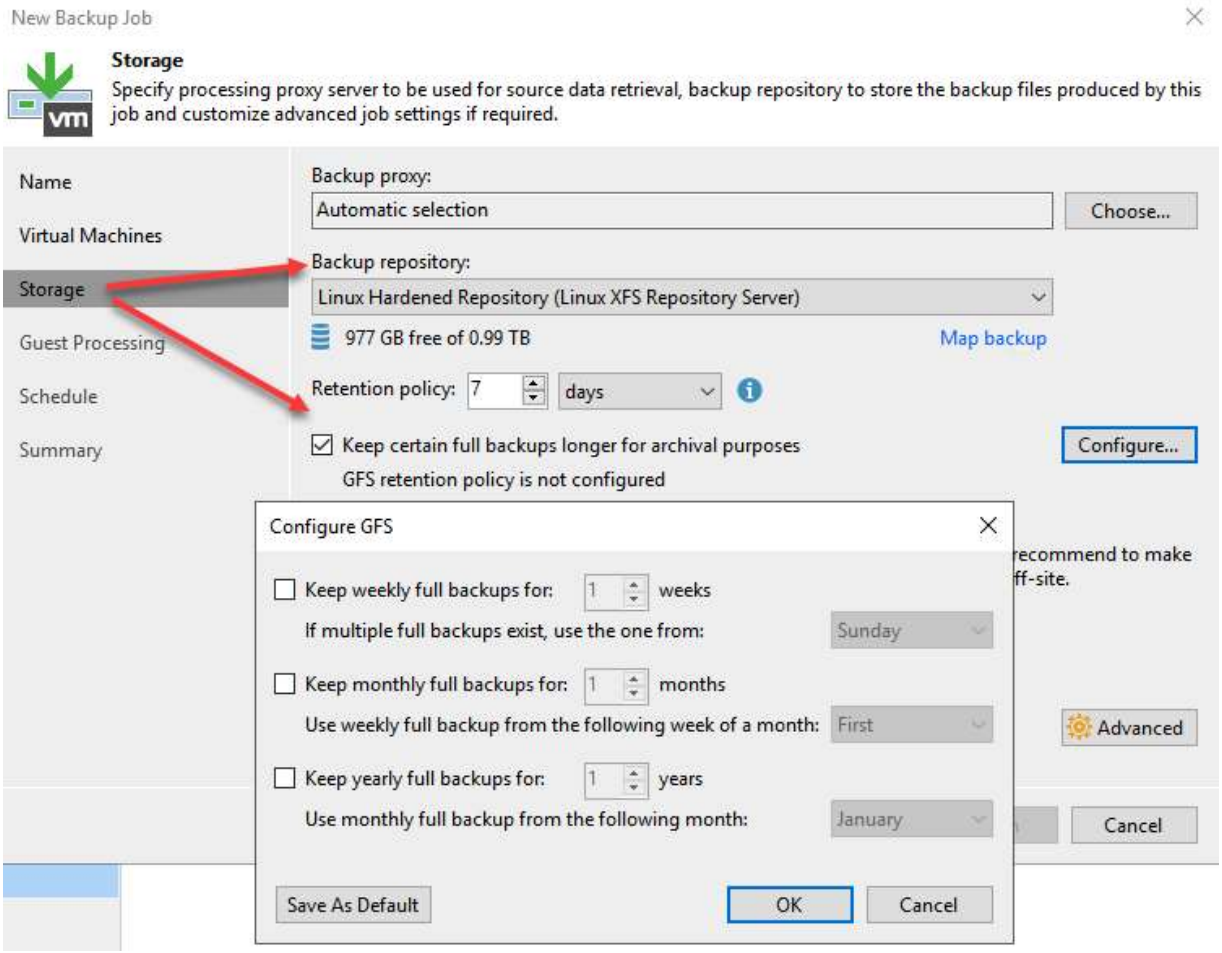

New Backup Repository
Review
Please review the settings, and click Apply to continue.
Name
Server
Repository
Mount Server
Review
Apply
Summary
The following components will be processed on server home-vbk01.home.lab:
Component name
Status
Transport
already exists
vPower NFS
already exists
Mount Server
already exists
Search the repository for existing backups and import them automatically
Import guest file system index data to the catalog
< Previous
Apply
Finish
Cancel

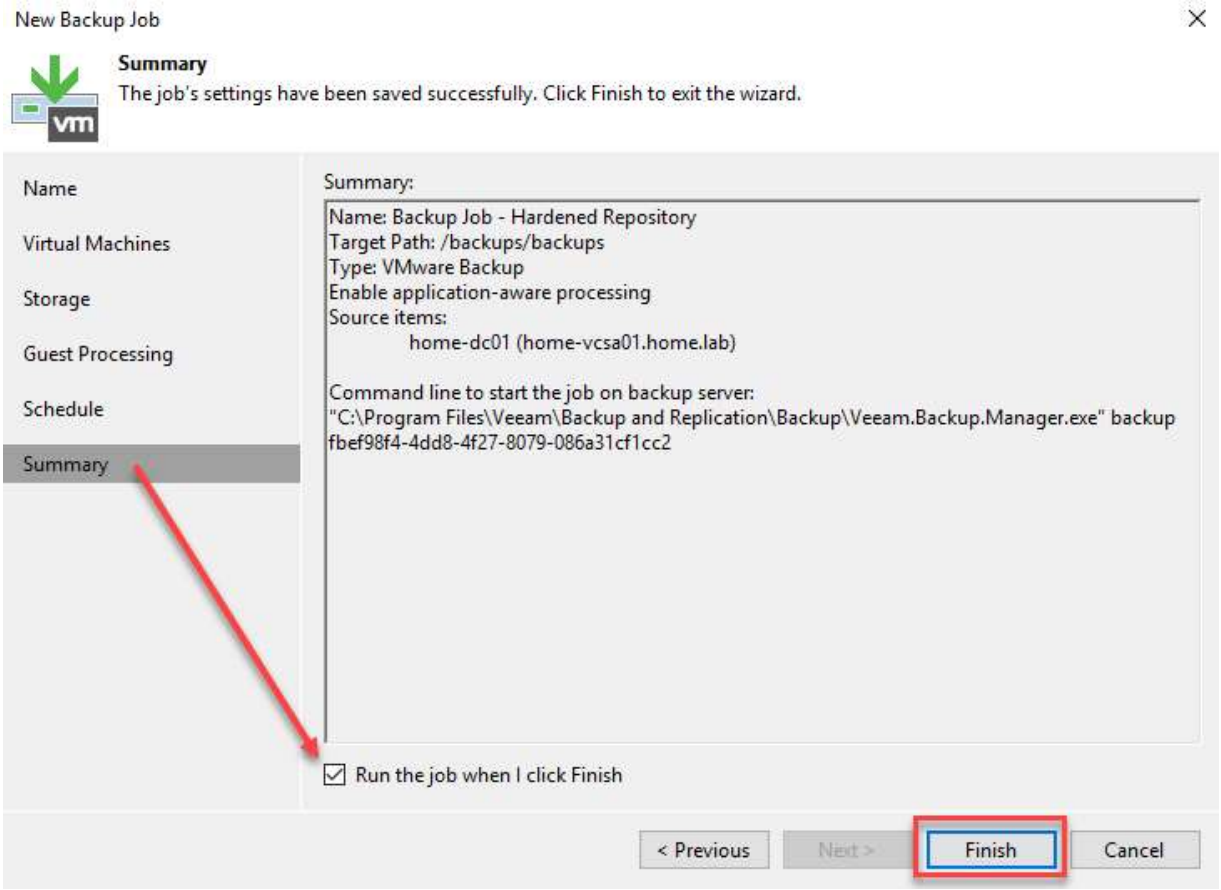

Repository Tools
Home
Backup Repository
Add Repository
Edit Repository
Manage Repository
Backup Infrastructure
Type in an object name to search for
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Linux
Name
Type
Backup Repository 1
Windows
Default Backup Repository
Windows
Linux Hardened Repository
Linux
Home
Inventory
Backup Infrastructure

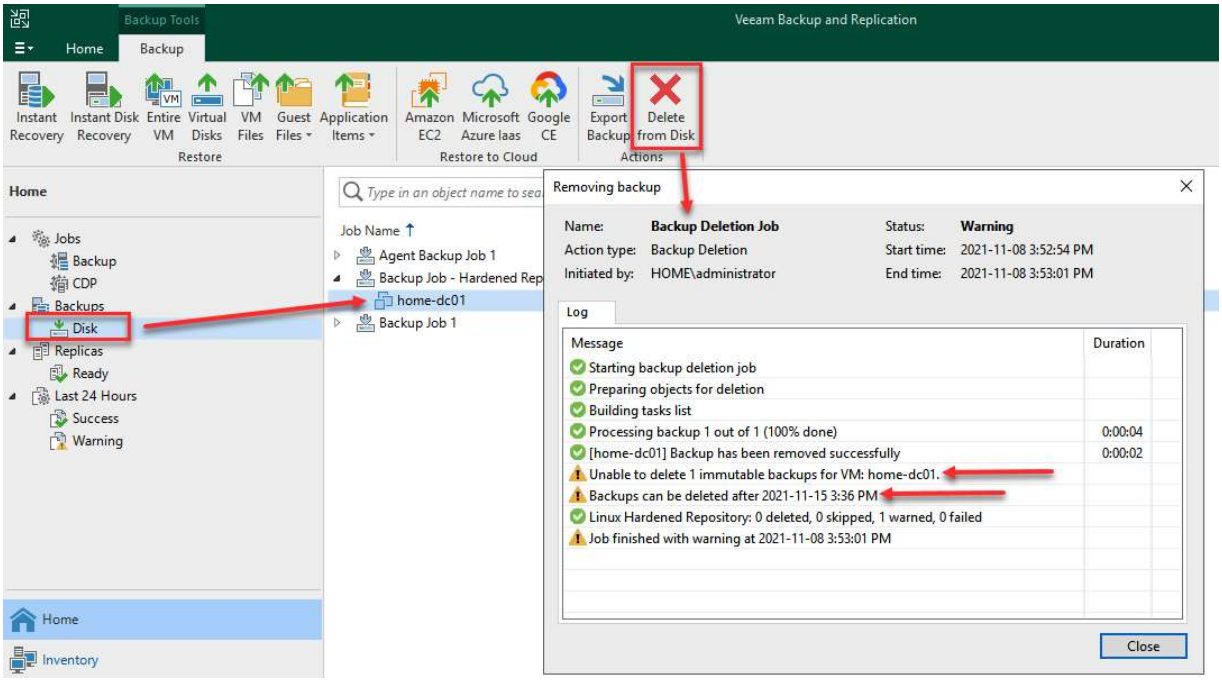

Veeam Backup and Replication
Home
View
Backup Job
Replication Job
CDP Policy
Backup Copy
Copy Job
Restore
Failover Plan
Import Backup
Export Backup
Primary Jobs
Auxiliary Jobs
Restore
Actions
Home
Type in an object name to search for
All jobs
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Running (1)
Success
Warning
Name
Type
Objects
Status
Agent Backup Job 1
Windows Agent Backup
1
Stopped
Backup Job 1
VMware Backup
2
Stopped
CDP Policy 1
CDP
1
Syncing
Backup
Replication
CDP policy...
Backup copy
VM copy...
File copy...
Add view...
Virtual machine...
Windows computer...
Linux computer...
Mac computer...
Unix computer...
File share...
Home


New Backup Job
Name
Type in a name and description for this backup job.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Name:
Backup Job - Hardened Repository
Description:
Backup job to use Hardened Linux repository
High priority
Backup infrastructure resources are offered to high priority jobs first. Use this option for jobs sensitive to the start time, or jobs with strict RPO requirements.
< Previous
Next >
Finish
Cancel

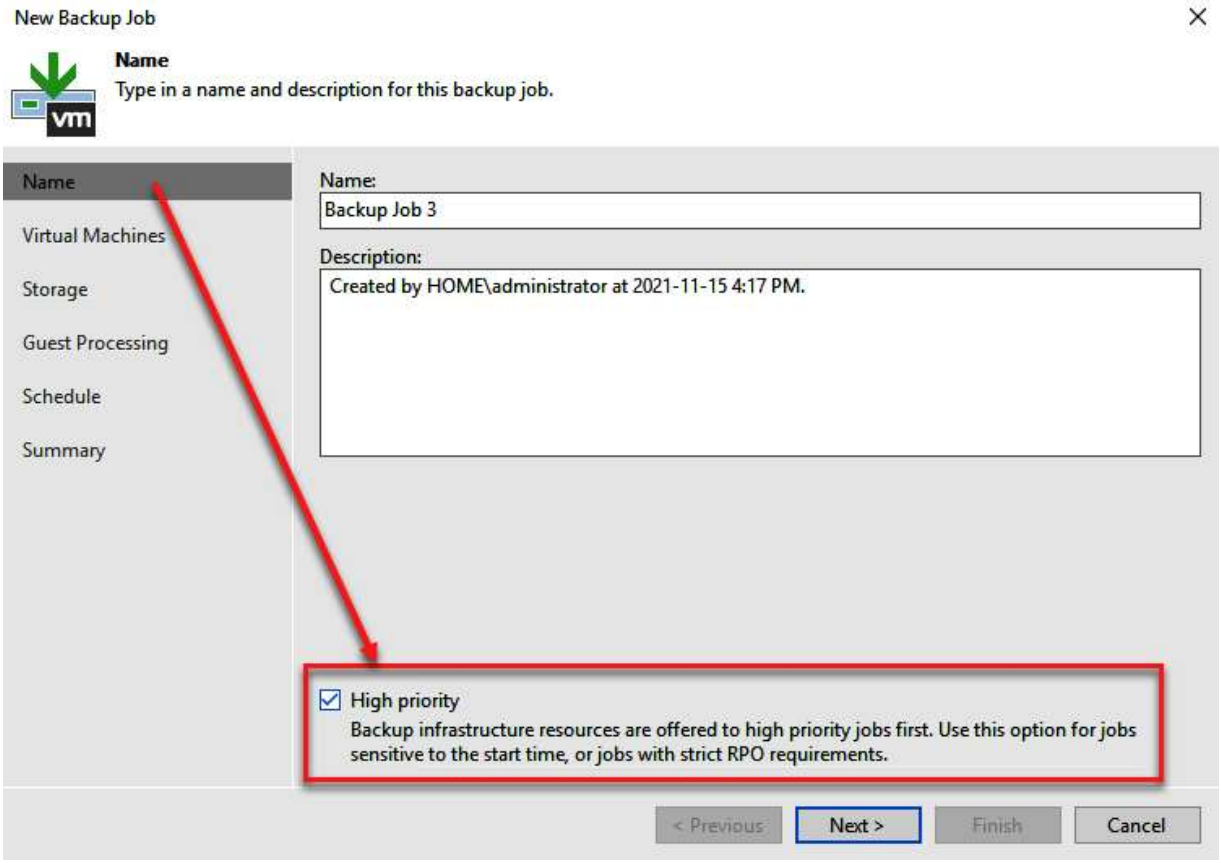

New Backup Job
Virtual Machine
Select virtual ma
as you add new
that automatically changes
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Add...
Remove
Exclusions...
Up
Down
Recalculate
Total size:
0 B
Finish
Cancel
Add Objects
Select objects:
Home-Cluster
home-esxi01a.home.lab
home-esxi02a.home.lab
home-esxi03a.home.lab
home-esxi04a.home.lab
home-cdpproxy01
home-cdpproxy02
home-dc01
home-dc02
home-freenas01
home-kube02
home-kube03
home-proxy01
home-refsrepo01
home-runecast01
home-vbk01
home-vbk02
home-vcsa01
Type in an object name to search for
Add
Cancel

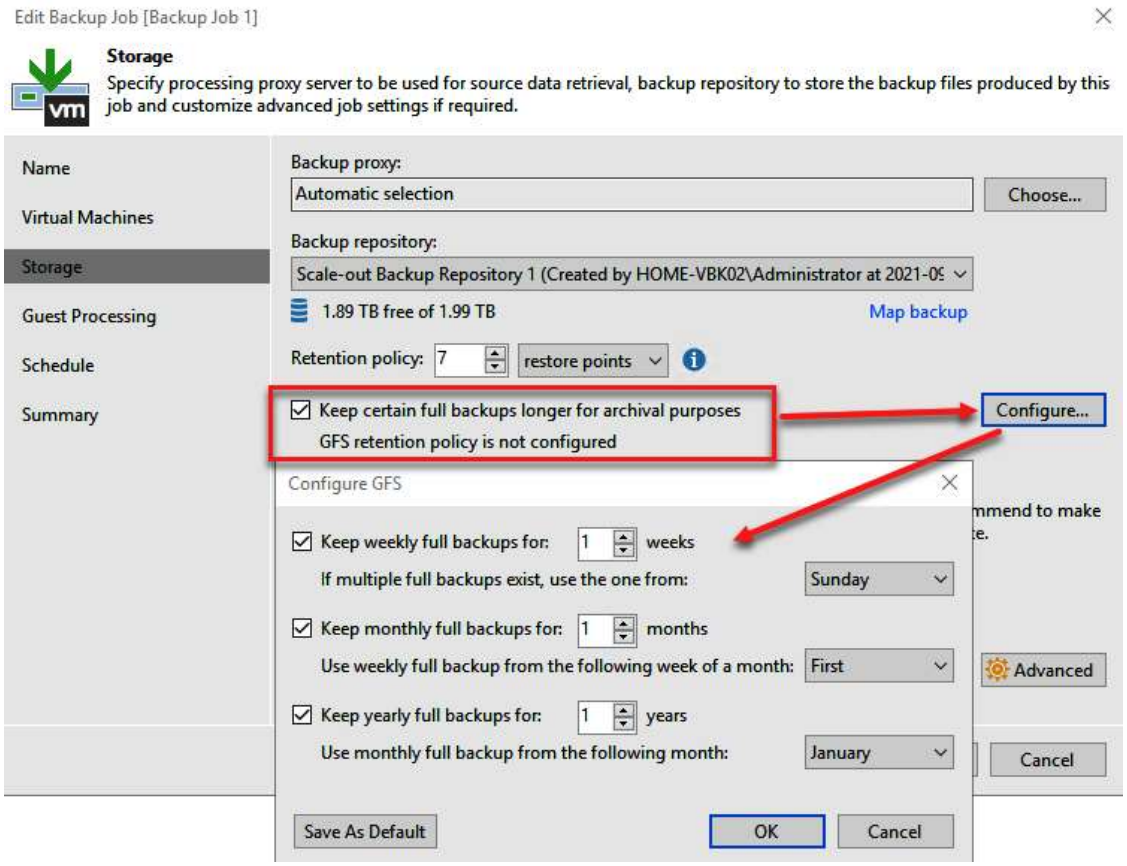

New Backup Job
Storage
Specify processing proxy server to be used for source data retrieval, backup repository to store the backup files produced by this job and customize advanced job settings if required.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Backup proxy:
Automatic selection
Choose...
Backup repository:
Linux Hardened Repository (Linux XFS Repository Server)
977 GB free of 0.99 TB
Map backup
Retention policy: 7 days
Keep certain full backups longer for archival purposes
GFS retention policy is not configured
Configure...
Configure GFS
Keep weekly full backups for: 1 weeks
If multiple full backups exist, use the one from: Sunday
Keep monthly full backups for: 1 months
Use weekly full backup from the following week of a month: First
Keep yearly full backups for: 1 years
Use monthly full backup from the following month: January
Save As Default
OK
Cancel
recommend to make
ff-site.
Advanced
Cancel

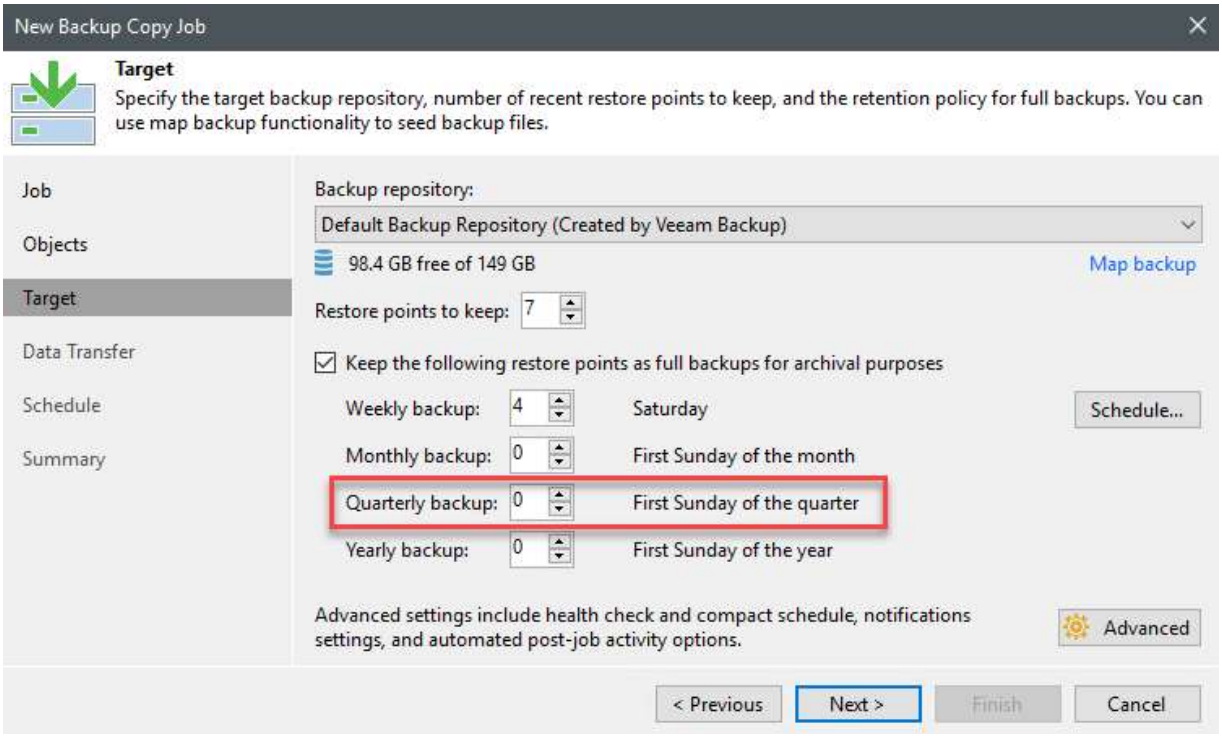

New Backup Job
Summary
The job's settings have been saved successfully. Click Finish to exit the wizard.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Summary:
Name: Backup Job - Hardened Repository
Target Path: /backups/backups
Type: VMware Backup
Enable application-aware processing
Source items:
home-dc01 (home-vcsa01.home.lab)
Command line to start the job on backup server:
"C:\Program Files\Veeam\Backup and Replication\Backup\Veeam.Backup.Manager.exe" backup
fbef98f4-4dd8-4f27-8079-086a31cf1cc2
Run the job when I click Finish
< Previous
Next >
Finish
Cancel

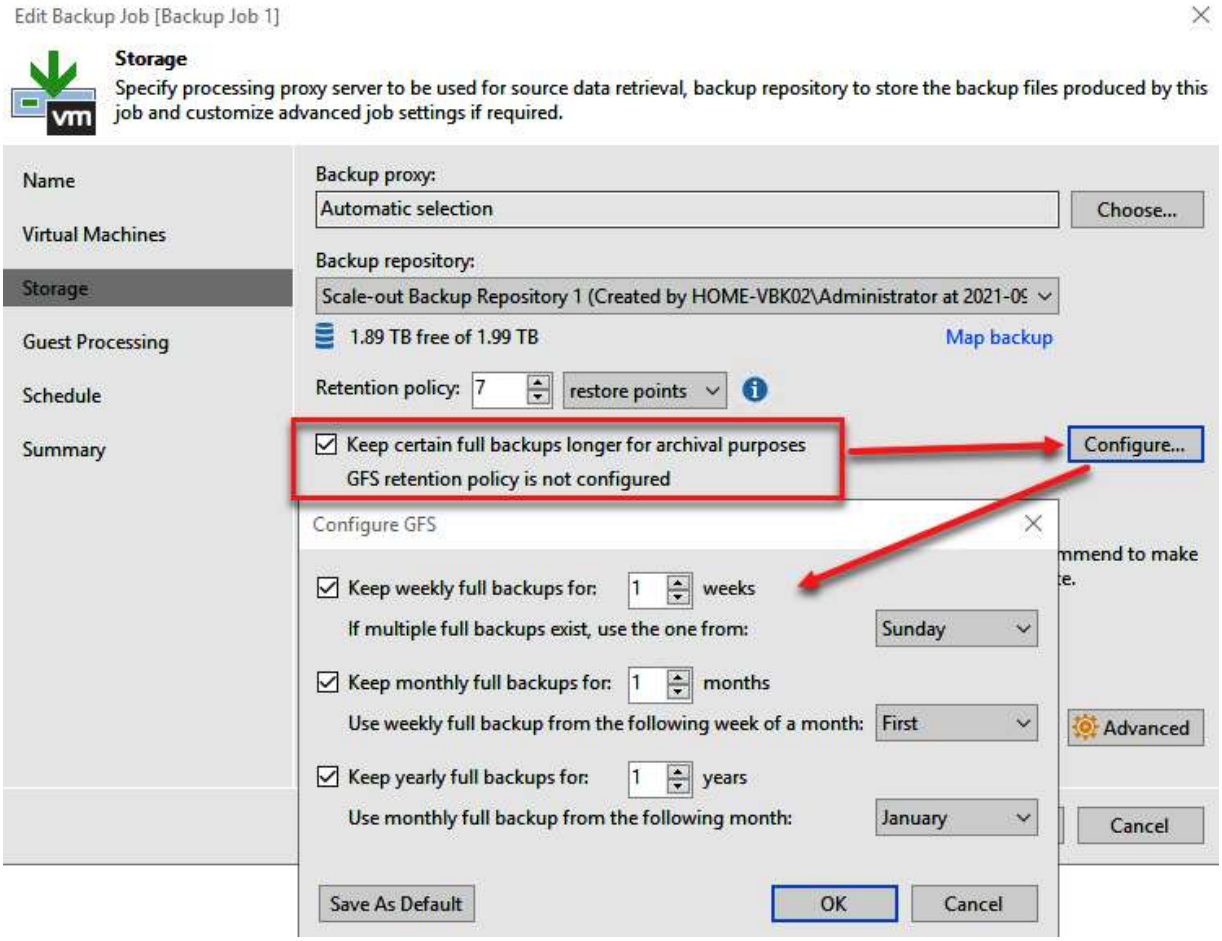

Backup Tools
Veeam Backup and Replication
Home
Backup
Instant Recovery
Instant Disk Recovery
Entire VM
Virtual Disks
VM Files
Guest Files
Application Items
Restore
Amazon EC2
Microsoft Azure Iaas
Google CE
Restore to Cloud
Export Backup
Delete from Disk
Actions
Home
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Success
Warning
Job Name
Agent Backup Job 1
Backup Job - Hardened Rep
home-dc01
Backup Job 1
Removing backup
Name: Backup Deletion Job
Action type: Backup Deletion
Initiated by: HOME\administrator
Status: Warning
Start time: 2021-11-08 3:52:54 PM
End time: 2021-11-08 3:53:01 PM
Log
Message
Duration
Starting backup deletion job
Preparing objects for deletion
Building tasks list
Processing backup 1 out of 1 (100% done) 0:00:04
[home-dc01] Backup has been removed successfully 0:00:02
Unable to delete 1 immutable backups for VM: home-dc01.
Backups can be deleted after 2021-11-15 3:36 PM
Linux Hardened Repository: 0 deleted, 0 skipped, 1 warned, 0 failed
Job finished with warning at 2021-11-08 3:53:01 PM
Close
Home
Inventory

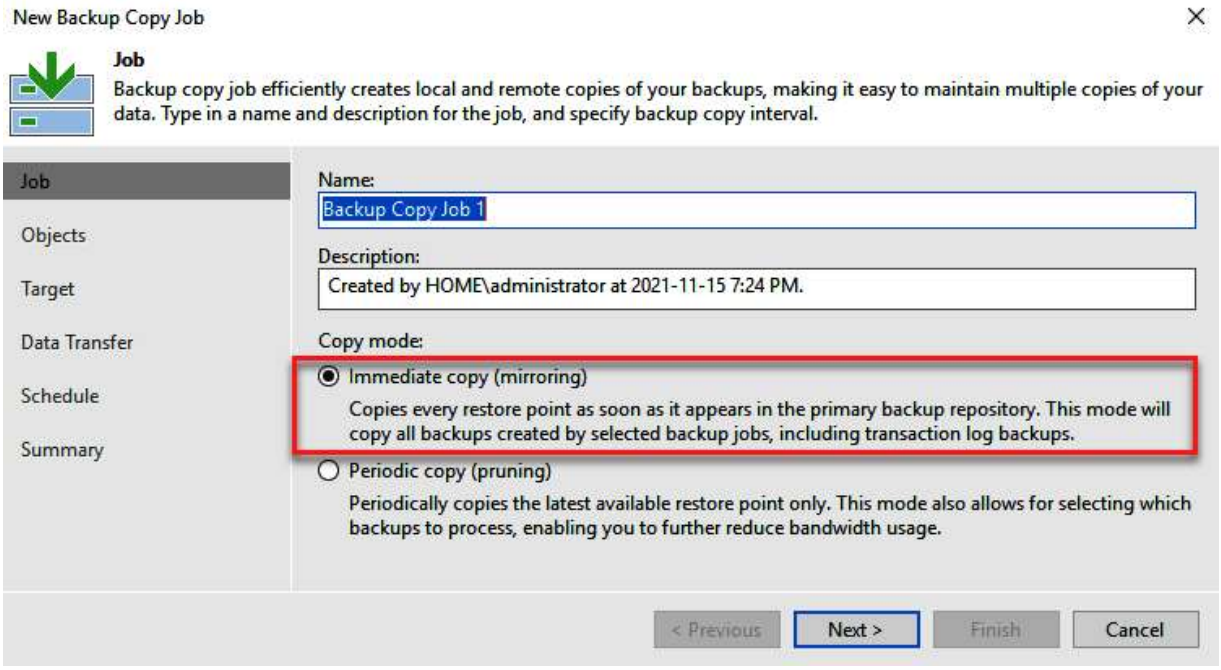
Chapter 5: Backup Enhancements – Jobs, Copy Jobs, Restores, and More

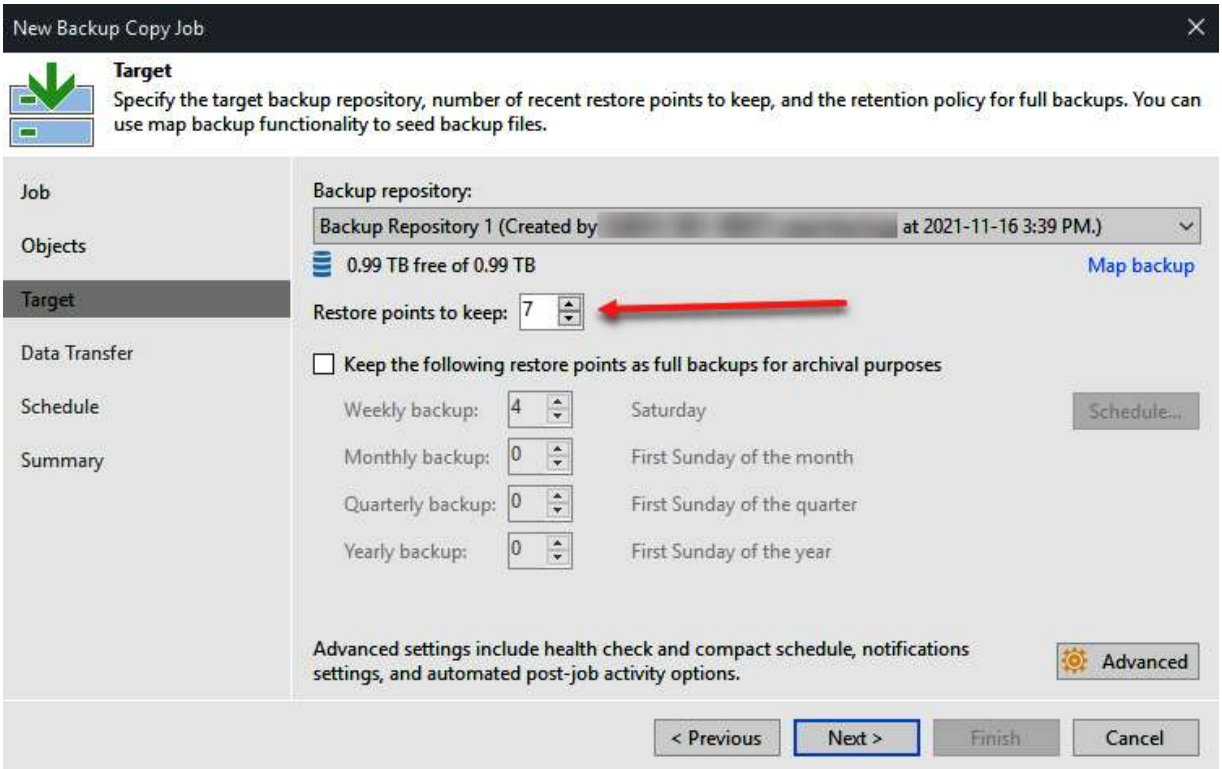


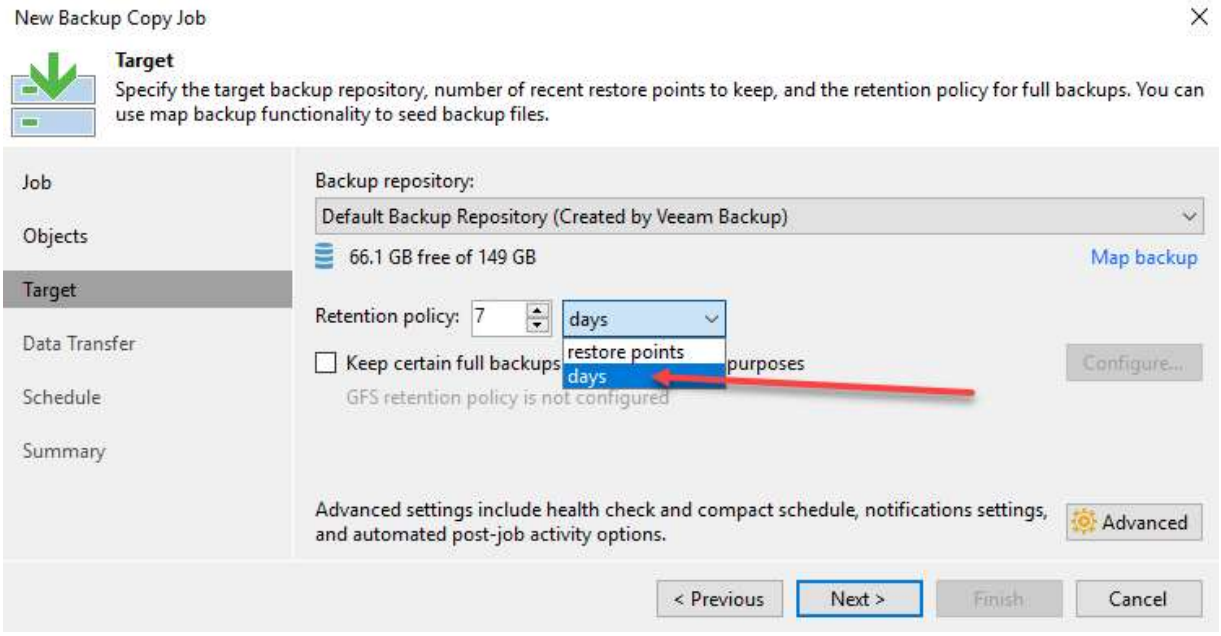

Edit Backup Job [Backup Job 1]
Storage
Specify processing proxy server to be used for source data retrieval, backup repository to store the backup files produced by this job and customize advanced job settings if required.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Backup proxy:
Automatic selection
Choose...
Backup repository:
Scale-out Backup Repository 1 (Created by HOME-VBK02\Administrator at 2021-0
1.89 TB free of 1.99 TB
Map backup
Retention policy: 7 restore points
Keep certain full backups longer for archival purposes
GFS retention policy is not configured
Configure...
Configure GFS
Keep weekly full backups for: 1 weeks
If multiple full backups exist, use the one from: Sunday
Keep monthly full backups for: 1 months
Use weekly full backup from the following week of a month: First
Keep yearly full backups for: 1 years
Use monthly full backup from the following month: January
Advanced
Cancel
Save As Default
OK
Cancel


New Backup Copy Job
Target
Specify the target backup repository, number of recent restore points to keep, and the retention policy for full backups. You can use map backup functionality to seed backup files.
Job
Objects
Target
Data Transfer
Schedule
Summary
Backup repository:
Default Backup Repository (Created by Veeam Backup)
98.4 GB free of 149 GB
Map backup
Restore points to keep: 7
Keep the following restore points as full backups for archival purposes
Weekly backup: 4 Saturday
Schedule...
Monthly backup: 0 First Sunday of the month
Quarterly backup: 0 First Sunday of the quarter
Yearly backup: 0 First Sunday of the year
Advanced settings include health check and compact schedule, notifications settings, and automated post-job activity options.
Advanced
< Previous
Next >
Finish
Cancel

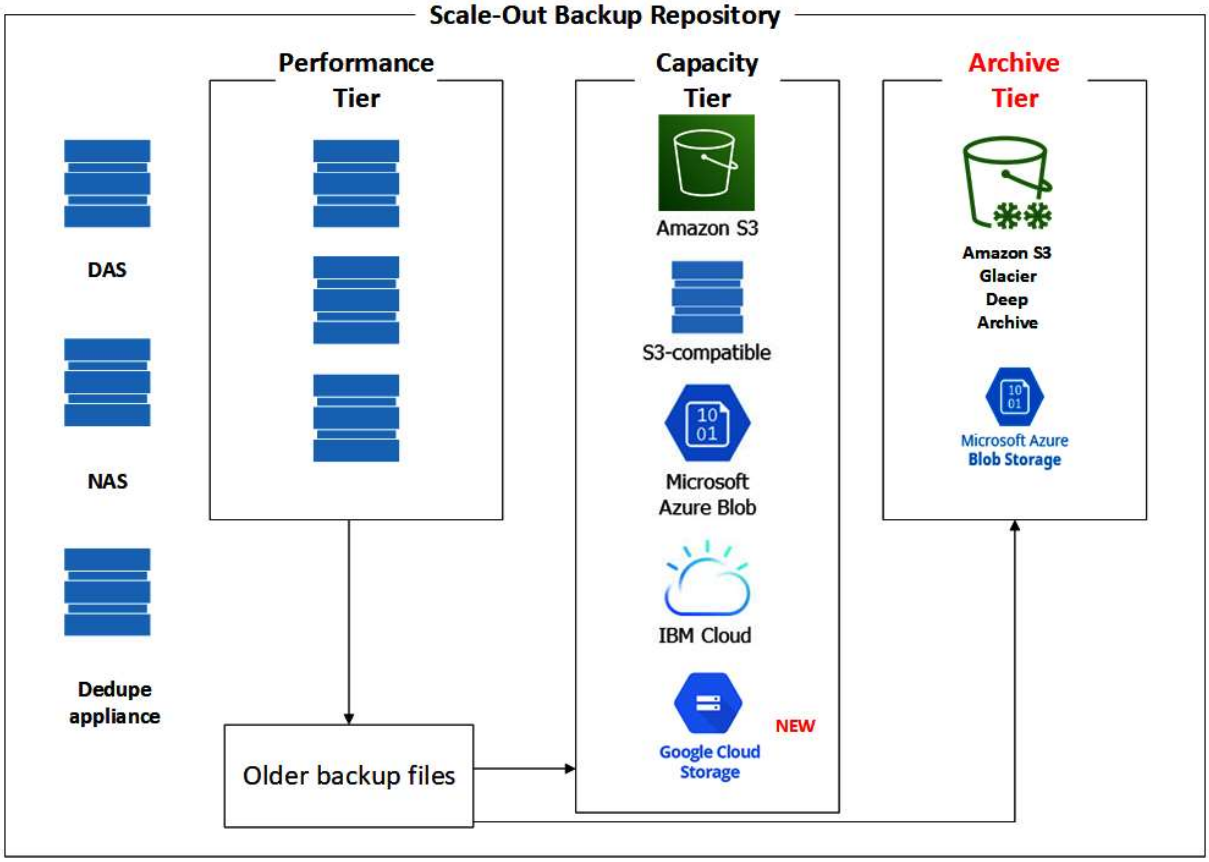

Edit Backup Job [Backup Job 1]
Storage
Specify processing proxy server to be used for source data retrieval, backup repository to store the backup files produced by this job and customize advanced job settings if required.
Name
Virtual Machines
Storage
Guest Processing
Schedule
Summary
Backup proxy:
Automatic selection
Choose...
Backup repository:
Scale-out Backup Repository 1 (Created by HOME-VBK02\Administrator at 2021-0
1.89 TB free of 1.99 TB
Map backup
Retention policy: 7 restore points
Keep certain full backups longer for archival purposes
GFS retention policy is not configured
Configure...
Configure GFS
Keep weekly full backups for: 1 weeks
If multiple full backups exist, use the one from: Sunday
Keep monthly full backups for: 1 months
Use weekly full backup from the following week of a month: First
Keep yearly full backups for: 1 years
Use monthly full backup from the following month: January
Save As Default
OK
Cancel
Advanced
Cancel

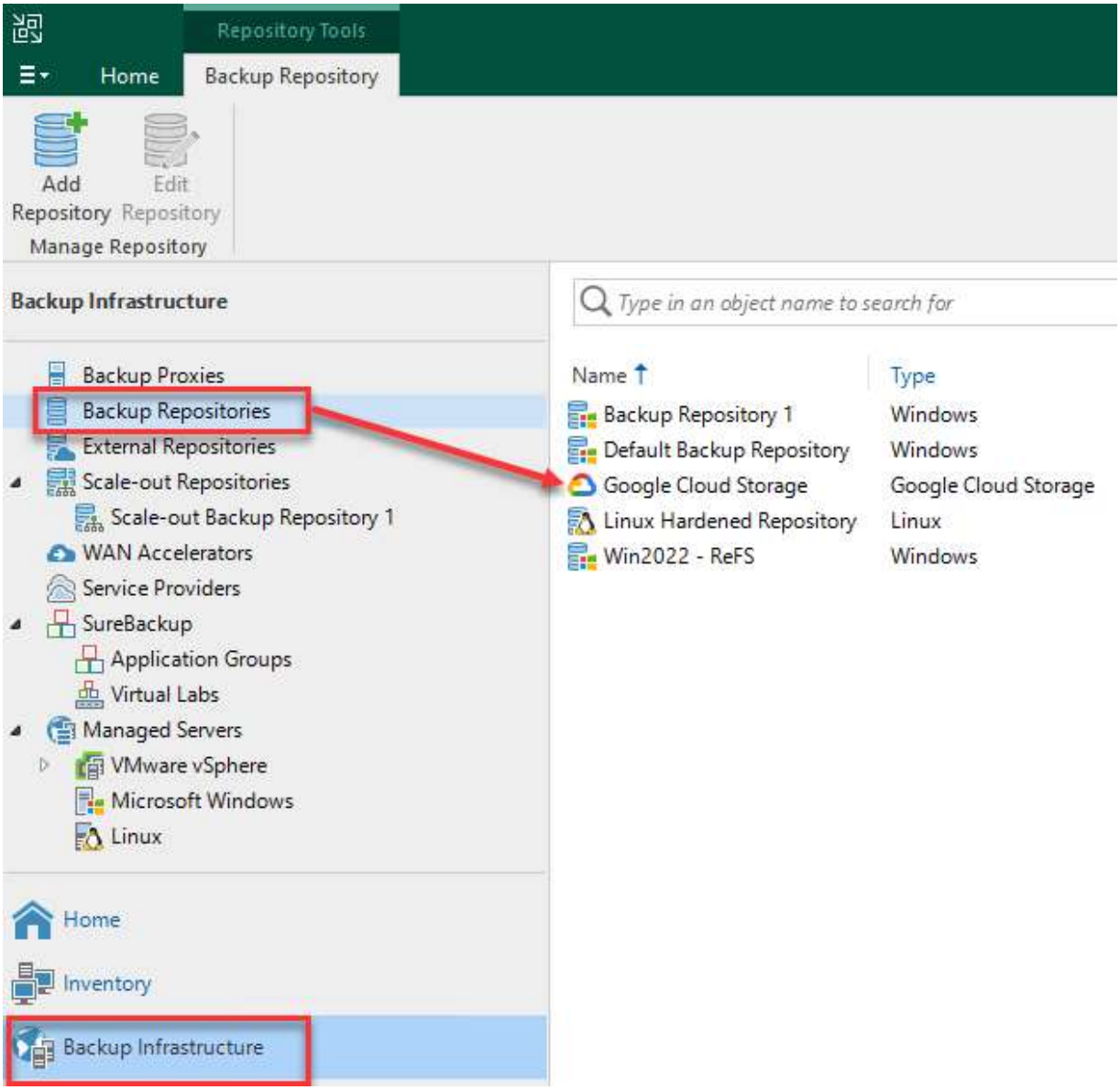

New Backup Copy Job
Job
Backup copy job efficiently creates local and remote copies of your backups, making it easy to maintain multiple copies of your data. Type in a name and description for the job, and specify backup copy interval.
Job
Objects
Target
Data Transfer
Schedule
Summary
Name:
Backup Copy Job 1
Description:
Created by HOME\administrator at 2021-11-15 7:24 PM.
Copy mode:
Immediate copy (mirroring)
Copies every restore point as soon as it appears in the primary backup repository. This mode will copy all backups created by selected backup jobs, including transaction log backups.
Periodic copy (pruning)
Periodically copies the latest available restore point only. This mode also allows for selecting which backups to process, enabling you to further reduce bandwidth usage.
< Previous
Next >
Finish
Cancel

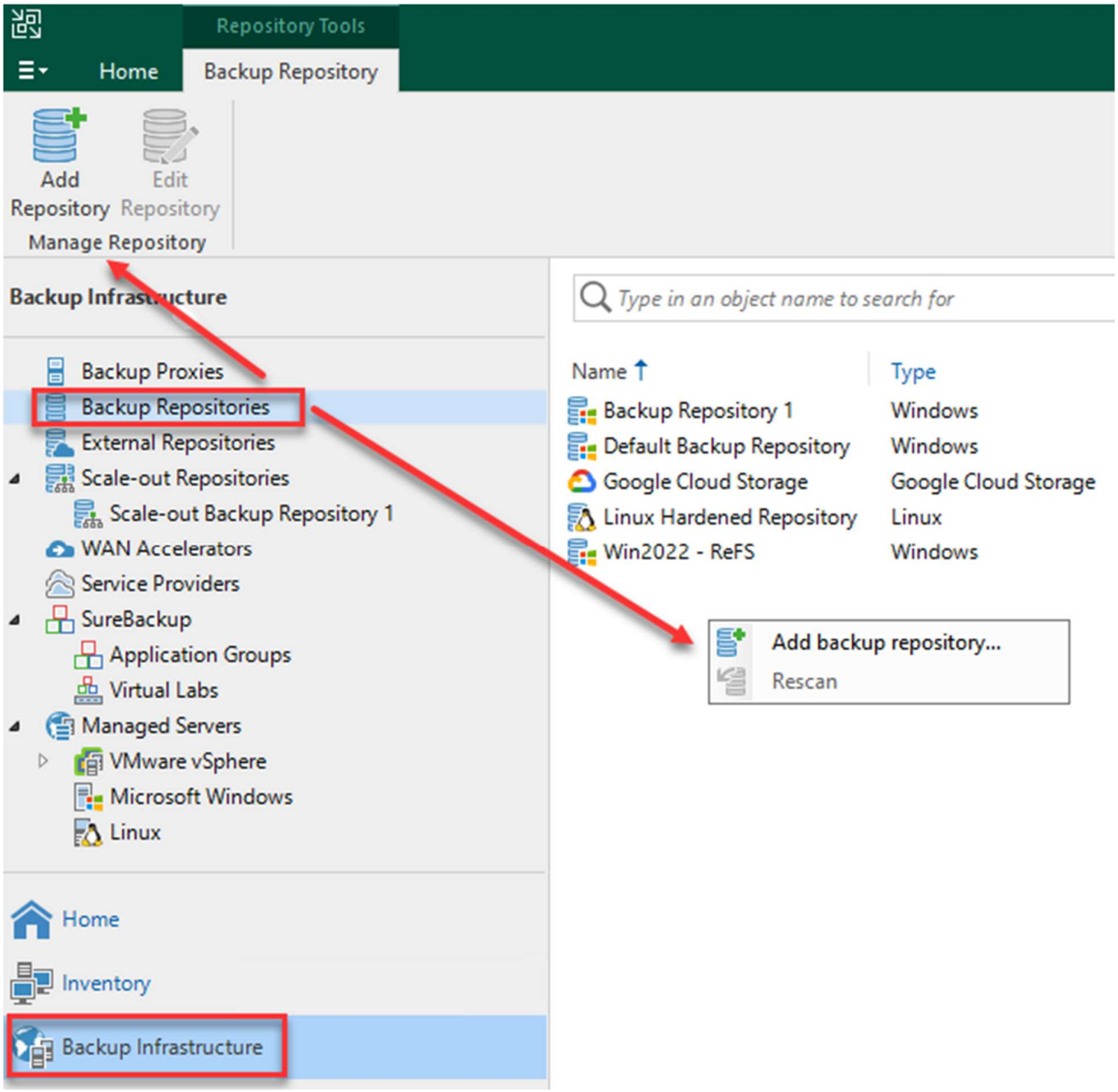

New Backup Copy Job
Target
Specify the target backup repository, number of recent restore points to keep, and the retention policy for full backups. You can use map backup functionality to seed backup files.
Job
Objects
Target
Data Transfer
Schedule
Summary
Backup repository:
Backup Repository 1 (Created by at 2021-11-16 3:39 PM.)
0.99 TB free of 0.99 TB
Map backup
Restore points to keep: 7
Keep the following restore points as full backups for archival purposes
Weekly backup: 4 Saturday
Schedule...
Monthly backup: 0 First Sunday of the month
Quarterly backup: 0 First Sunday of the quarter
Yearly backup: 0 First Sunday of the year
Advanced settings include health check and compact schedule, notifications settings, and automated post-job activity options.
Advanced
< Previous
Next >
Finish
Cancel


New Backup Copy Job
Target
Specify the target backup repository, number of recent restore points to keep, and the retention policy for full backups. You can use map backup functionality to seed backup files.
Job
Objects
Target
Data Transfer
Schedule
Summary
Backup repository:
Default Backup Repository (Created by Veeam Backup)
66.1 GB free of 149 GB
Map backup
Retention policy:
7
days
restore points
days
Keep certain full backups
purposes
Configure...
GFS retention policy is not configured
Advanced settings include health check and compact schedule, notifications settings, and automated post-job activity options.
Advanced
< Previous
Next >
Finish
Cancel

Chapter 6: Expanded Object Storage Support – Capacity and Archive Tiers




Repository Tools
Home
Backup Repository
Add Repository
Edit Repository
Manage Repository
Backup Infrastructure
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Linux
Home
Inventory
Backup Infrastructure
Type in an object name to search for
Name
Type
Backup Repository 1
Windows
Default Backup Repository
Windows
Google Cloud Storage
Google Cloud Storage
Linux Hardened Repository
Linux
Win2022 - ReFS
Windows


Repository Tools
Home
Backup Repository
Add Repository
Edit Repository
Manage Repository
Backup Infrastructure
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Linux
Home
Inventory
Backup Infrastructure
Type in an object name to search for
Name
Type
Backup Repository 1
Windows
Default Backup Repository
Windows
Google Cloud Storage
Google Cloud Storage
Linux Hardened Repository
Linux
Win2022 - ReFS
Windows
Add backup repository...
Rescan

Add Backup Repository

Select the type of backup repository you want to add.

Direct attached storage

Microsoft Windows or Linux server with internal or direct attached storage. This configuration enables data movers to run directly on the server, allowing for fastest performance.

Network attached storage

Network share on a file server or a NAS device. When backing up to a remote share, we recommend that you select a gateway server located in the same site with the share.

Deduplicating storage appliance

Dell EMC Data Domain, ExaGrid, HPE StoreOnce or Quantum DXi. If you are unable to meet the requirements of advanced integration via native appliance API, use the network attached storage option instead.

Object storage

On-prem object storage system or a cloud object storage provider. Object storage can only be used as a Capacity Tier of scale-out backup repositories, backing up directly to object storage is not currently supported.

Cancel

Object Storage

Select the type of object storage you want to use as a backup repository.

S3 Compatible
Adds an on-premises object storage system or a cloud object storage provider.

Amazon S3
Adds Amazon cloud object storage. Amazon S3, Amazon S3 Glacier (including Deep Archive) and Amazon Snowball Edge are supported.

Google Cloud Storage
Adds Google Cloud storage. Both Standard and Nearline storage classes are supported.

IBM Cloud Object Storage
Adds IBM Cloud object storage. S3 compatible versions of both on-premises and IBM Cloud storage offerings are supported.

Microsoft Azure Storage
Adds Microsoft Azure cloud object storage. Microsoft Azure Blob Storage, Microsoft Azure Archive Storage and Microsoft Azure Data Box are supported.

Cancel

Amazon Cloud Storage Services

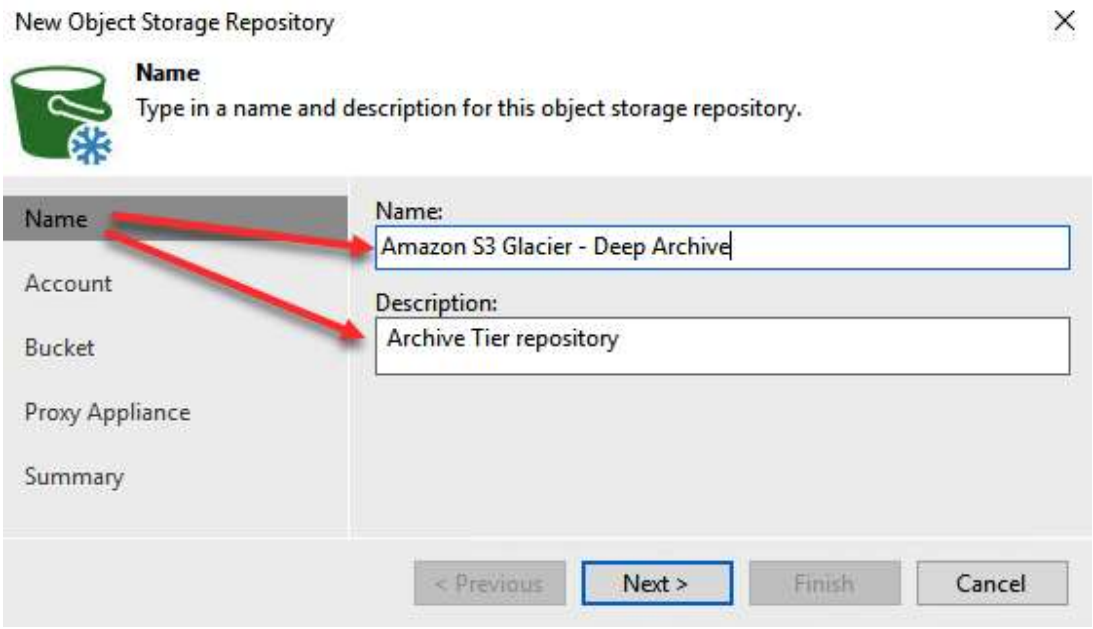
Select the type of Amazon storage you want to use as a backup repository.

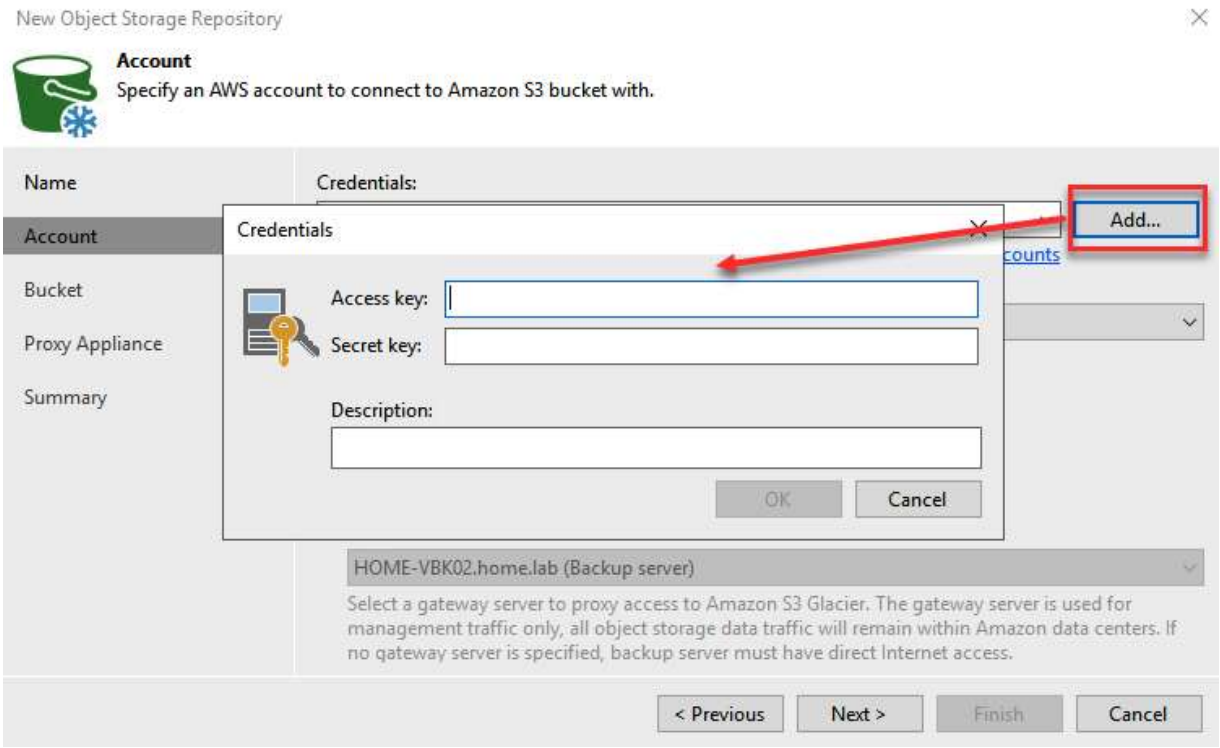
Amazon S3
Adds Amazon S3 storage. Both Standard and Infrequent Access (IA) storage classes are supported.

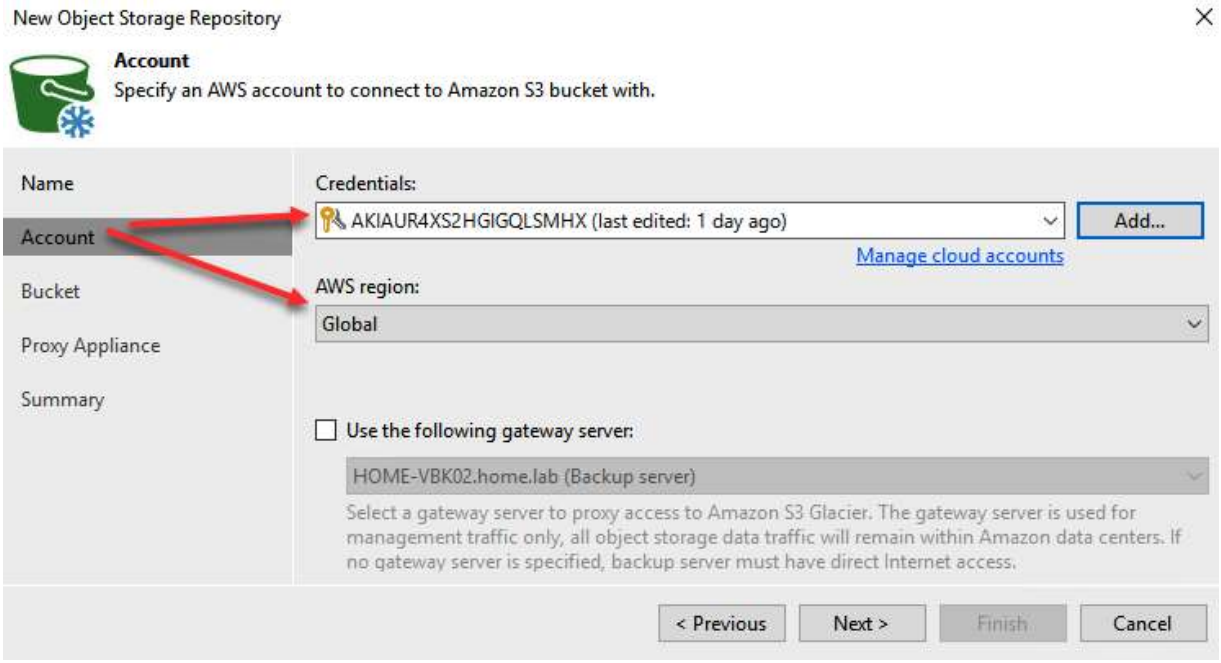
Amazon S3 Glacier
Adds Amazon S3 Glacier storage. Both Amazon S3 Glacier and Glacier Deep Archive are supported.

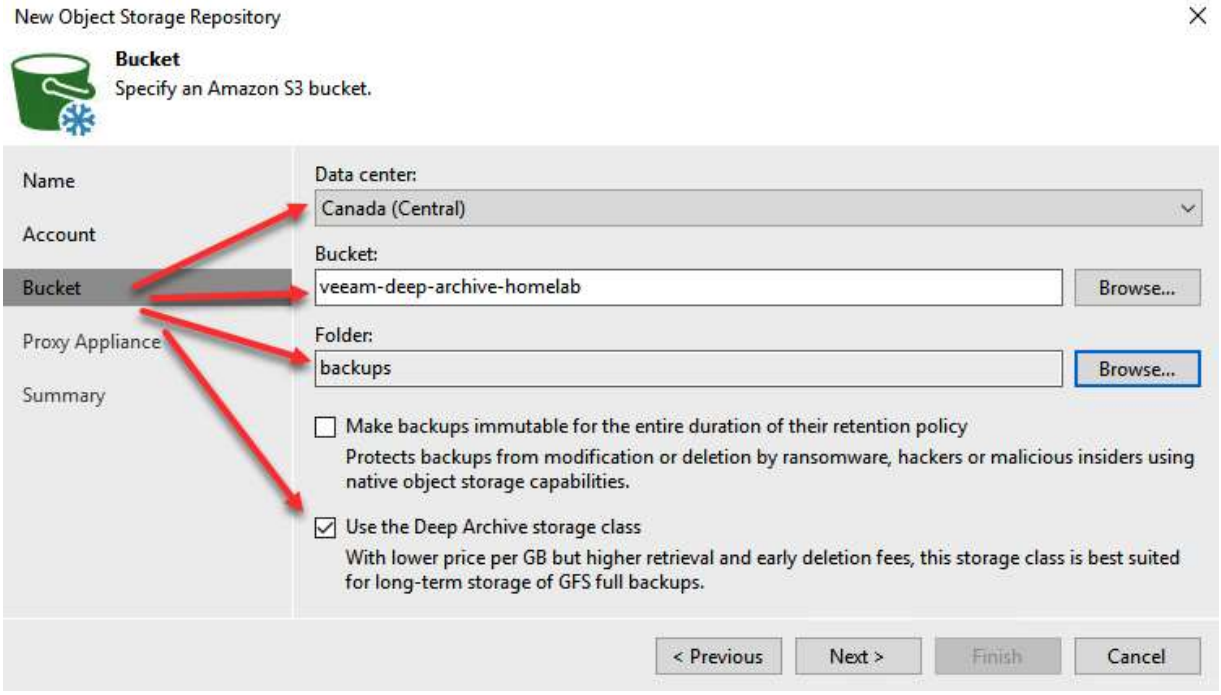
AWS Snowball Edge
Adds AWS Snowball Edge appliance to enable seeding of backups into Amazon S3 object storage.

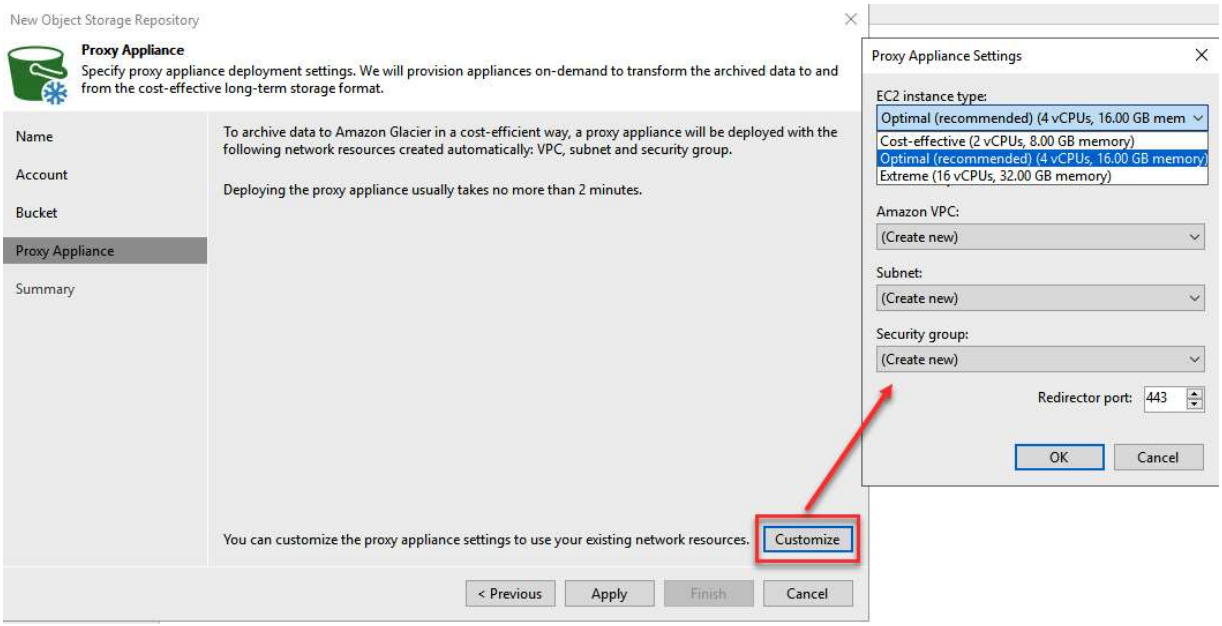
Cancel

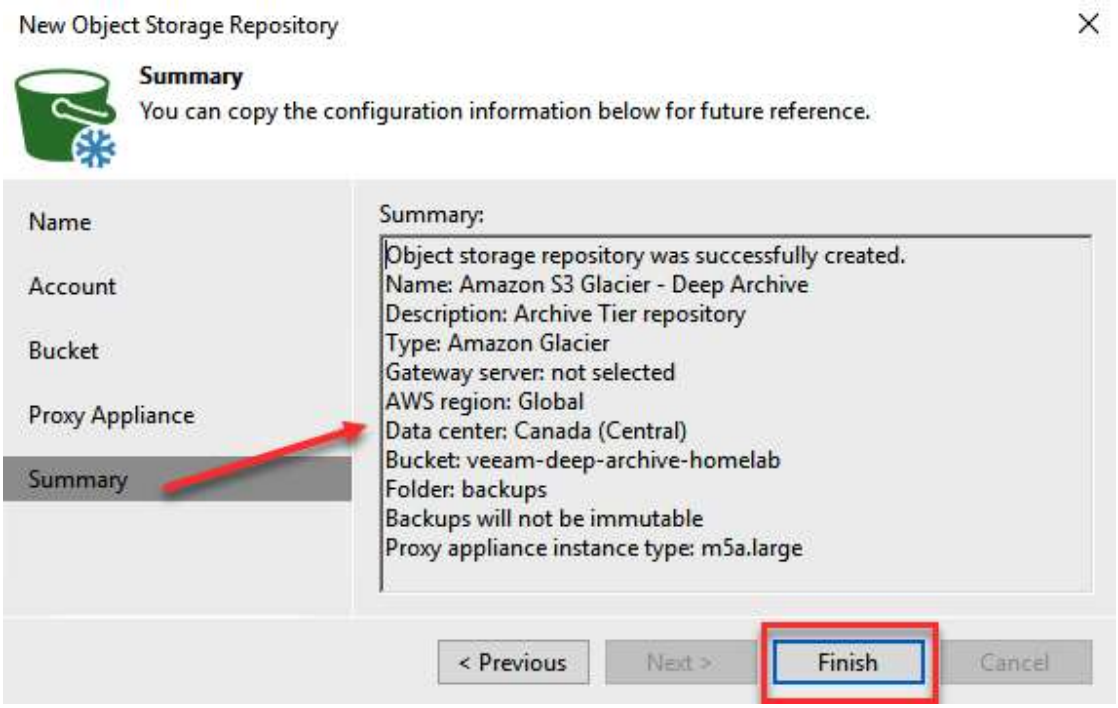

New Object Storage Repository
Name
Type in a name and description for this object storage repository.
Name
Account
Bucket
Proxy Appliance
Summary
Name:
Amazon S3 Glacier - Deep Archive
Description:
Archive Tier repository
< Previous
Next >
Finish
Cancel

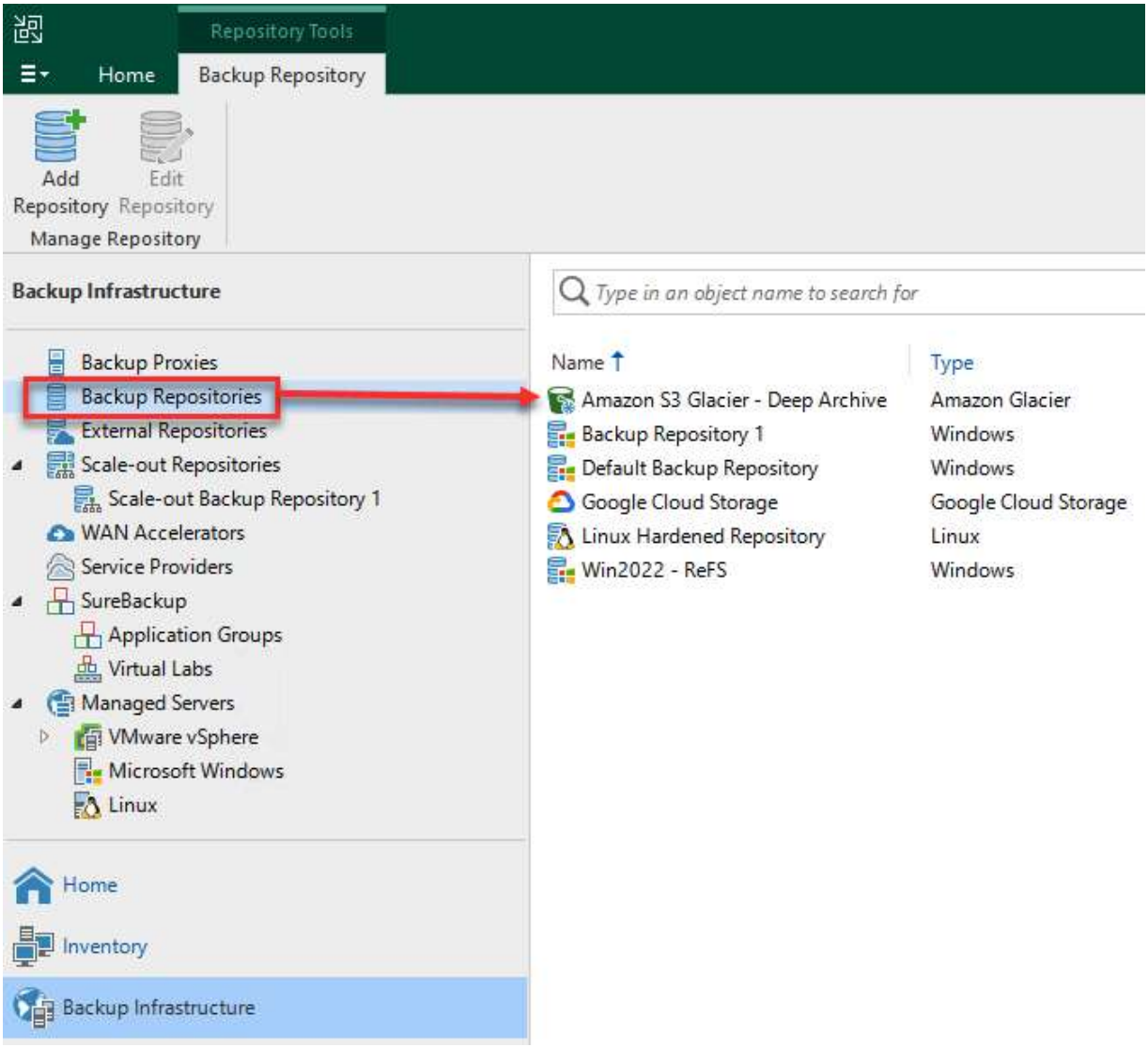

New Object Storage Repository
Account
Specify an AWS account to connect to Amazon S3 bucket with.
Name
Account
Bucket
Proxy Appliance
Summary
Credentials:
Add...
Credentials
Access key:
Secret key:
Description:
OK
Cancel
HOME-VBK02.home.lab (Backup server)
Select a gateway server to proxy access to Amazon S3 Glacier. The gateway server is used for management traffic only, all object storage data traffic will remain within Amazon data centers. If no gateway server is specified, backup server must have direct Internet access.
< Previous
Next >
Finish
Cancel

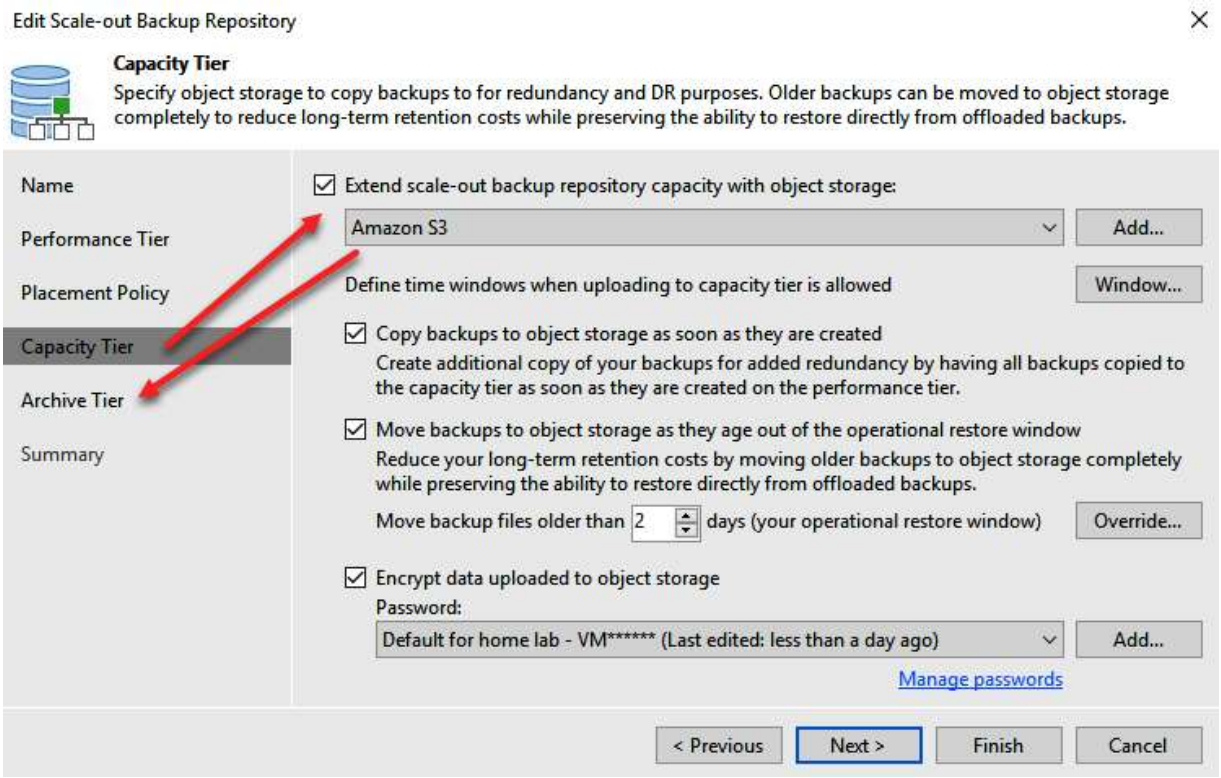

New Object Storage Repository
Account
Specify an AWS account to connect to Amazon S3 bucket with.
Name
Account
Bucket
Proxy Appliance
Summary
Credentials:
AKIAUR4XS2HGIGQLSMHX (last edited: 1 day ago)
Add...
Manage cloud accounts
AWS region:
Global
Use the following gateway server:
HOME-VBK02.home.lab (Backup server)
Select a gateway server to proxy access to Amazon S3 Glacier. The gateway server is used for management traffic only, all object storage data traffic will remain within Amazon data centers. If no gateway server is specified, backup server must have direct Internet access.
< Previous
Next >
Finish
Cancel

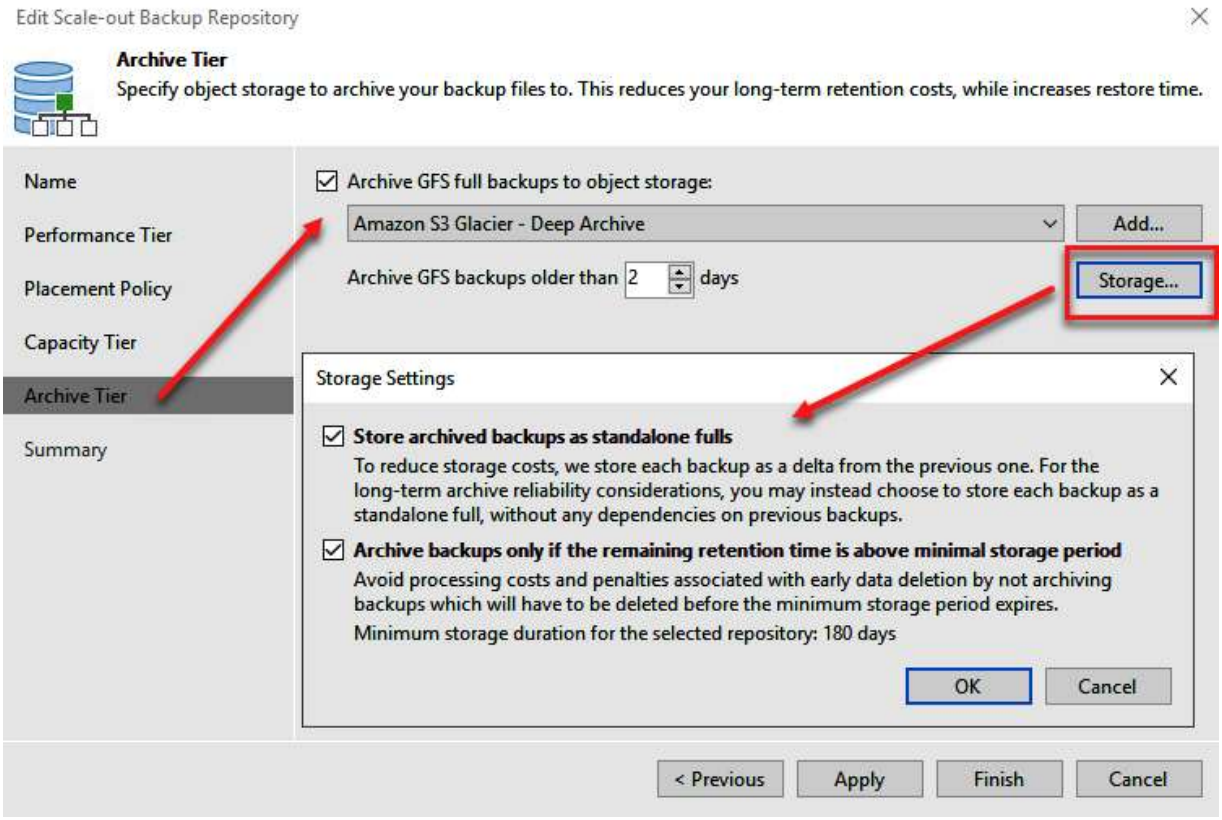

New Object Storage Repository
Bucket
Specify an Amazon S3 bucket.
Name
Account
Bucket
Proxy Appliance
Summary
Data center:
Canada (Central)
Bucket:
veeam-deep-archive-homelab
Browse...
Folder:
backups
Browse...
Make backups immutable for the entire duration of their retention policy
Protects backups from modification or deletion by ransomware, hackers or malicious insiders using native object storage capabilities.
Use the Deep Archive storage class
With lower price per GB but higher retrieval and early deletion fees, this storage class is best suited for long-term storage of GFS full backups.
< Previous
Next >
Finish
Cancel


New Object Storage Repository
Proxy Appliance
Specify proxy appliance deployment settings. We will provision appliances on-demand to transform the archived data to and from the cost-effective long-term storage format.
Name
Account
Bucket
Proxy Appliance
Summary
To archive data to Amazon Glacier in a cost-efficient way, a proxy appliance will be deployed with the following network resources created automatically: VPC, subnet and security group.
Deploying the proxy appliance usually takes no more than 2 minutes.
You can customize the proxy appliance settings to use your existing network resources.
Customize
< Previous
Apply
Finish
Cancel
Proxy Appliance Settings
EC2 instance type:
Optimal (recommended) (4 vCPUs, 16.00 GB mem
Cost-effective (2 vCPUs, 8.00 GB memory)
Optimal (recommended) (4 vCPUs, 16.00 GB memory)
Extreme (16 vCPUs, 32.00 GB memory)
Amazon VPC:
(Create new)
Subnet:
(Create new)
Security group:
(Create new)
Redirector port:
443
OK
Cancel

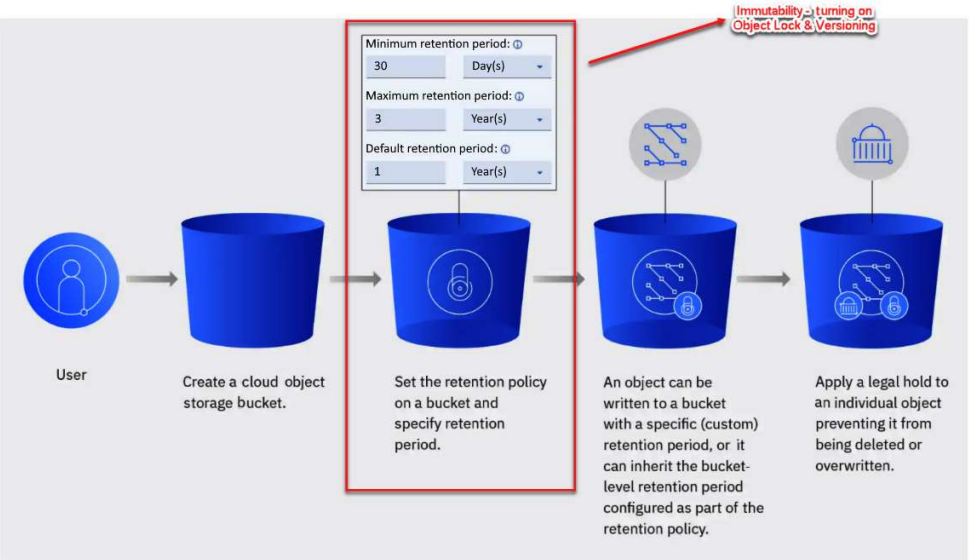

New Object Storage Repository
Summary
You can copy the configuration information below for future reference.
Name
Account
Bucket
Proxy Appliance
Summary
Summary:
Object storage repository was successfully created.
Name: Amazon S3 Glacier - Deep Archive
Description: Archive Tier repository
Type: Amazon Glacier
Gateway server: not selected
AWS region: Global
Data center: Canada (Central)
Bucket: veeam-deep-archive-homelab
Folder: backups
Backups will not be immutable
Proxy appliance instance type: m5a.large
< Previous
Next >
Finish
Cancel


Repository Tools
Home
Backup Repository
Add Repository
Edit Repository
Manage Repository
Backup Infrastructure
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Linux
Home
Inventory
Backup Infrastructure
Type in an object name to search for
Name
Type
Amazon S3 Glacier - Deep Archive
Amazon Glacier
Backup Repository 1
Windows
Default Backup Repository
Windows
Google Cloud Storage
Google Cloud Storage
Linux Hardened Repository
Linux
Win2022 - ReFS
Windows

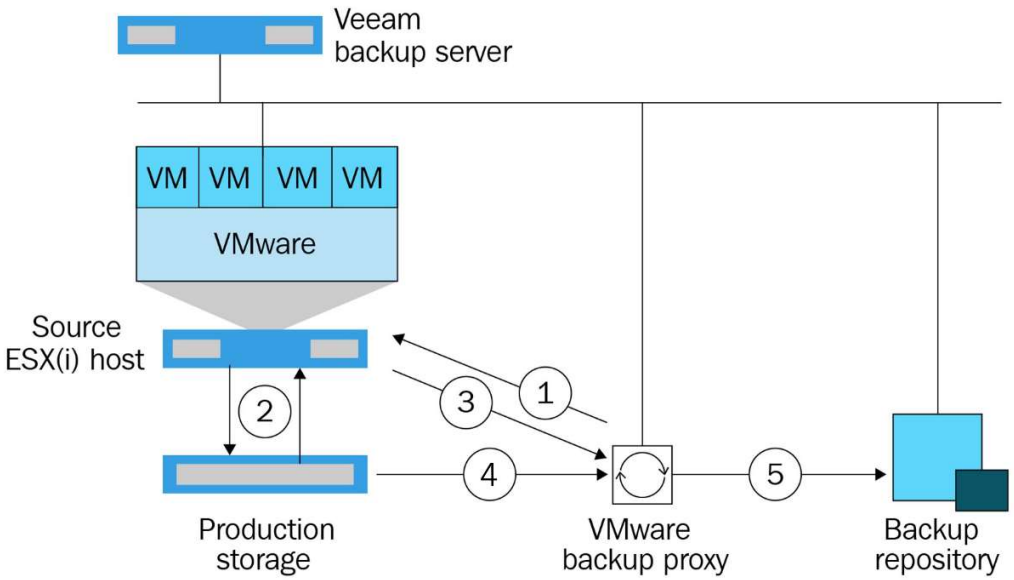

Edit Scale-out Backup Repository
Capacity Tier
Specify object storage to copy backups to for redundancy and DR purposes. Older backups can be moved to object storage completely to reduce long-term retention costs while preserving the ability to restore directly from offloaded backups.
Name
Performance Tier
Placement Policy
Capacity Tier
Archive Tier
Summary
Extend scale-out backup repository capacity with object storage:
Amazon S3
Add...
Define time windows when uploading to capacity tier is allowed
Window...
Copy backups to object storage as soon as they are created
Create additional copy of your backups for added redundancy by having all backups copied to the capacity tier as soon as they are created on the performance tier.
Move backups to object storage as they age out of the operational restore window
Reduce your long-term retention costs by moving older backups to object storage completely while preserving the ability to restore directly from offloaded backups.
Move backup files older than 2 days (your operational restore window)
Override...
Encrypt data uploaded to object storage
Password:
Default for home lab - VM****** (Last edited: less than a day ago)
Add...
Manage passwords
< Previous
Next >
Finish
Cancel


Edit Scale-out Backup Repository
Archive Tier
Specify object storage to archive your backup files to. This reduces your long-term retention costs, while increases restore time.
Name
Performance Tier
Placement Policy
Capacity Tier
Archive Tier
Summary
Archive GFS full backups to object storage:
Amazon S3 Glacier - Deep Archive
Add...
Archive GFS backups older than 2 days
Storage...
Storage Settings
Store archived backups as standalone fulls
To reduce storage costs, we store each backup as a delta from the previous one. For the long-term archive reliability considerations, you may instead choose to store each backup as a standalone full, without any dependencies on previous backups.
Archive backups only if the remaining retention time is above minimal storage period
Avoid processing costs and penalties associated with early data deletion by not archiving backups which will have to be deleted before the minimum storage period expires.
Minimum storage duration for the selected repository: 180 days
OK
Cancel
< Previous
Apply
Finish
Cancel

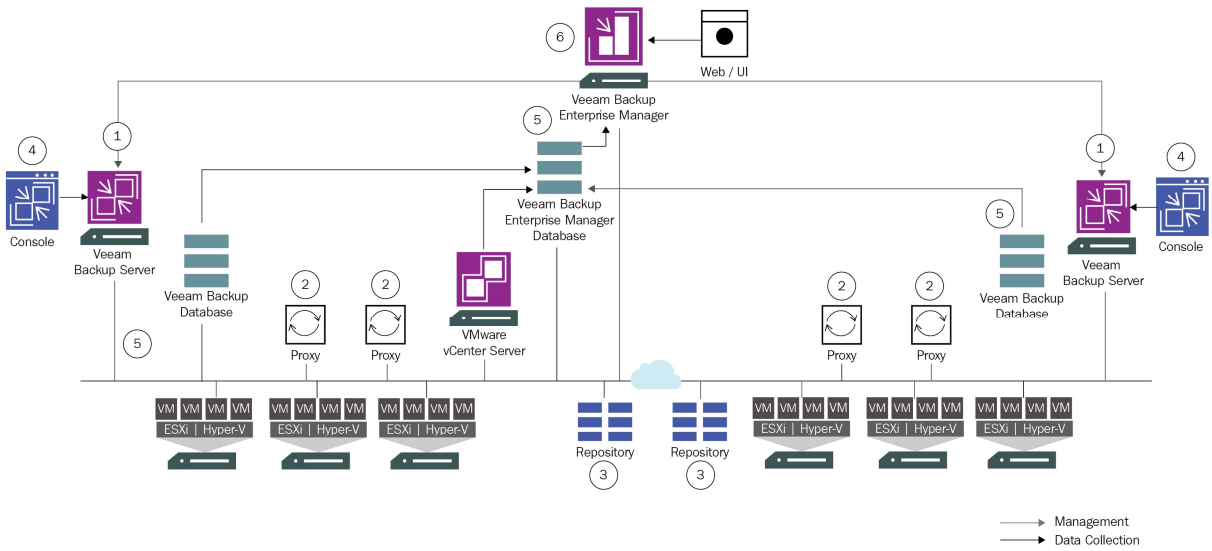
Locking Down Objects for Retention

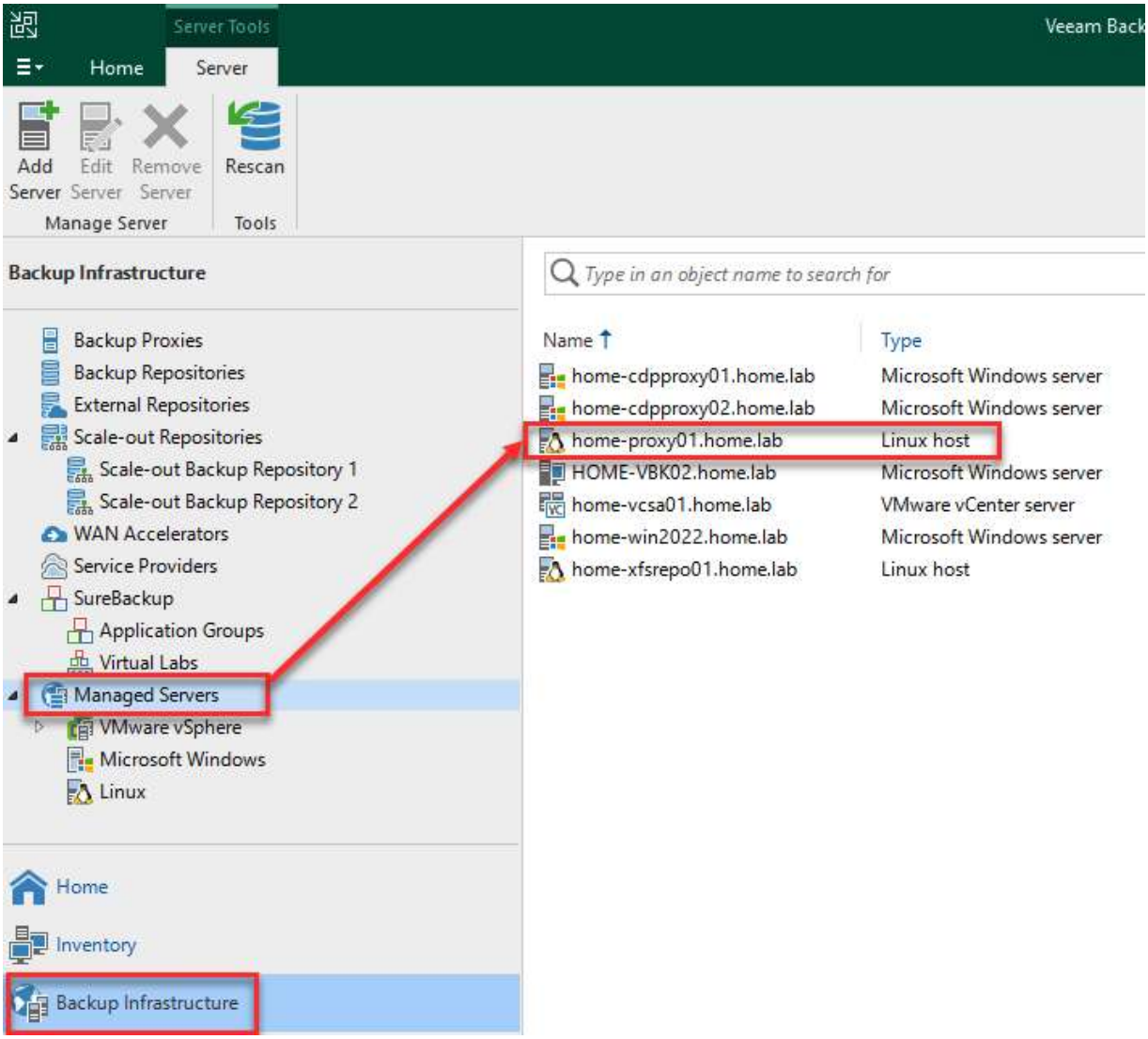


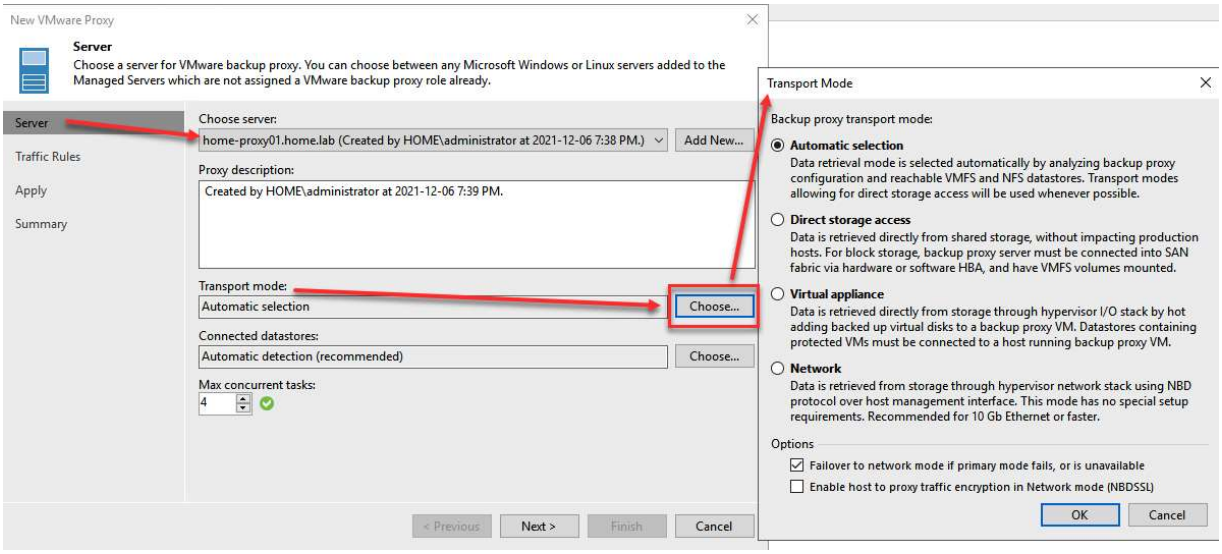
Chapter 7: Linux Proxy Enhancements

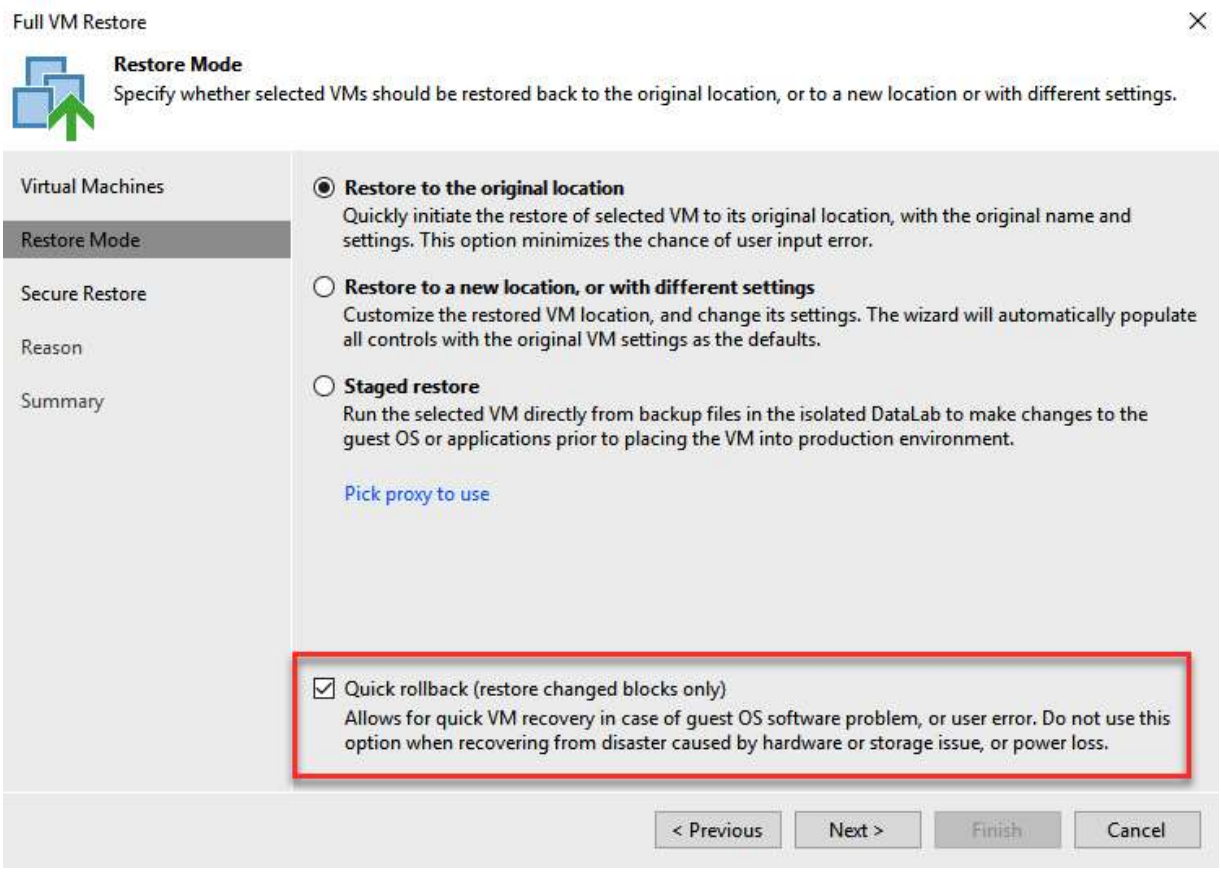


Major Veeam components overview

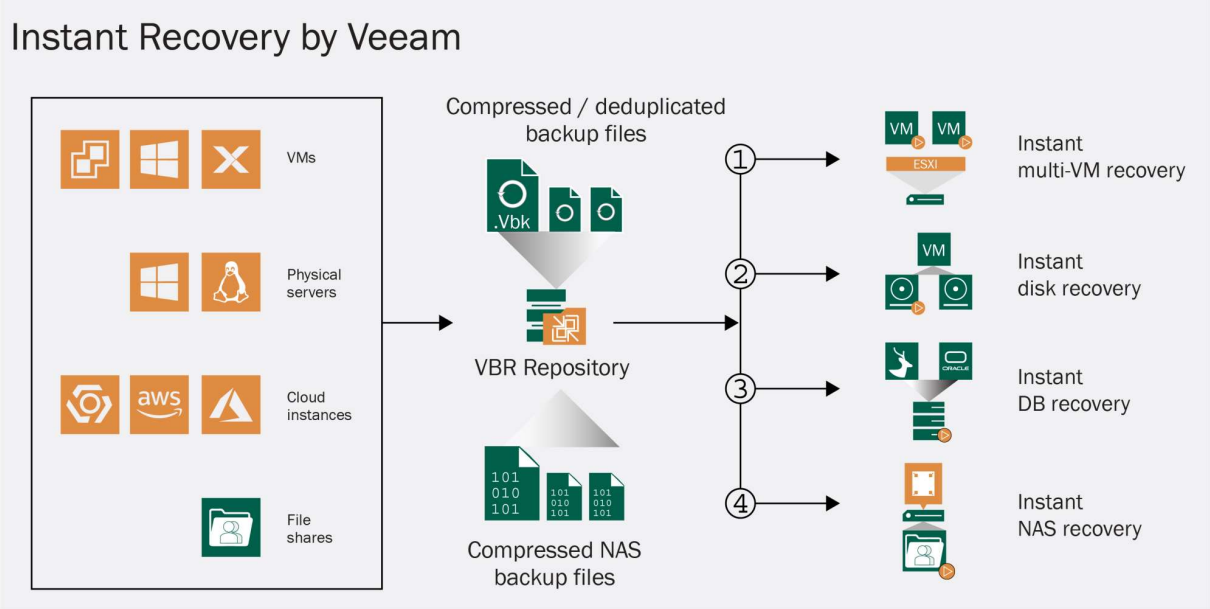


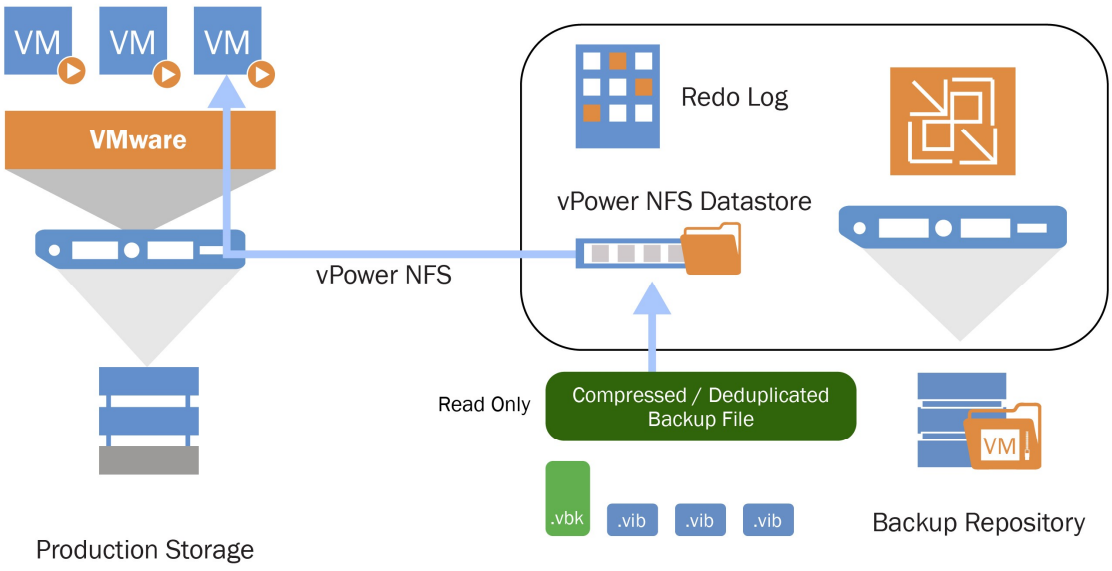

Server Tools
Veeam Back
Home
Server
Add Server
Edit Server
Remove Server
Manage Server
Rescan
Tools
Backup Infrastructure
Backup Proxies
Backup Repositories
External Repositories
Scale-out Repositories
Scale-out Backup Repository 1
Scale-out Backup Repository 2
WAN Accelerators
Service Providers
SureBackup
Application Groups
Virtual Labs
Managed Servers
VMware vSphere
Microsoft Windows
Linux
Home
Inventory
Backup Infrastructure
Type in an object name to search for
Name
Type
home-cdpproxy01.home.lab
Microsoft Windows server
home-cdpproxy02.home.lab
Microsoft Windows server
home-proxy01.home.lab
Linux host
HOME-VBK02.home.lab
Microsoft Windows server
home-vcsa01.home.lab
VMware vCenter server
home-win2022.home.lab
Microsoft Windows server
home-xfsrepo01.home.lab
Linux host

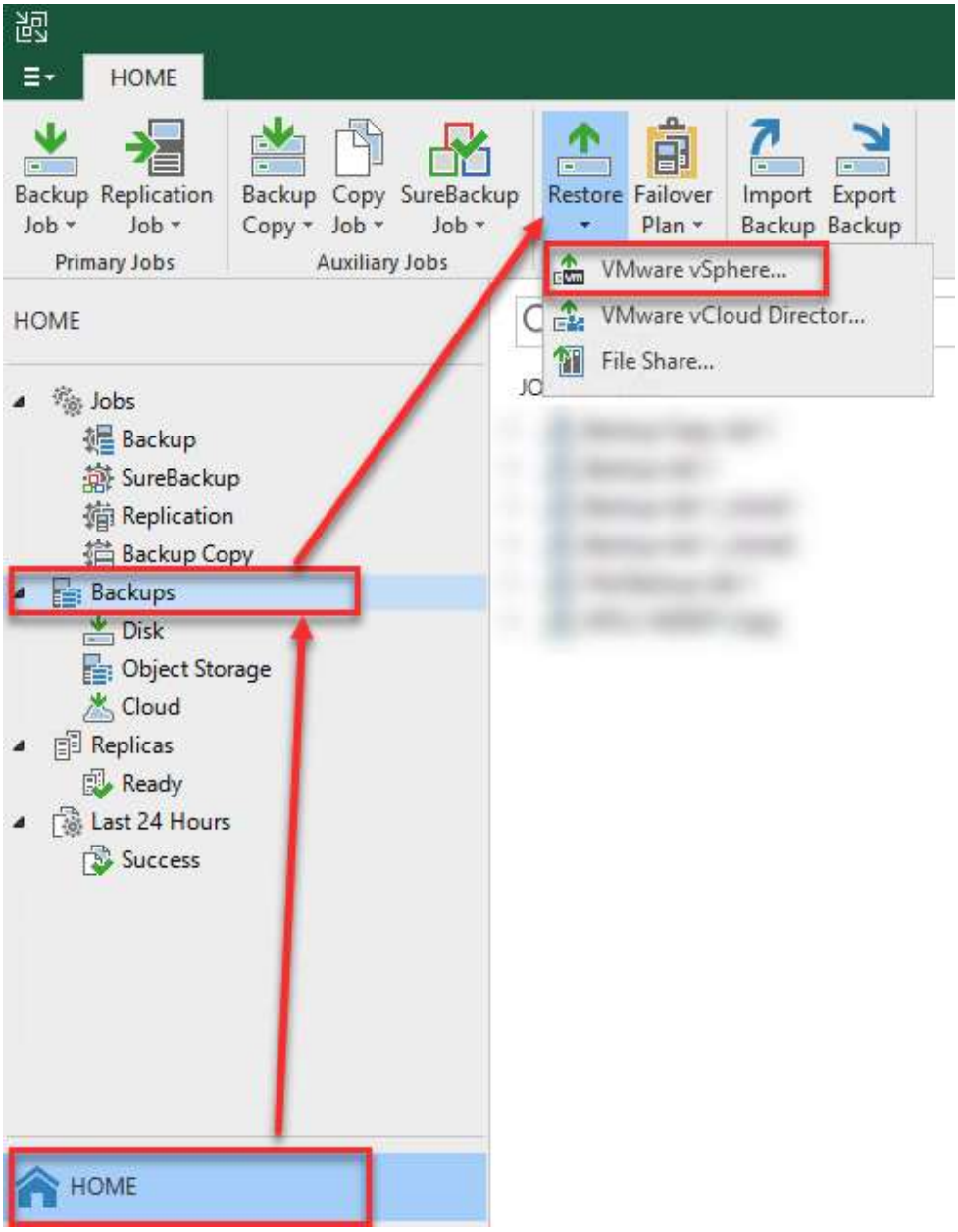

New VMware Proxy
Server
Choose a server for VMware backup proxy. You can choose between any Microsoft Windows or Linux servers added to the Managed Servers which are not assigned a VMware backup proxy role already.
Server
Traffic Rules
Apply
Summary
Choose server:
home-proxy01.home.lab (Created by HOME\administrator at 2021-12-06 7:38 PM.)
Add New...
Proxy description:
Created by HOME\administrator at 2021-12-06 7:39 PM.
Transport mode:
Automatic selection
Choose...
Connected datastores:
Automatic detection (recommended)
Choose...
Max concurrent tasks:
4
< Previous
Next >
Finish
Cancel
Transport Mode
Backup proxy transport mode:
Automatic selection
Data retrieval mode is selected automatically by analyzing backup proxy configuration and reachable VMFS and NFS datastores. Transport modes allowing for direct storage access will be used whenever possible.
Direct storage access
Data is retrieved directly from shared storage, without impacting production hosts. For block storage, backup proxy server must be connected into SAN fabric via hardware or software HBA, and have VMFS volumes mounted.
Virtual appliance
Data is retrieved directly from storage through hypervisor I/O stack by hot adding backed up virtual disks to a backup proxy VM. Datastores containing protected VMs must be connected to a host running backup proxy VM.
Network
Data is retrieved from storage through hypervisor network stack using NBD protocol over host management interface. This mode has no special setup requirements. Recommended for 10 Gb Ethernet or faster.
Options
Failover to network mode if primary mode fails, or is unavailable
Enable host to proxy traffic encryption in Network mode (NBDSSL)
OK
Cancel

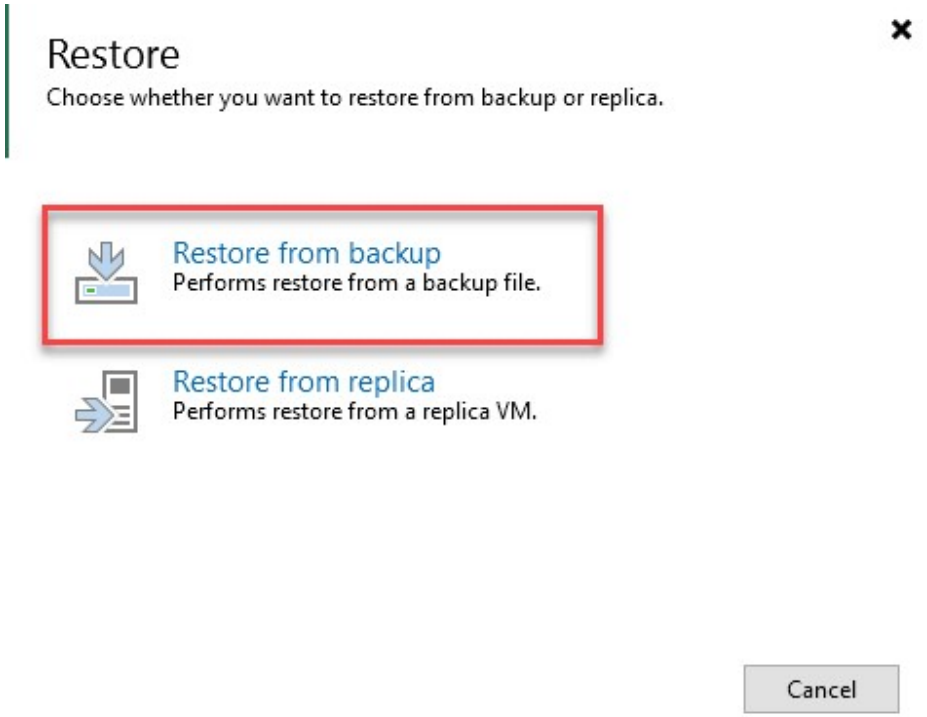

Full VM Restore
Restore Mode
Specify whether selected VMs should be restored back to the original location, or to a new location or with different settings.
Virtual Machines
Restore Mode
Secure Restore
Reason
Summary
Restore to the original location
Quickly initiate the restore of selected VM to its original location, with the original name and settings. This option minimizes the chance of user input error.
Restore to a new location, or with different settings
Customize the restored VM location, and change its settings. The wizard will automatically populate all controls with the original VM settings as the defaults.
Staged restore
Run the selected VM directly from backup files in the isolated DataLab to make changes to the guest OS or applications prior to placing the VM into production environment.
Pick proxy to use
Quick rollback (restore changed blocks only)
Allows for quick VM recovery in case of guest OS software problem, or user error. Do not use this option when recovering from disaster caused by hardware or storage issue, or power loss.
< Previous
Next >
Finish
Cancel

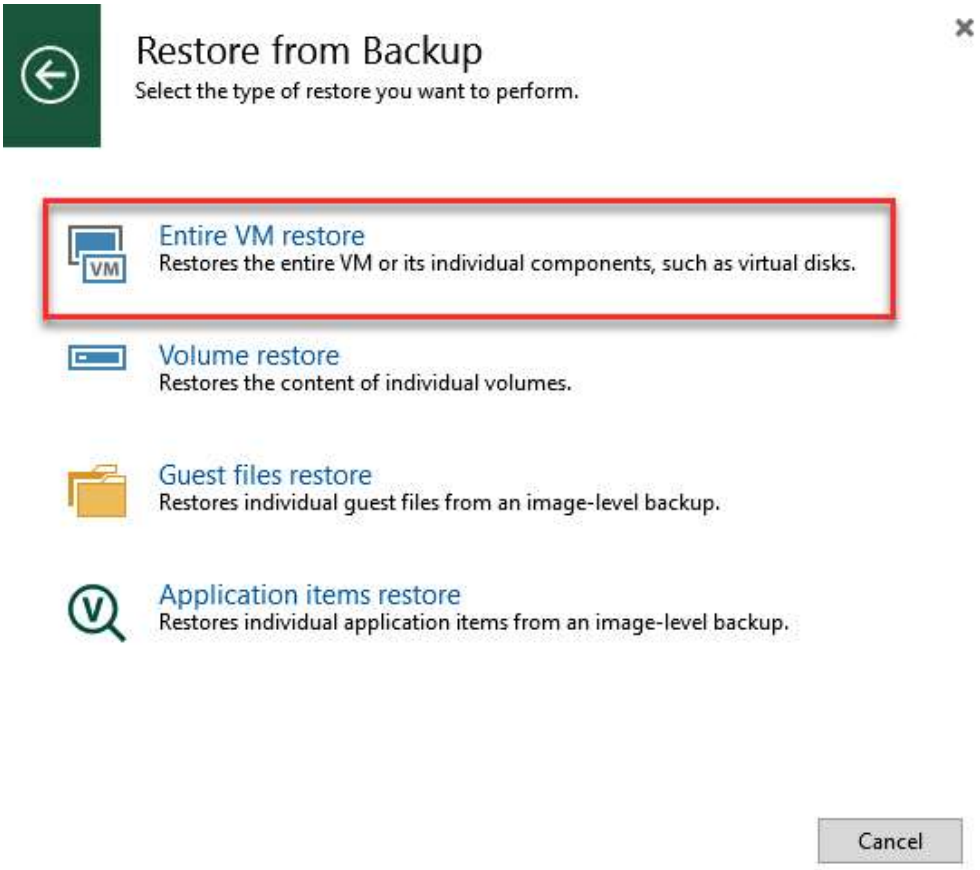
Chapter 8: Understanding Instant Recovery

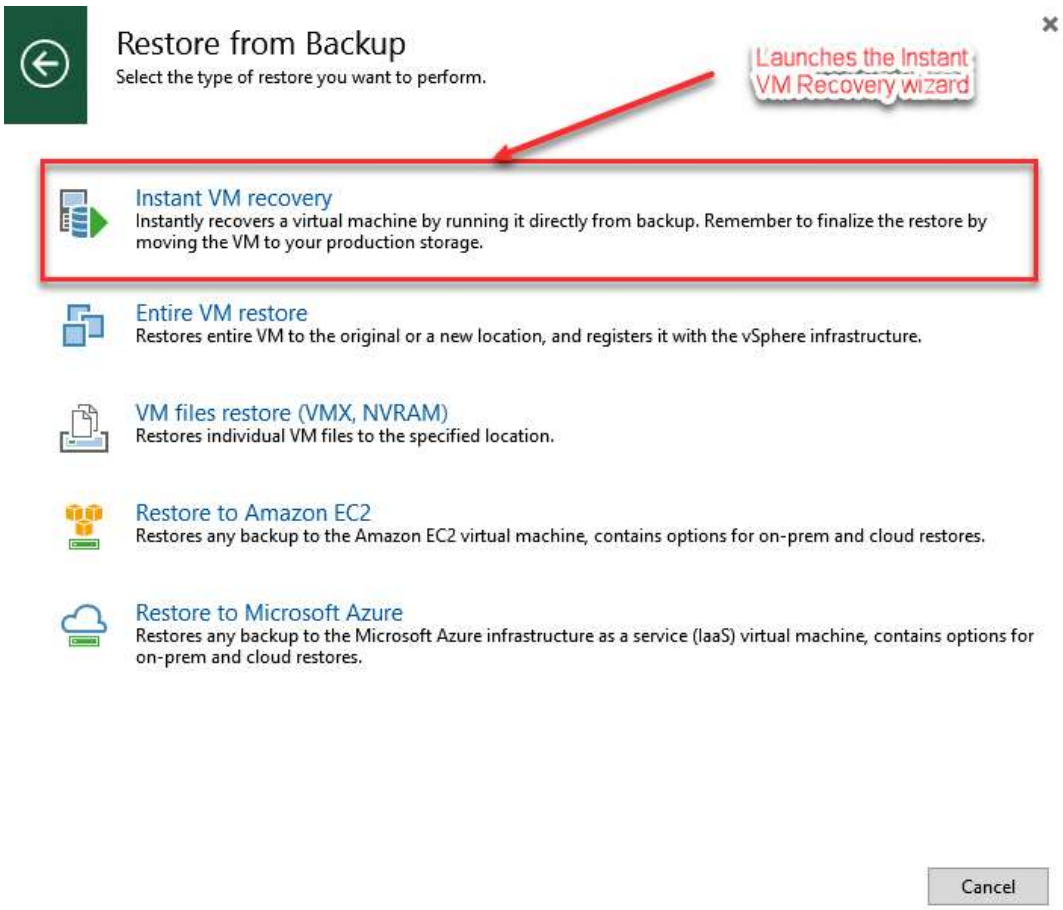


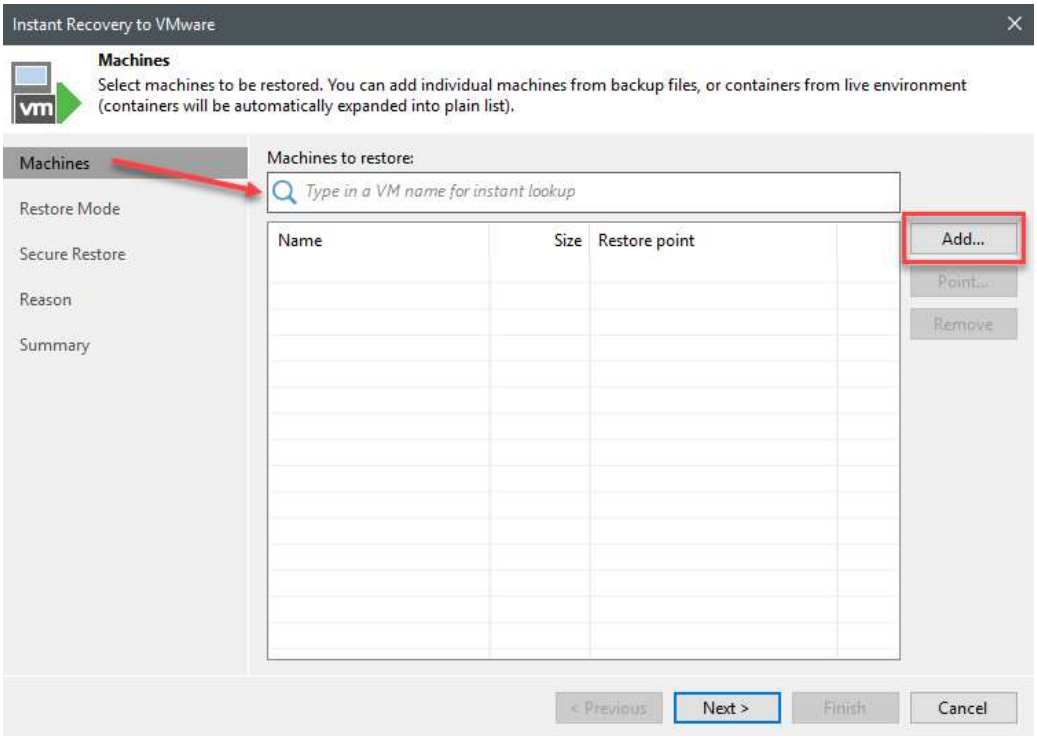


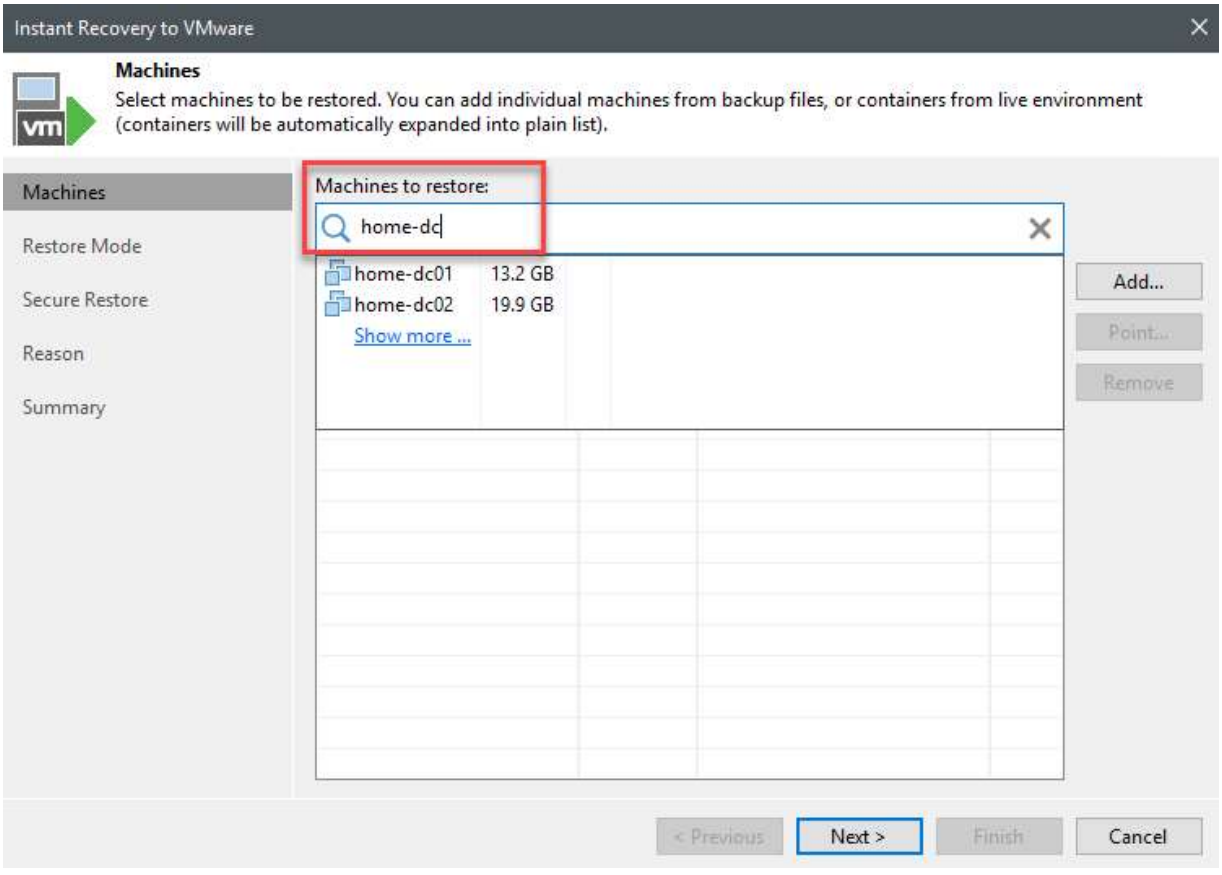

HOME
Backup Job
Replication Job
Primary Jobs
Backup Copy
Copy Job
SureBackup Job
Auxiliary Jobs
Restore
Failover Plan
Import Backup
Export Backup
VMware vSphere...
VMware vCloud Director...
File Share...
HOME
Jobs
Backup
SureBackup
Replication
Backup Copy
Backups
Disk
Object Storage
Cloud
Replicas
Ready
Last 24 Hours
Success
HOME

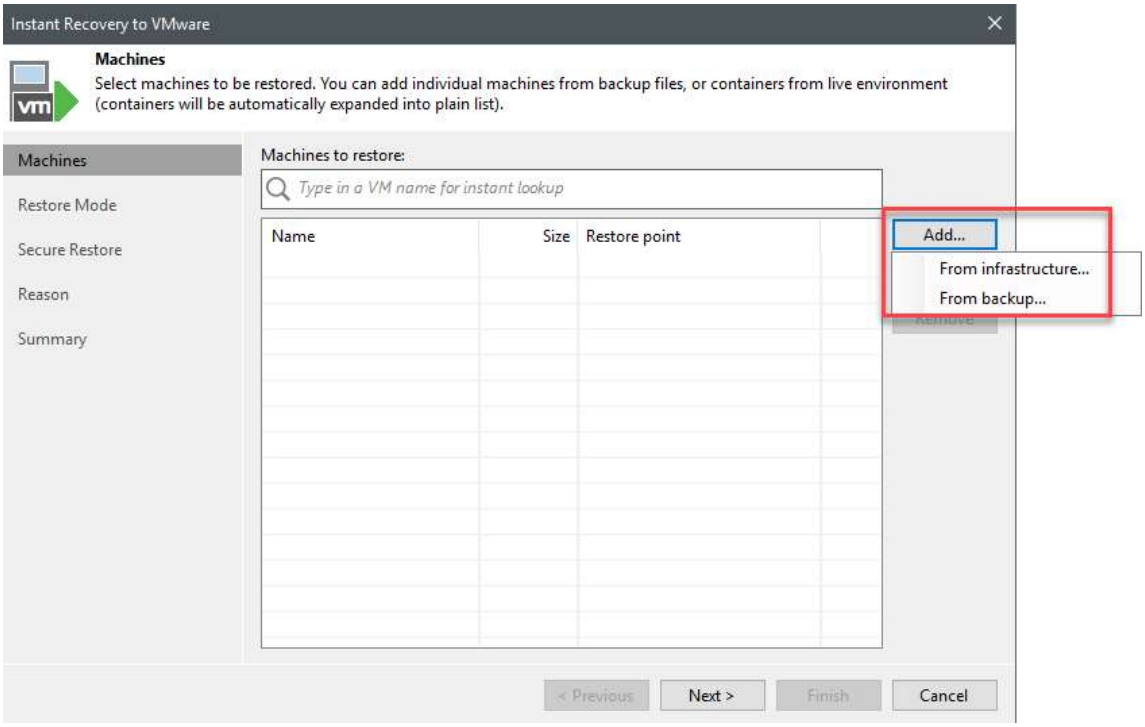

Restore
Choose whether you want to restore from backup or replica.
Restore from backup
Performs restore from a backup file.
Restore from replica
Performs restore from a replica VM.
Cancel

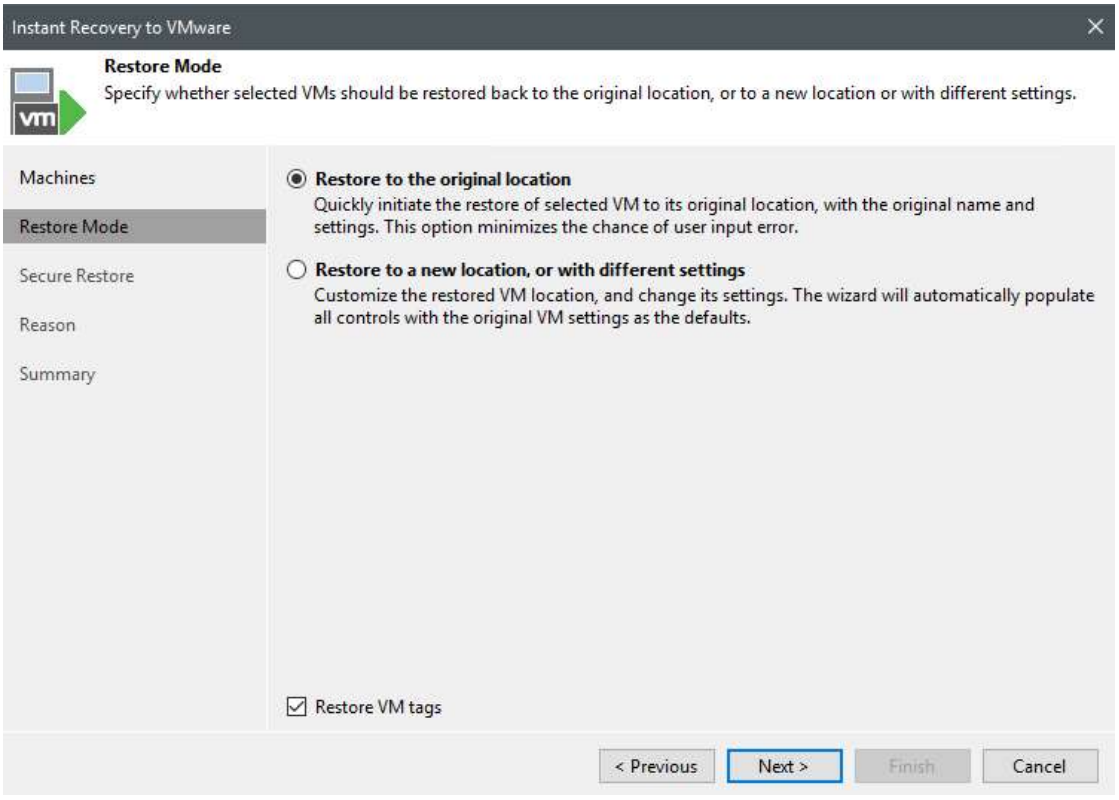

Restore from Backup
Select the type of restore you want to perform.
Entire VM restore
Restores the entire VM or its individual components, such as virtual disks.
Volume restore
Restores the content of individual volumes.
Guest files restore
Restores individual guest files from an image-level backup.
Application items restore
Restores individual application items from an image-level backup.
Cancel

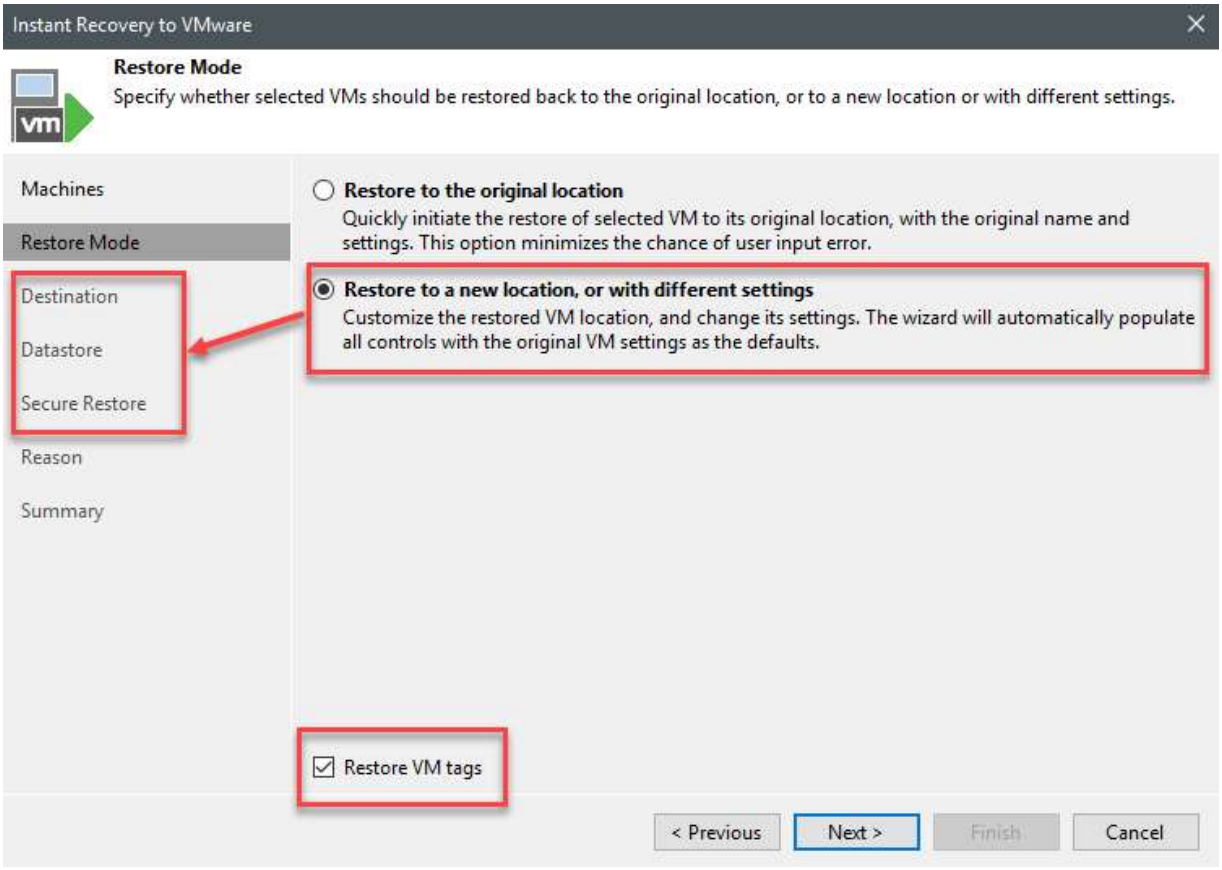

Restore from Backup
Select the type of restore you want to perform.
Launches the Instant VM Recovery wizard
Instant VM recovery
Instantly recovers a virtual machine by running it directly from backup. Remember to finalize the restore by moving the VM to your production storage.
Entire VM restore
Restores entire VM to the original or a new location, and registers it with the vSphere infrastructure.
VM files restore (VMX, NVRAM)
Restores individual VM files to the specified location.
Restore to Amazon EC2
Restores any backup to the Amazon EC2 virtual machine, contains options for on-prem and cloud restores.
Restore to Microsoft Azure
Restores any backup to the Microsoft Azure infrastructure as a service (IaaS) virtual machine, contains options for on-prem and cloud restores.
Cancel

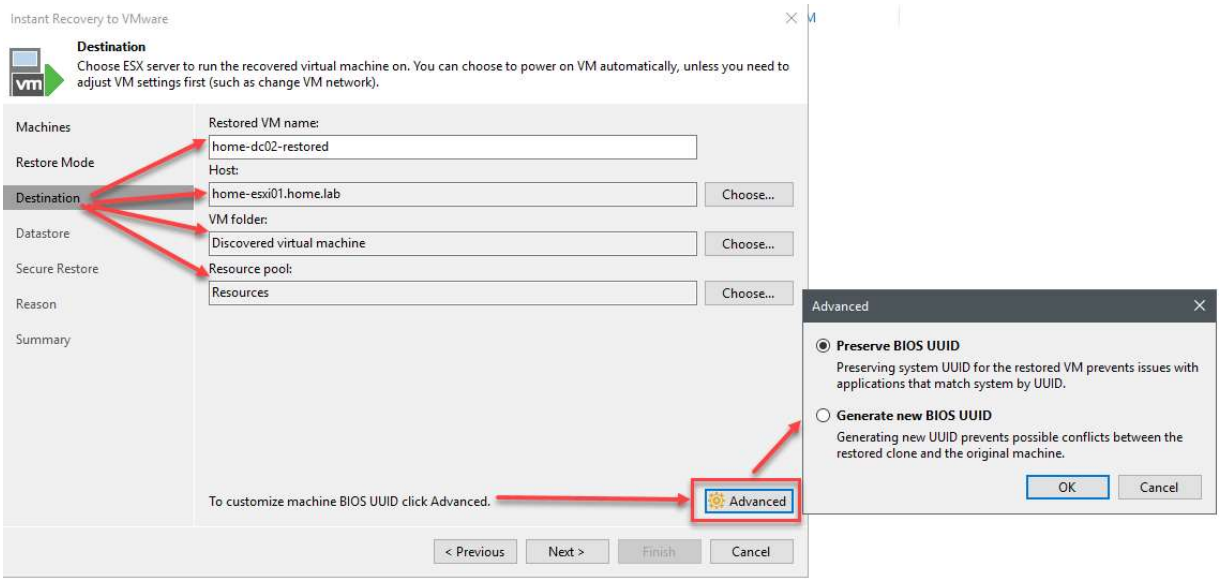

Instant Recovery to VMware
Machines
Select machines to be restored. You can add individual machines from backup files, or containers from live environment (containers will be automatically expanded into plain list).
Machines
Restore Mode
Secure Restore
Reason
Summary
Machines to restore:
Type in a VM name for instant lookup
Name
Size
Restore point
Add...
Point...
Remove
< Previous
Next >
Finish
Cancel

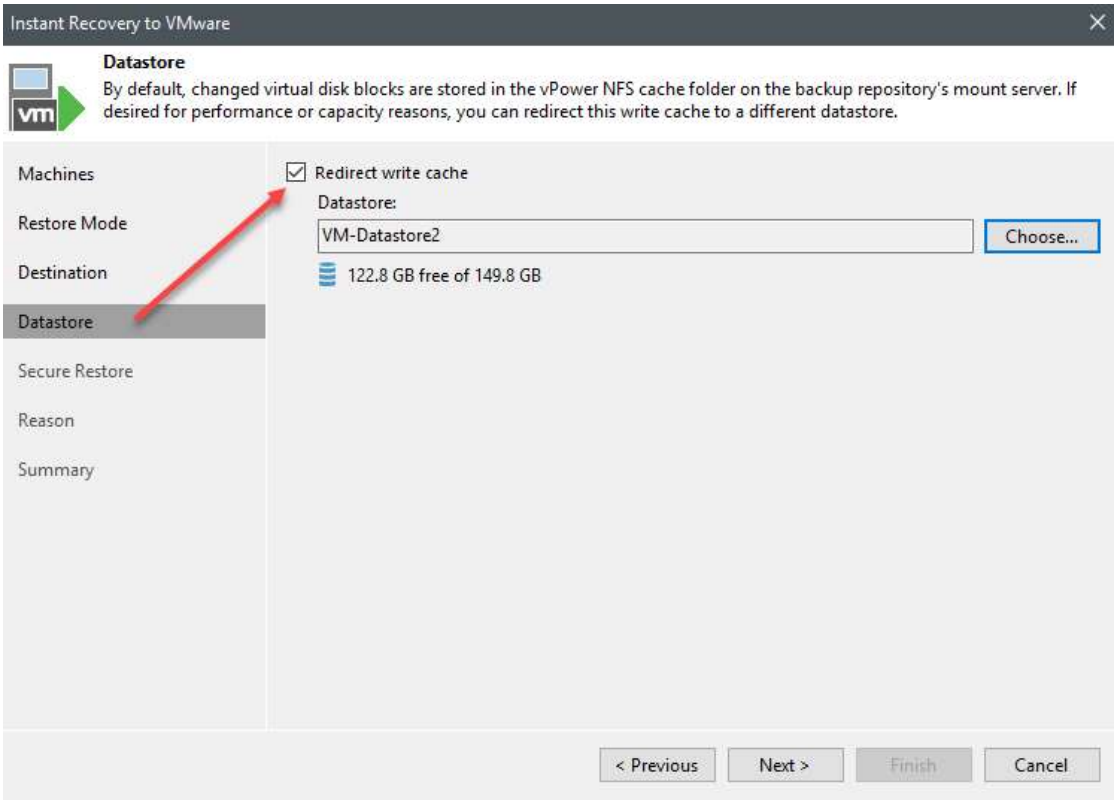

Instant Recovery to VMware
Machines
Select machines to be restored. You can add individual machines from backup files, or containers from live environment (containers will be automatically expanded into plain list).
Machines
Restore Mode
Secure Restore
Reason
Summary
Machines to restore:
home-dc
home-dc01 13.2 GB
home-dc02 19.9 GB
Show more ...
Add...
Point...
Remove
< Previous
Next >
Finish
Cancel

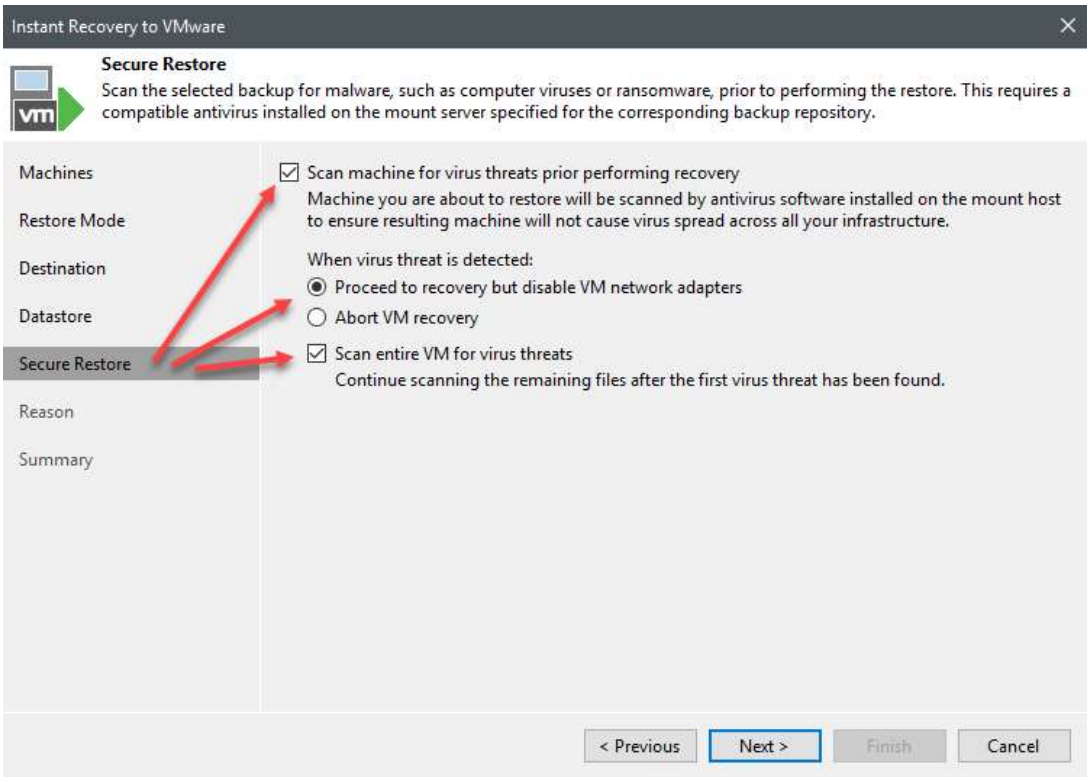

Instant Recovery to VMware
Machines
Select machines to be restored. You can add individual machines from backup files, or containers from live environment (containers will be automatically expanded into plain list).
Machines
Restore Mode
Secure Restore
Reason
Summary
Machines to restore:
Type in a VM name for instant lookup
Name
Size
Restore point
Add...
From infrastructure...
From backup...
< Previous
Next >
Finish
Cancel

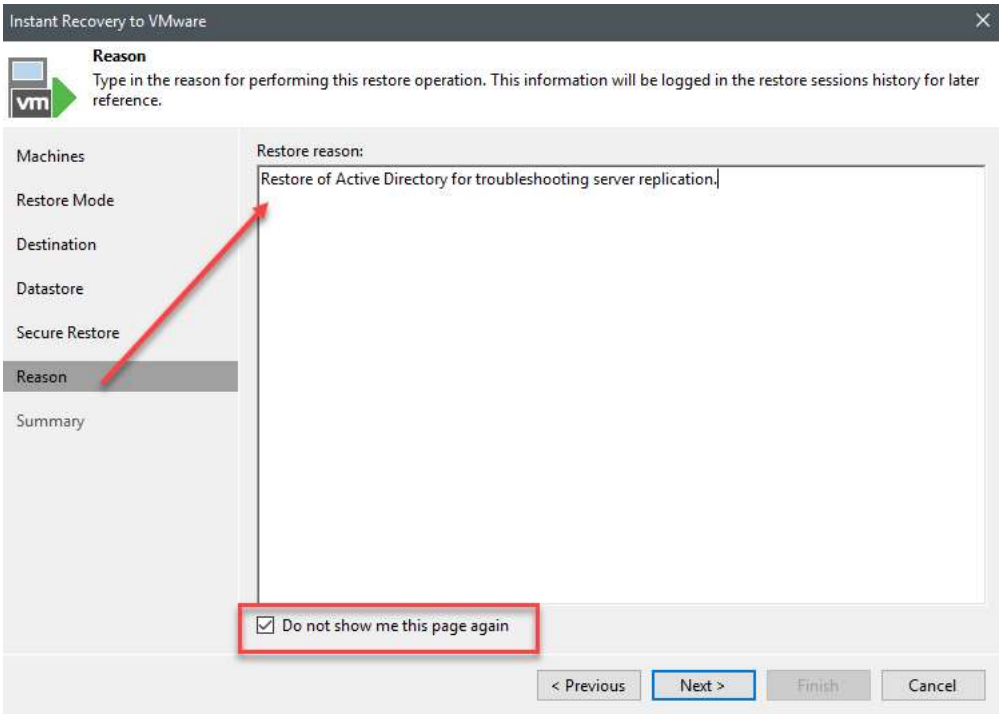

Instant Recovery to VMware
Restore Mode
Specify whether selected VMs should be restored back to the original location, or to a new location or with different settings.
Machines
Restore Mode
Secure Restore
Reason
Summary
Restore to the original location
Quickly initiate the restore of selected VM to its original location, with the original name and settings. This option minimizes the chance of user input error.
Restore to a new location, or with different settings
Customize the restored VM location, and change its settings. The wizard will automatically populate all controls with the original VM settings as the defaults.
Restore VM tags
< Previous
Next >
Finish
Cancel

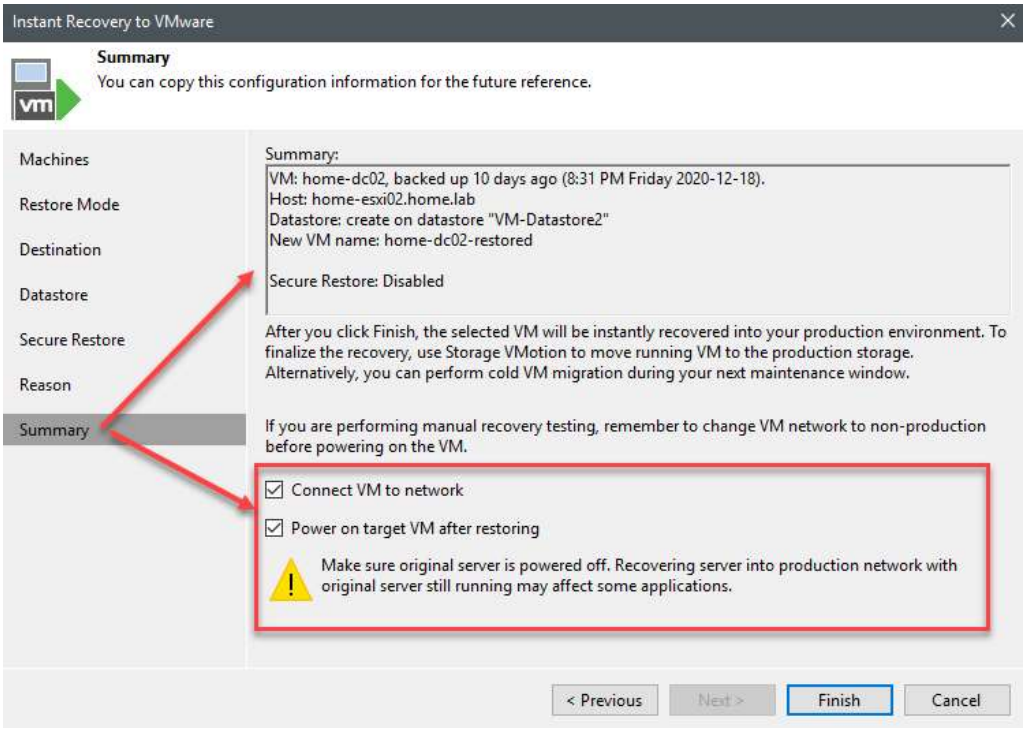

Instant Recovery to VMware
Restore Mode
Specify whether selected VMs should be restored back to the original location, or to a new location or with different settings.
Machines
Restore Mode
Destination
Datastore
Secure Restore
Reason
Summary
Restore to the original location
Quickly initiate the restore of selected VM to its original location, with the original name and settings. This option minimizes the chance of user input error.
Restore to a new location, or with different settings
Customize the restored VM location, and change its settings. The wizard will automatically populate all controls with the original VM settings as the defaults.
Restore VM tags
< Previous
Next >
Finish
Cancel

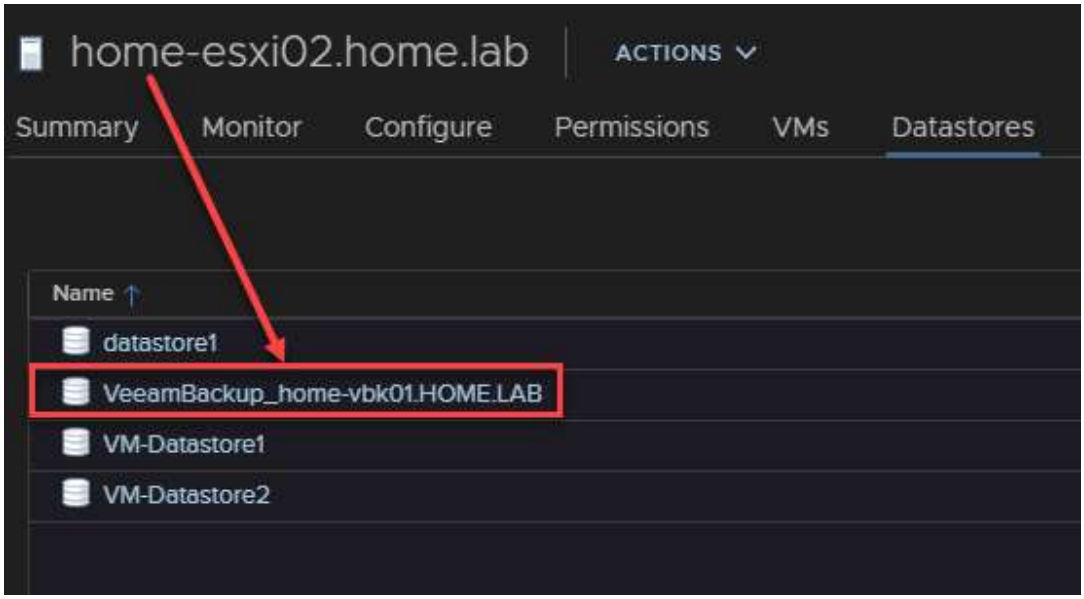

Instant Recovery to VMware
Destination
Choose ESX server to run the recovered virtual machine on. You can choose to power on VM automatically, unless you need to adjust VM settings first (such as change VM network).
Machines
Restore Mode
Destination
Datastore
Secure Restore
Reason
Summary
Restored VM name:
home-dc02-restored
Host:
home-esxi01.home.lab
Choose...
VM folder:
Discovered virtual machine
Choose...
Resource pool:
Resources
Choose...
To customize machine BIOS UUID click Advanced.
Advanced
< Previous
Next >
Finish
Cancel
Advanced
Preserve BIOS UUID
Preserving system UUID for the restored VM prevents issues with applications that match system by UUID.
Generate new BIOS UUID
Generating new UUID prevents possible conflicts between the restored clone and the original machine.
OK
Cancel

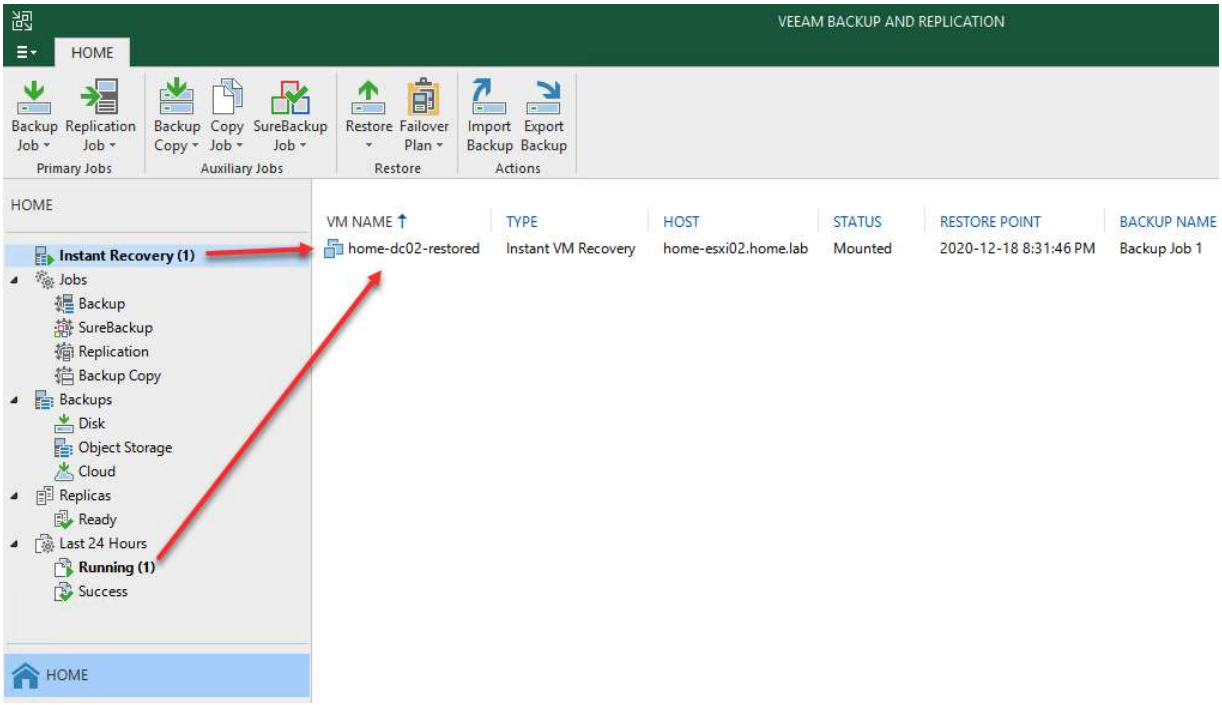

Instant Recovery to VMware
Datastore
By default, changed virtual disk blocks are stored in the vPower NFS cache folder on the backup repository's mount server. If desired for performance or capacity reasons, you can redirect this write cache to a different datastore.
Machines
Restore Mode
Destination
Datastore
Secure Restore
Reason
Summary
Redirect write cache
Datastore:
VM-Datastore2
Choose...
122.8 GB free of 149.8 GB
< Previous
Next >
Finish
Cancel

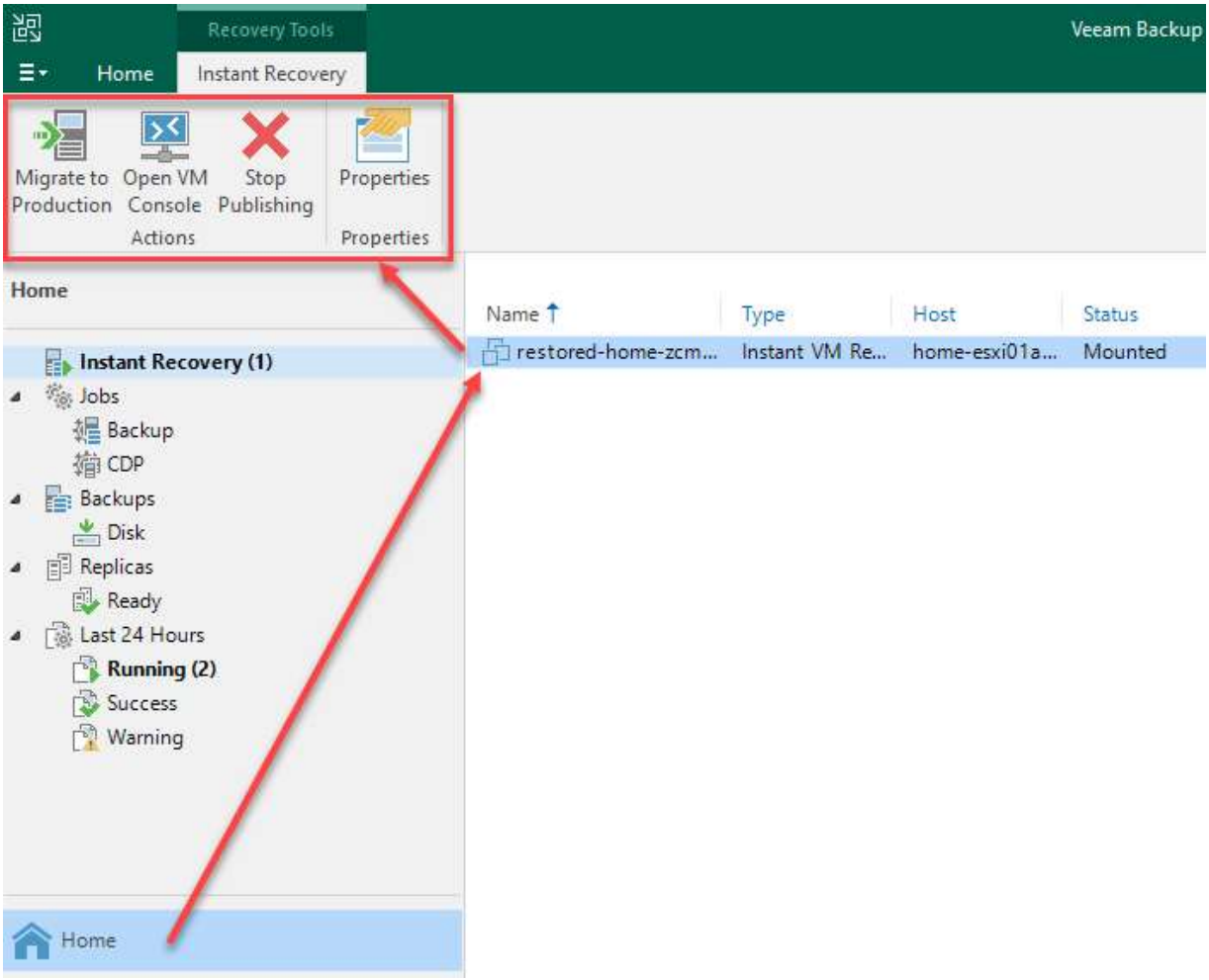

Instant Recovery to VMware
Secure Restore
Scan the selected backup for malware, such as computer viruses or ransomware, prior to performing the restore. This requires a compatible antivirus installed on the mount server specified for the corresponding backup repository.
Machines
Restore Mode
Destination
Datastore
Secure Restore
Reason
Summary
Scan machine for virus threats prior performing recovery
Machine you are about to restore will be scanned by antivirus software installed on the mount host to ensure resulting machine will not cause virus spread across all your infrastructure.
When virus threat is detected:
Proceed to recovery but disable VM network adapters
Abort VM recovery
Scan entire VM for virus threats
Continue scanning the remaining files after the first virus threat has been found.
< Previous
Next >
Finish
Cancel

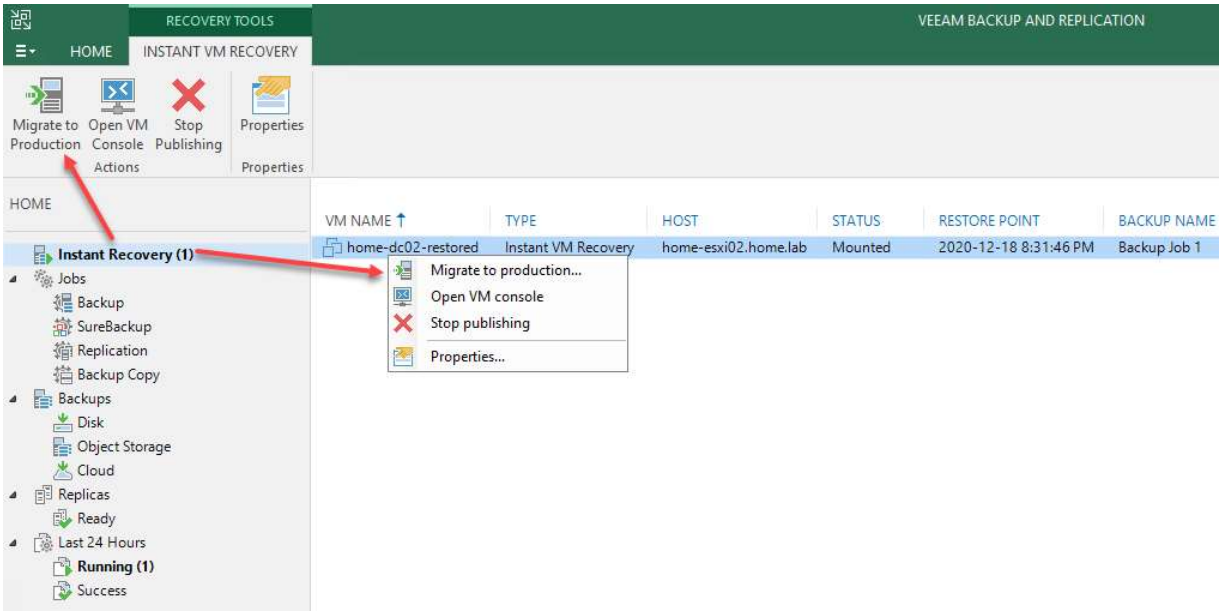

Instant Recovery to VMware
Reason
Type in the reason for performing this restore operation. This information will be logged in the restore sessions history for later reference.
Machines
Restore Mode
Destination
Datastore
Secure Restore
Reason
Summary
Restore reason:
Restore of Active Directory for troubleshooting server replication.
Do not show me this page again
< Previous
Next >
Finish
Cancel

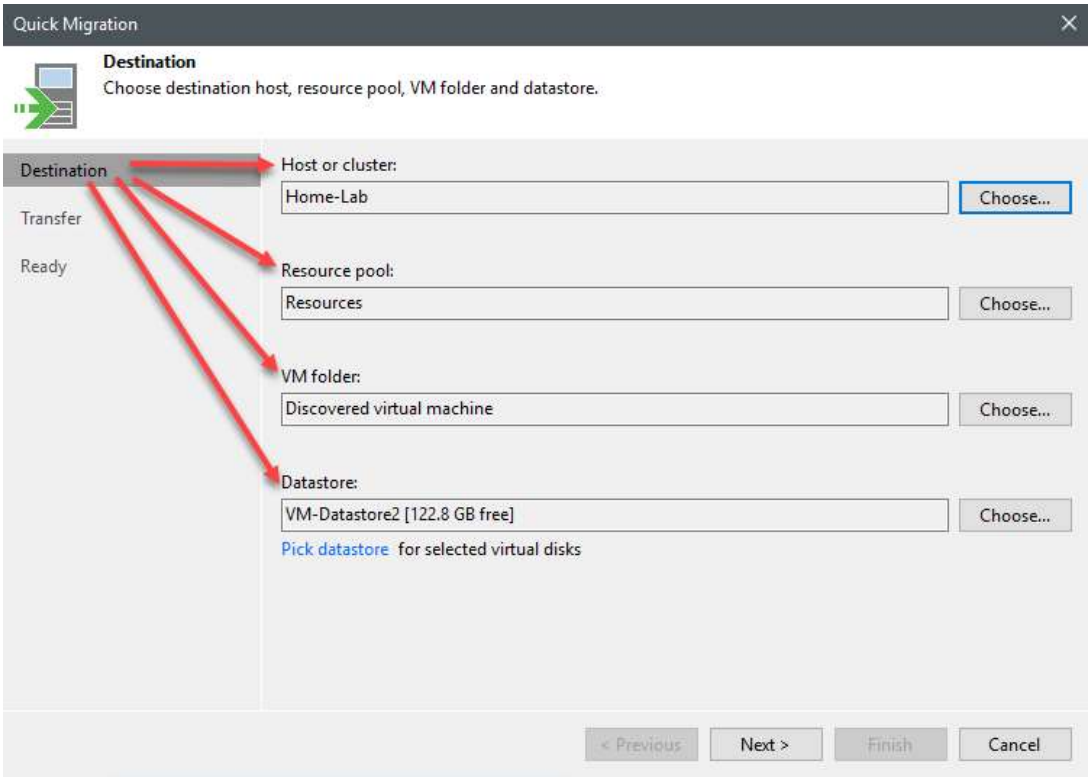

Instant Recovery to VMware
Summary
You can copy this configuration information for the future reference.
Machines
Restore Mode
Destination
Datastore
Secure Restore
Reason
Summary
Summary:
VM: home-dc02, backed up 10 days ago (8:31 PM Friday 2020-12-18).
Host: home-esxi02.home.lab
Datastore: create on datastore "VM-Datastore2"
New VM name: home-dc02-restored
Secure Restore: Disabled
After you click Finish, the selected VM will be instantly recovered into your production environment. To finalize the recovery, use Storage VMotion to move running VM to the production storage. Alternatively, you can perform cold VM migration during your next maintenance window.
If you are performing manual recovery testing, remember to change VM network to non-production before powering on the VM.
Connect VM to network
Power on target VM after restoring
Make sure original server is powered off. Recovering server into production network with original server still running may affect some applications.
< Previous
Next >
Finish
Cancel

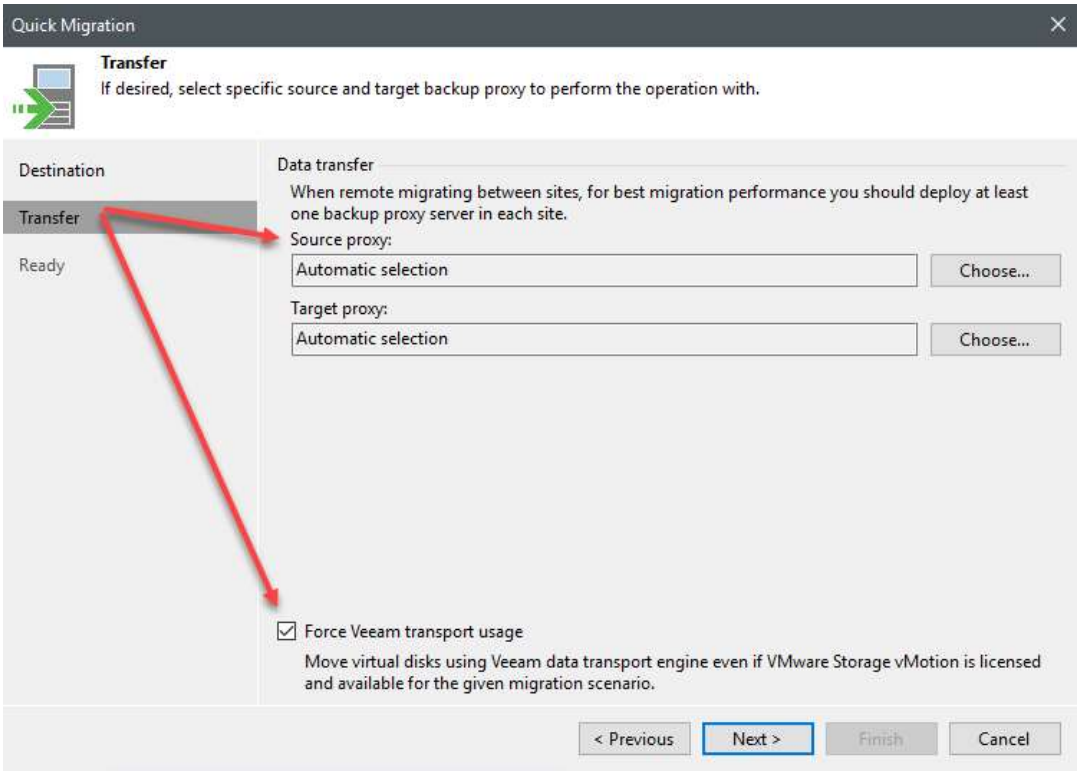

home-esxi02.home.lab
ACTIONS
Summary
Monitor
Configure
Permissions
VMs
Datastores
Name
datastore1
VeeamBackup_home-vbk01.HOME.LAB
VM-Datastore1
VM-Datastore2

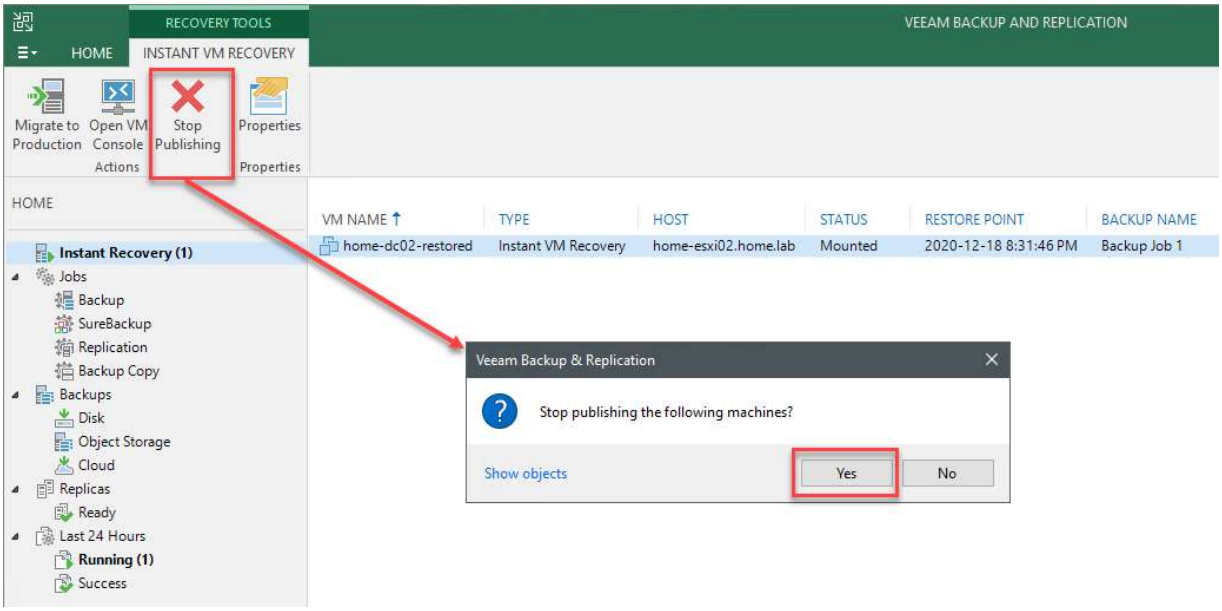

VEEAM BACKUP AND REPLICATION
HOME
Backup Job
Replication Job
Backup Copy
Copy Job
SureBackup Job
Restore
Failover Plan
Import Backup
Export Backup
Primary Jobs
Auxiliary Jobs
Restore
Actions
HOME
Instant Recovery (1)
Jobs
Backup
SureBackup
Replication
Backup Copy
Backups
Disk
Object Storage
Cloud
Replicas
Ready
Last 24 Hours
Running (1)
Success
HOME
VM NAME
TYPE
HOST
STATUS
RESTORE POINT
BACKUP NAME
home-dc02-restored
Instant VM Recovery
home-esxi02.home.lab
Mounted
2020-12-18 8:31:46 PM
Backup Job 1

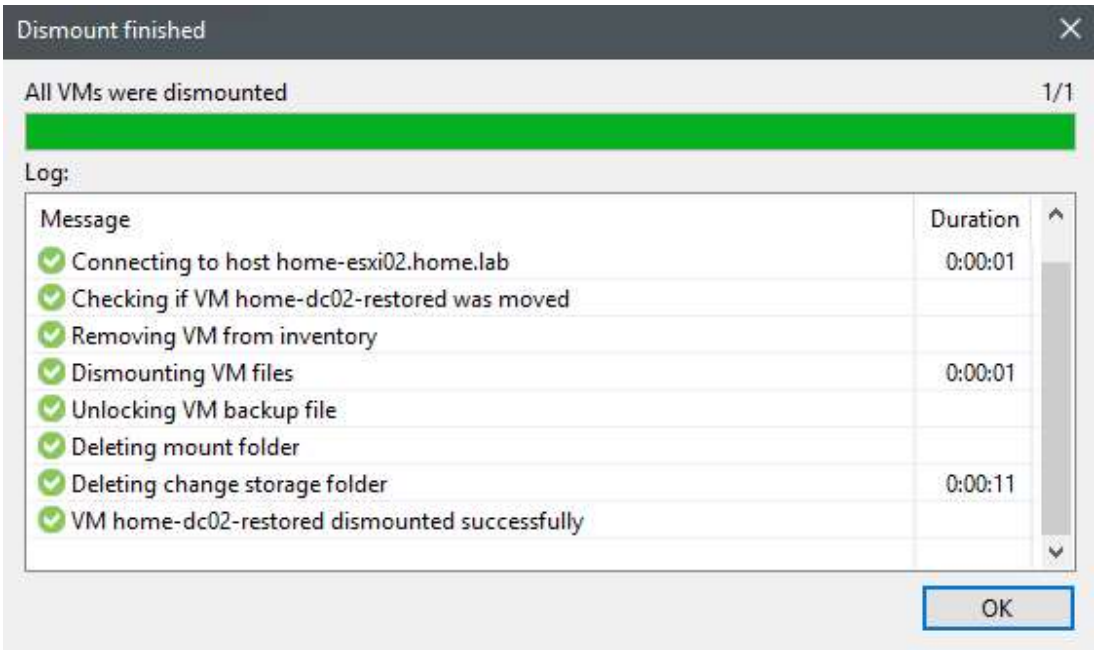

Recovery Tools
Veeam Backup
Home
Instant Recovery
Migrate to Production
Open VM Console
Stop Publishing
Actions
Properties
Properties
Home
Instant Recovery (1)
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Running (2)
Success
Warning
Name
Type
Host
Status
restored-home-zcm...
Instant VM Re...
home-esxi01a...
Mounted
Home

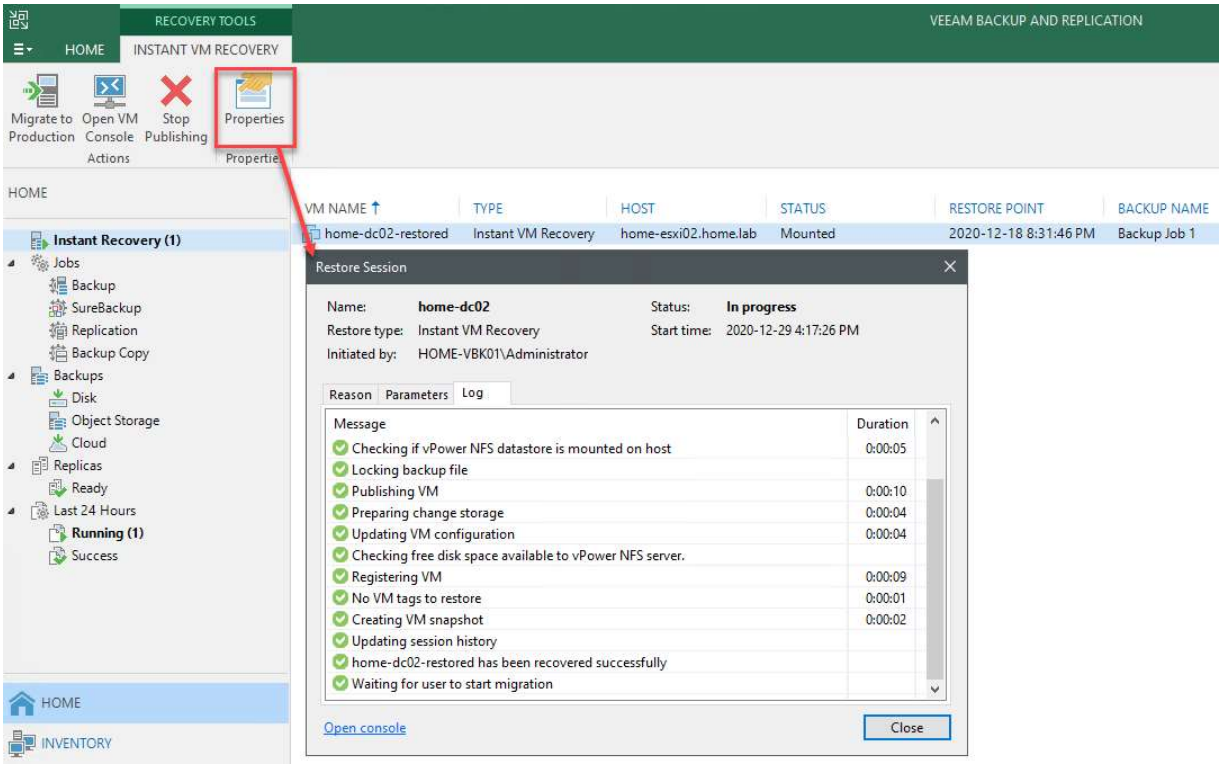

RECOVERY TOOLS
VEEAM BACKUP AND REPLICATION
HOME
INSTANT VM RECOVERY
Migrate to Production
Open VM Console
Stop Publishing
Actions
Properties
Properties
HOME
Instant Recovery (1)
Jobs
Backup
SureBackup
Replication
Backup Copy
Backups
Disk
Object Storage
Cloud
Replicas
Ready
Last 24 Hours
Running (1)
Success
VM NAME
TYPE
HOST
STATUS
RESTORE POINT
BACKUP NAME
home-dc02-restored
Instant VM Recovery
home-esxi02.home.lab
Mounted
2020-12-18 8:31:46 PM
Backup Job 1
Migrate to production...
Open VM console
Stop publishing
Properties...

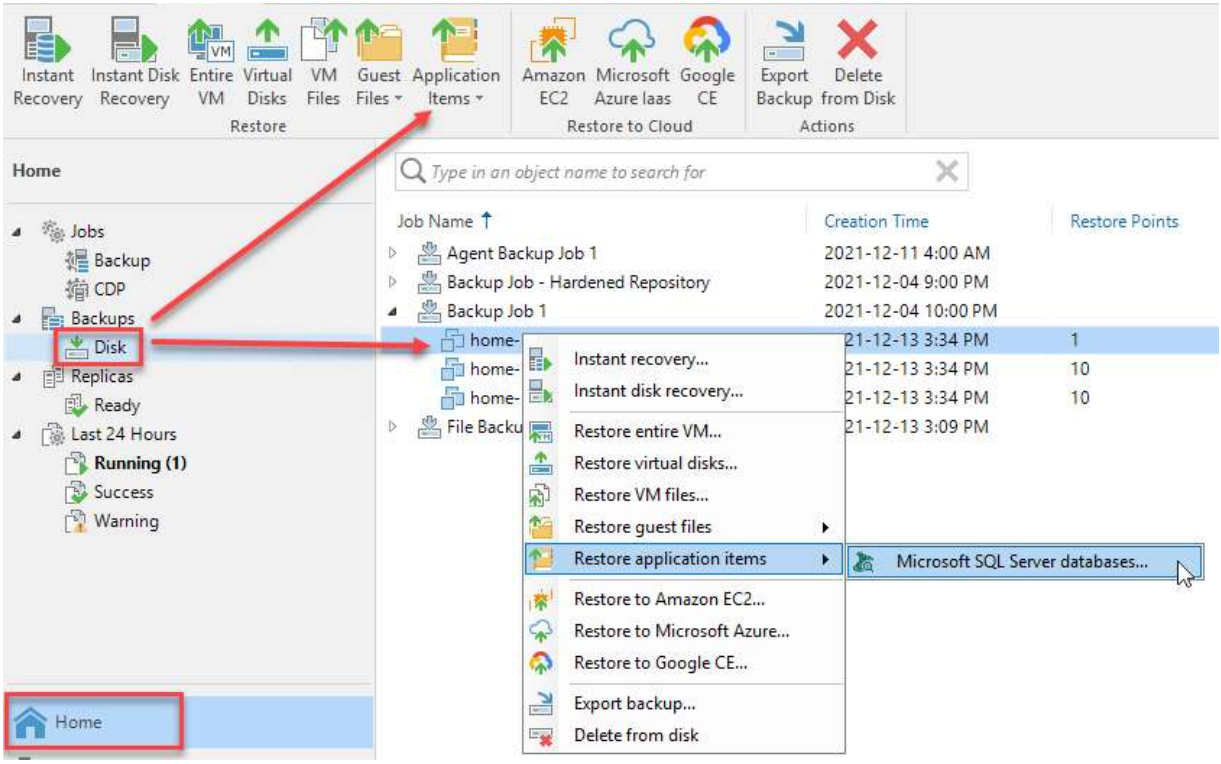

Quick Migration
Destination
Choose destination host, resource pool, VM folder and datastore.
Destination
Transfer
Ready
Host or cluster:
Home-Lab
Choose...
Resource pool:
Resources
Choose...
VM folder:
Discovered virtual machine
Choose...
Datastore:
VM-Datastore2 [122.8 GB free]
Choose...
Pick datastore for selected virtual disks
< Previous
Next >
Finish
Cancel

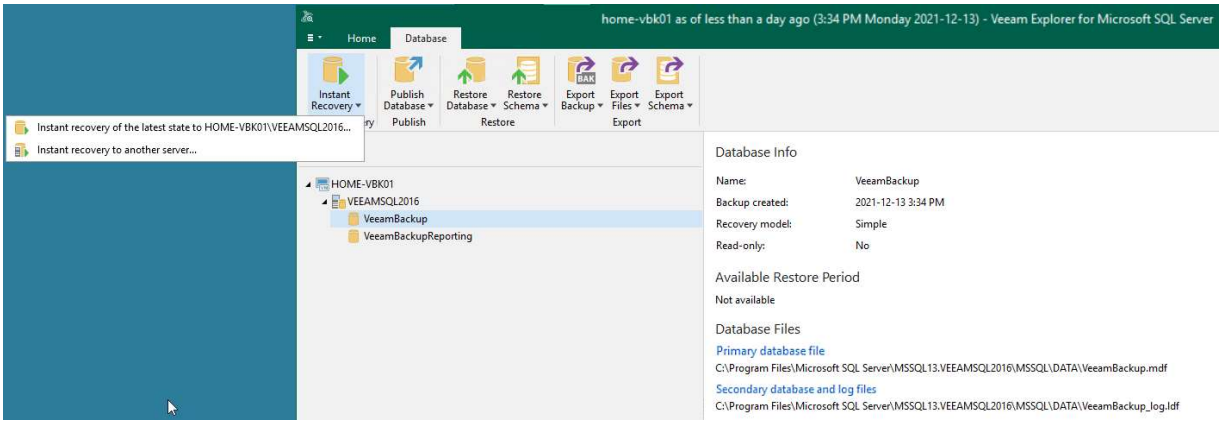

Quick Migration
Transfer
If desired, select specific source and target backup proxy to perform the operation with.
Destination
Transfer
Ready
Data transfer
When remote migrating between sites, for best migration performance you should deploy at least one backup proxy server in each site.
Source proxy:
Automatic selection
Choose...
Target proxy:
Automatic selection
Choose...
Force Veeam transport usage
Move virtual disks using Veeam data transport engine even if VMware Storage vMotion is licensed and available for the given migration scenario.
< Previous
Next >
Finish
Cancel

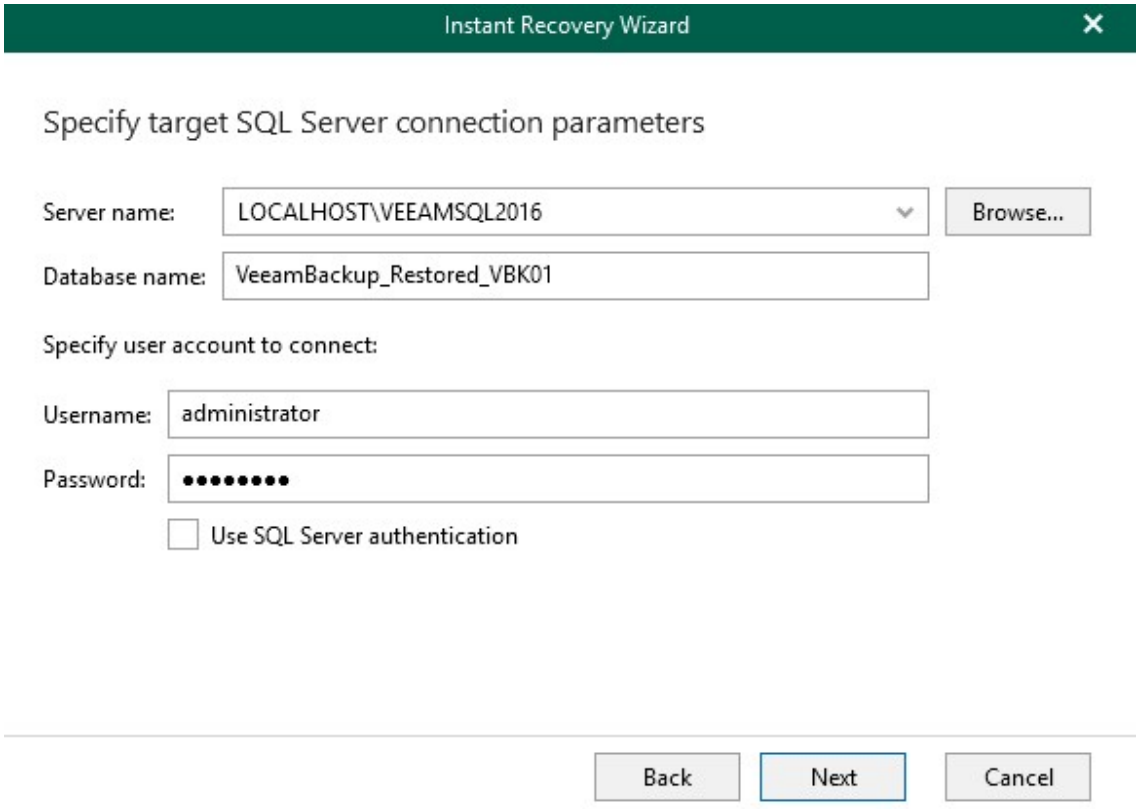

RECOVERY TOOLS
VEEAM BACKUP AND REPLICATION
HOME
INSTANT VM RECOVERY
Migrate to Production
Open VM Console
Stop Publishing
Properties
Actions
Properties
HOME
Instant Recovery (1)
Jobs
Backup
SureBackup
Replication
Backup Copy
Backups
Disk
Object Storage
Cloud
Replicas
Ready
Last 24 Hours
Running (1)
Success
VM NAME
TYPE
HOST
STATUS
RESTORE POINT
BACKUP NAME
home-dc02-restored
Instant VM Recovery
home-esxi02.home.lab
Mounted
2020-12-18 8:31:46 PM
Backup Job 1
Veeam Backup & Replication
Stop publishing the following machines?
Show objects
Yes
No

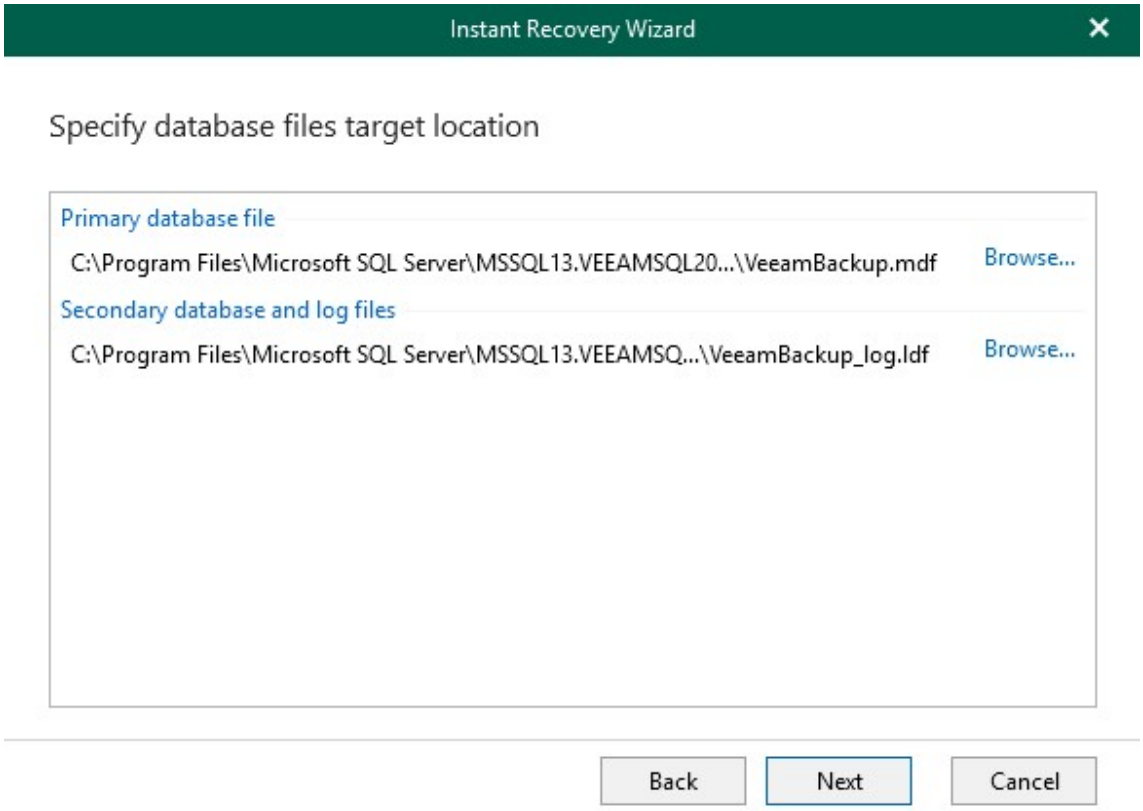

Dismount finished
All VMs were dismounted
1/1
Log:
Message
Duration
Connecting to host home-esxi02.home.lab
0:00:01
Checking if VM home-dc02-restored was moved
Removing VM from inventory
Dismounting VM files
0:00:01
Unlocking VM backup file
Deleting mount folder
Deleting change storage folder
0:00:11
VM home-dc02-restored dismounted successfully
OK

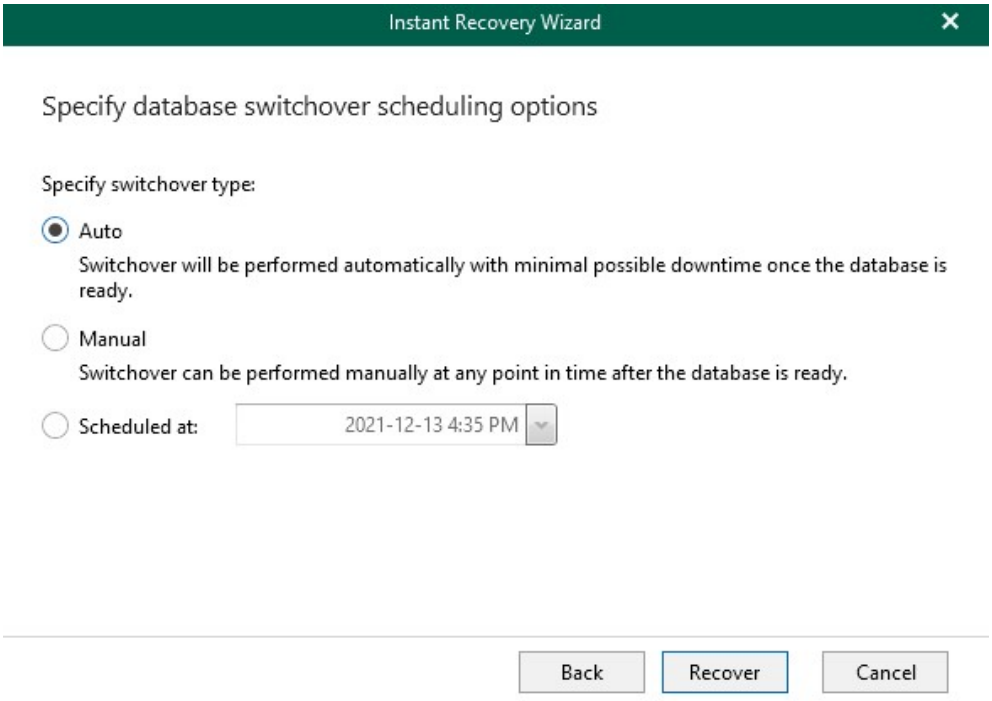

RECOVERY TOOLS
VEEAM BACKUP AND REPLICATION
HOME
INSTANT VM RECOVERY
Migrate to Production
Open VM Console
Stop Publishing
Properties
Actions
Properties
HOME
Instant Recovery (1)
Jobs
Backup
SureBackup
Replication
Backup Copy
Backups
Disk
Object Storage
Cloud
Replicas
Ready
Last 24 Hours
Running (1)
Success
HOME
INVENTORY
VM NAME
TYPE
HOST
STATUS
RESTORE POINT
BACKUP NAME
home-dc02-restored
Instant VM Recovery
home-esxi02.home.lab
Mounted
2020-12-18 8:31:46 PM
Backup Job 1
Restore Session
Name: home-dc02
Status: In progress
Restore type: Instant VM Recovery
Start time: 2020-12-29 4:17:26 PM
Initiated by: HOME-VBK01\Administrator
Reason
Parameters
Log
Message
Duration
Checking if vPower NFS datastore is mounted on host 0:00:05
Locking backup file
Publishing VM 0:00:10
Preparing change storage 0:00:04
Updating VM configuration 0:00:04
Checking free disk space available to vPower NFS server.
Registering VM 0:00:09
No VM tags to restore 0:00:01
Creating VM snapshot 0:00:02
Updating session history
home-dc02-restored has been recovered successfully
Waiting for user to start migration
Open console
Close

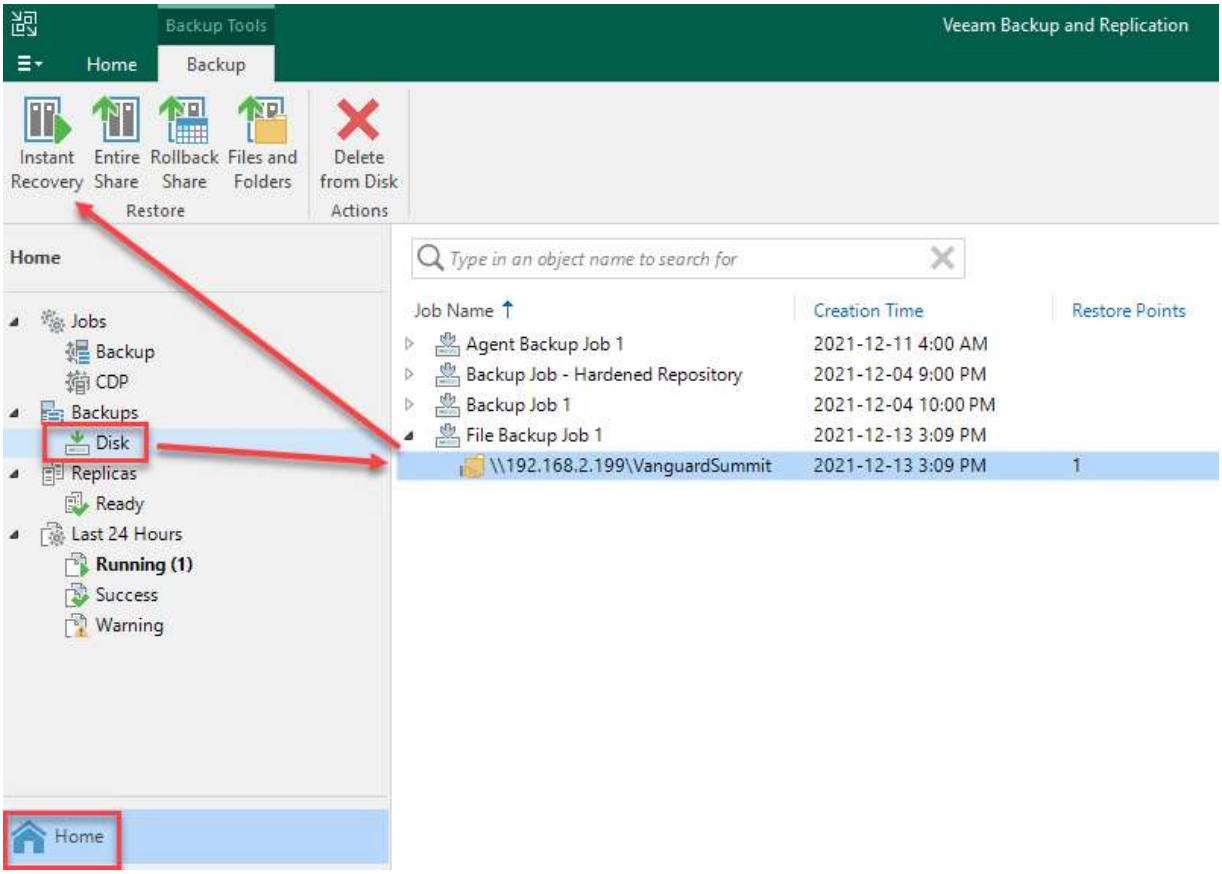

Instant Recovery
Instant Disk Recovery
Entire VM
Virtual Disks
VM Files
Guest Files
Application Items
Restore
Amazon EC2
Microsoft Azure Iaas
Google CE
Restore to Cloud
Export Backup
Delete from Disk
Actions
Home
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Running (1)
Success
Warning
Home
Type in an object name to search for
Job Name
Creation Time
Restore Points
Agent Backup Job 1
2021-12-11 4:00 AM
Backup Job - Hardened Repository
2021-12-04 9:00 PM
Backup Job 1
2021-12-04 10:00 PM
home-
21-12-13 3:34 PM
1
home-
21-12-13 3:34 PM
10
home-
21-12-13 3:34 PM
10
File Backu
21-12-13 3:09 PM
Instant recovery...
Instant disk recovery...
Restore entire VM...
Restore virtual disks...
Restore VM files...
Restore guest files
Restore application items
Microsoft SQL Server databases...
Restore to Amazon EC2...
Restore to Microsoft Azure...
Restore to Google CE...
Export backup...
Delete from disk

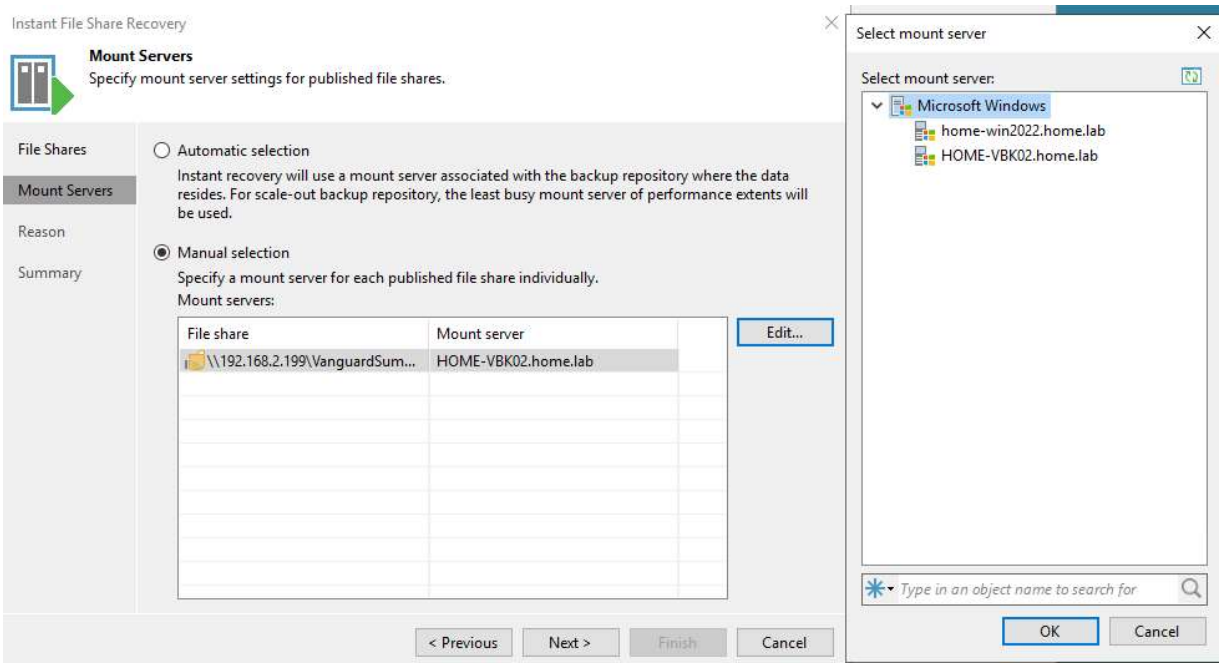

home-vbk01 as of less than a day ago (3:34 PM Monday 2021-12-13) - Veeam Explorer for Microsoft SQL Server
Home
Database
Instant Recovery
Publish Database
Restore Database
Restore Schema
Export Backup
Export Files
Export Schema
Publish
Restore
Export
Instant recovery of the latest state to HOME-VBK01\VEEAMSQL2016...
Instant recovery to another server...
HOME-VBK01
VEEAMSQL2016
VeeamBackup
VeeamBackupReporting
Database Info
Name: VeeamBackup
Backup created: 2021-12-13 3:34 PM
Recovery model: Simple
Read-only: No
Available Restore Period
Not available
Database Files
Primary database file
C:\Program Files\Microsoft SQL Server\MSSQL13.VEEAMSQL2016\MSSQL\DATA\VeeamBackup.mdf
Secondary database and log files
C:\Program Files\Microsoft SQL Server\MSSQL13.VEEAMSQL2016\MSSQL\DATA\VeeamBackup_log.ldf

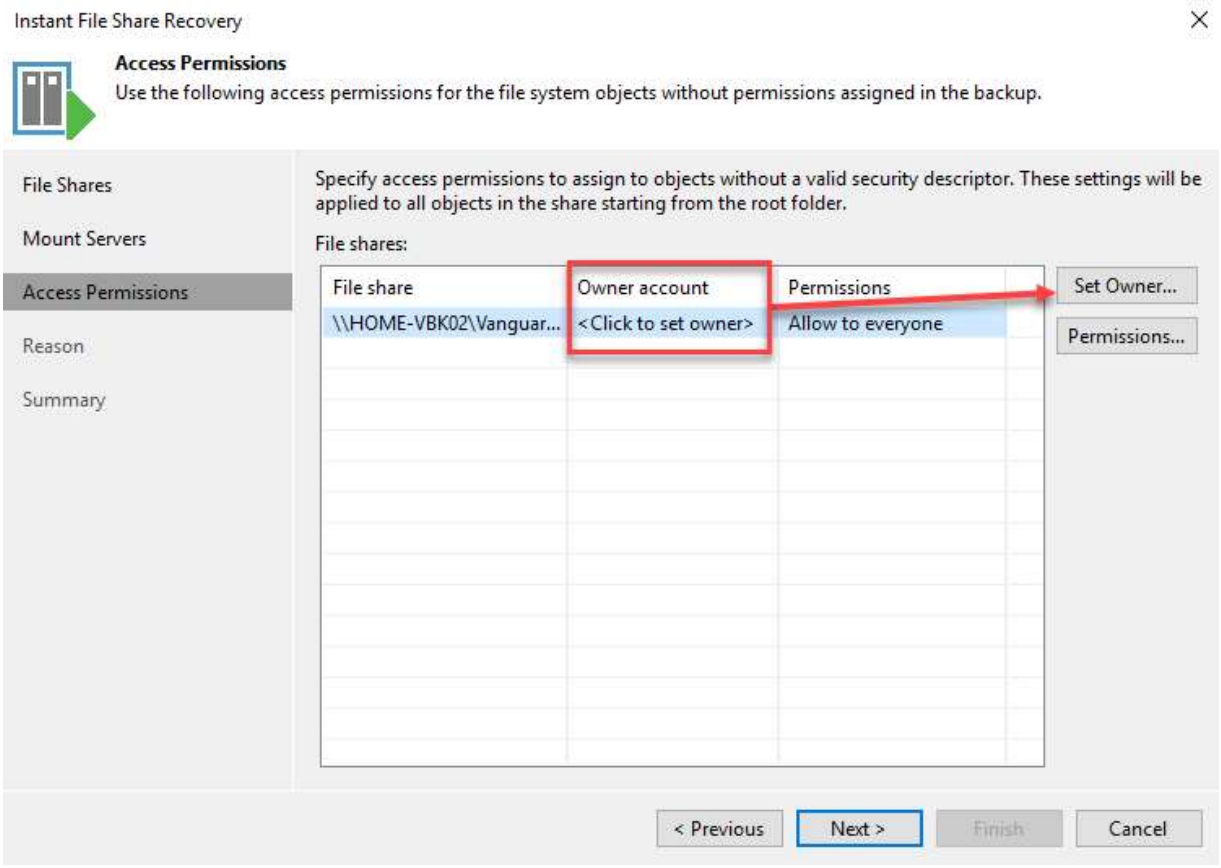

Instant Recovery Wizard
Specify target SQL Server connection parameters
Server name:
LOCALHOST\VEEAMSQL2016
Browse...
Database name:
VeeamBackup_Restored_VBK01
Specify user account to connect:
Username:
administrator
Password:
Use SQL Server authentication
Back
Next
Cancel

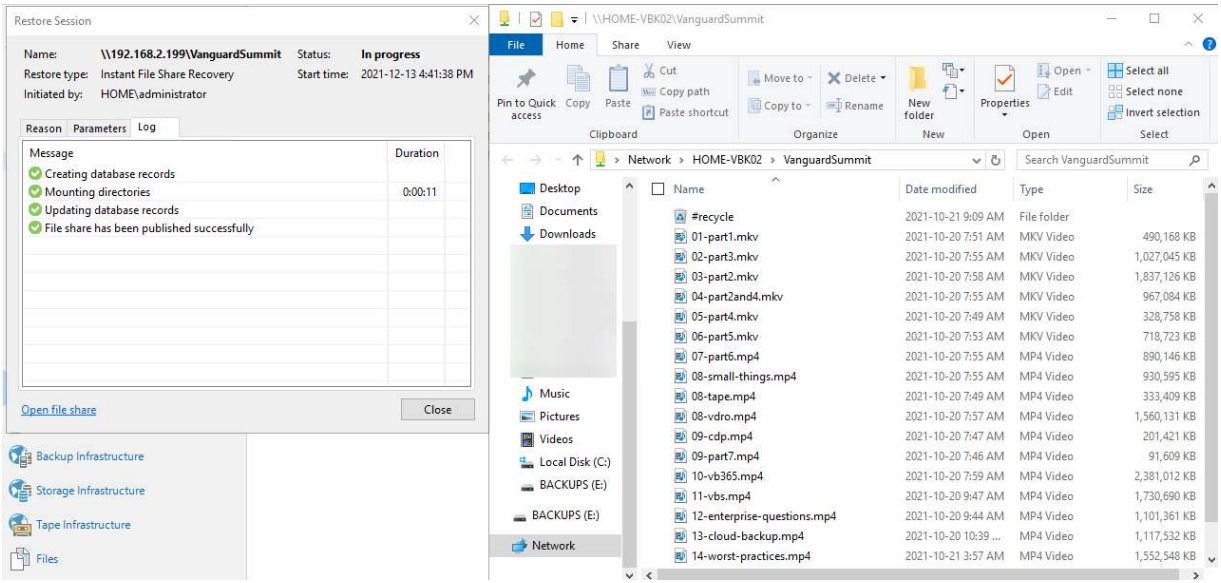

Instant Recovery Wizard
Specify database files target location
Primary database file
C:\Program Files\Microsoft SQL Server\MSSQL13.VEEAMSQL20...\VeeamBackup.mdf
Browse...
Secondary database and log files
C:\Program Files\Microsoft SQL Server\MSSQL13.VEEAMSQ...\VeeamBackup_log.ldf
Browse...
Back
Next
Cancel

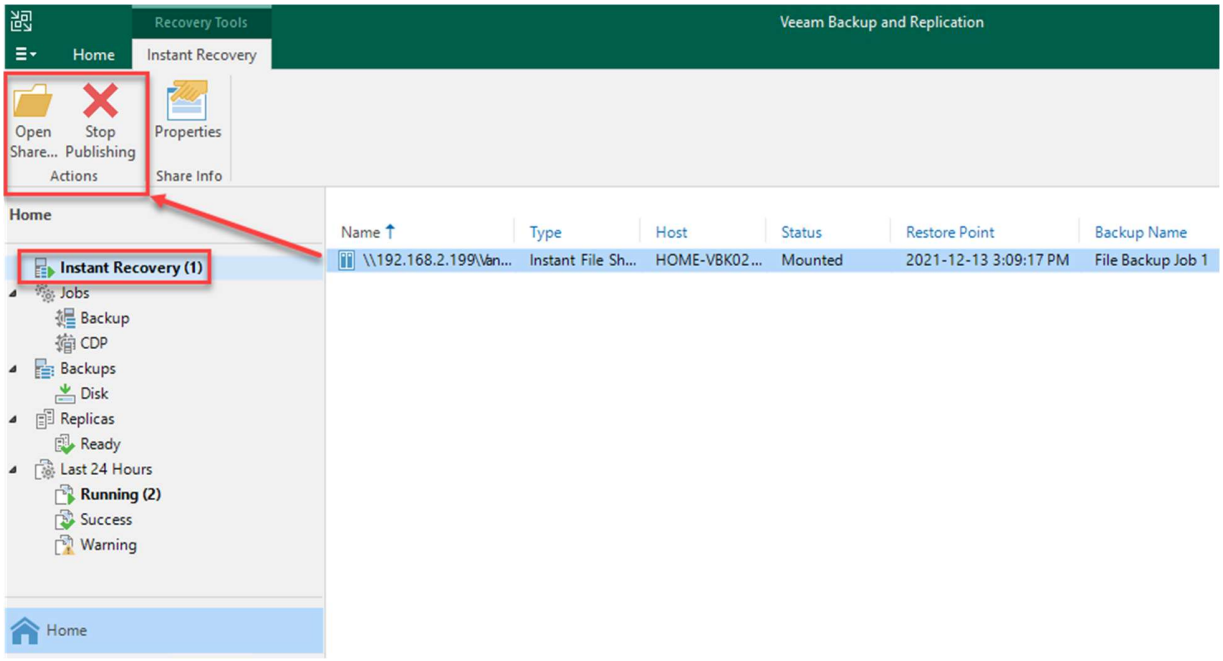

Instant Recovery Wizard
Specify database switchover scheduling options
Specify switchover type:
Auto
Switchover will be performed automatically with minimal possible downtime once the database is ready.
Manual
Switchover can be performed manually at any point in time after the database is ready.
Scheduled at:
2021-12-13 4:35 PM
Back
Recover
Cancel

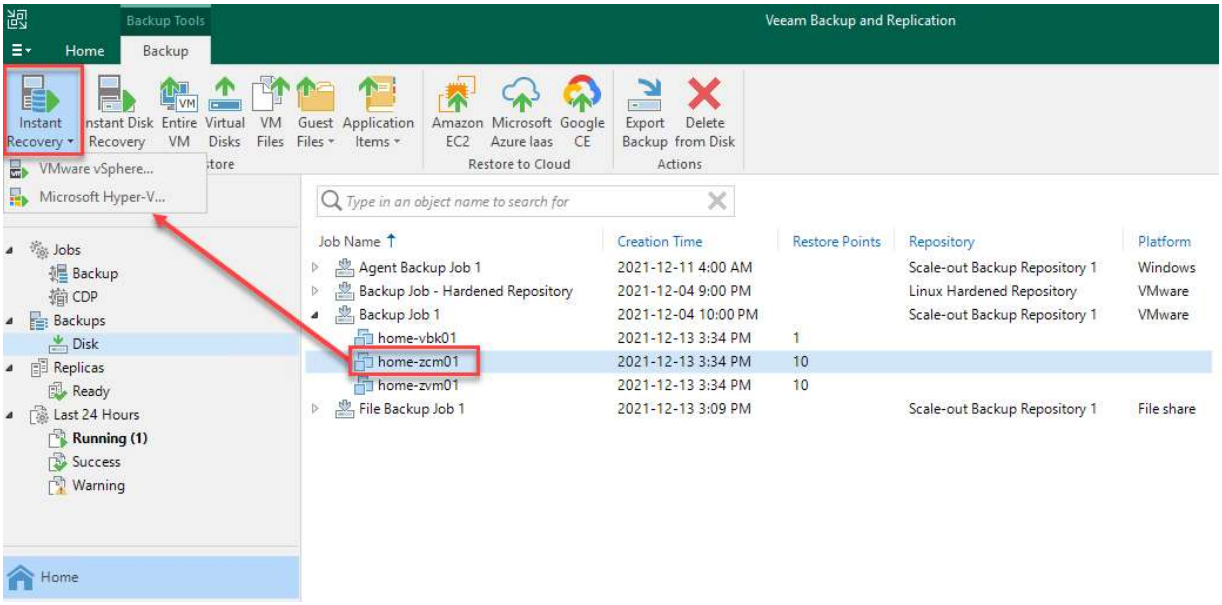

Backup Tools
Veeam Backup and Replication
Home
Backup
Instant Recovery
Entire Share
Rollback Share
Files and Folders
Delete from Disk
Restore
Actions
Home
Type in an object name to search for
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Running (1)
Success
Warning
Job Name
Creation Time
Restore Points
Agent Backup Job 1
2021-12-11 4:00 AM
Backup Job - Hardened Repository
2021-12-04 9:00 PM
Backup Job 1
2021-12-04 10:00 PM
File Backup Job 1
2021-12-13 3:09 PM
\\192.168.2.199\VanguardSummit
2021-12-13 3:09 PM
1
Home

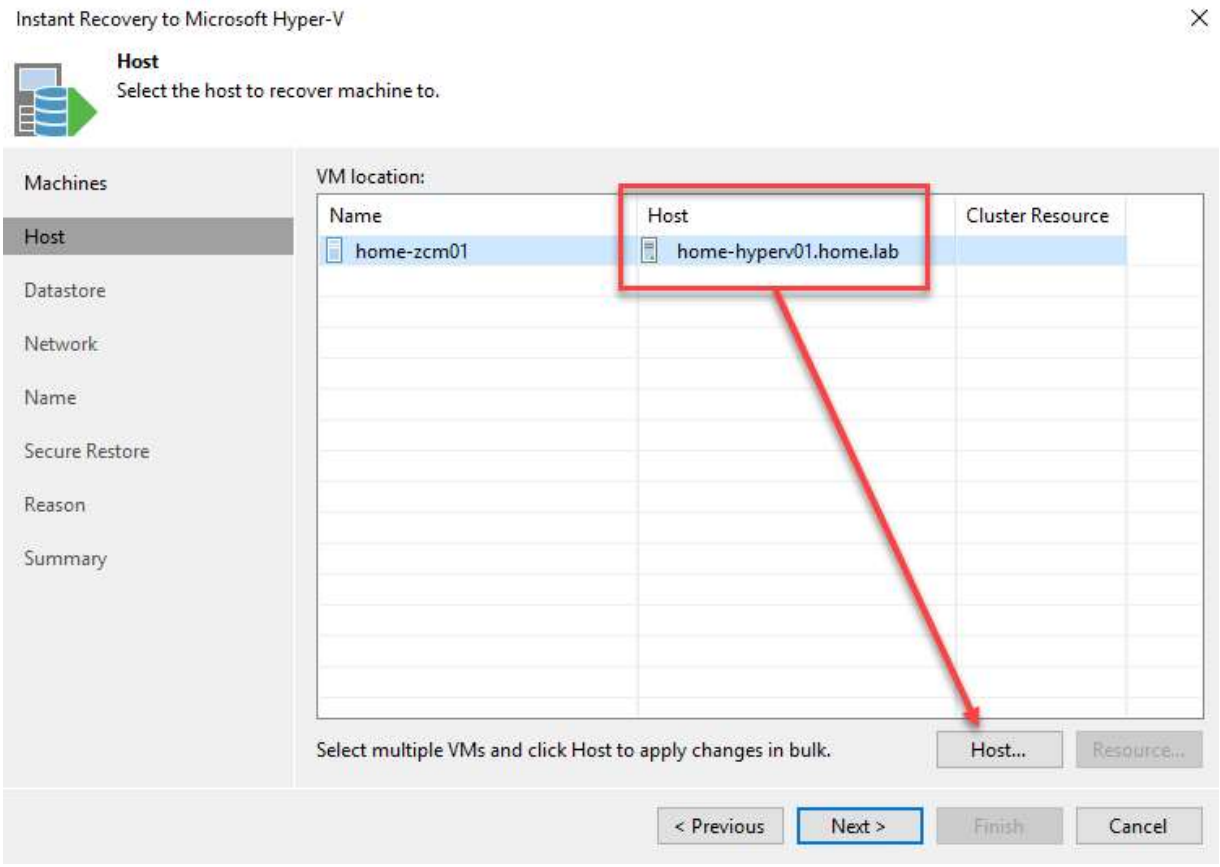

Instant File Share Recovery
Mount Servers
Specify mount server settings for published file shares.
File Shares
Mount Servers
Reason
Summary
Automatic selection
Instant recovery will use a mount server associated with the backup repository where the data resides. For scale-out backup repository, the least busy mount server of performance extents will be used.
Manual selection
Specify a mount server for each published file share individually.
Mount servers:
File share
Mount server
\\192.168.2.199\VanguardSum...
HOME-VBK02.home.lab
Edit...
< Previous
Next >
Finish
Cancel
Select mount server
Select mount server:
Microsoft Windows
home-win2022.home.lab
HOME-VBK02.home.lab
Type in an object name to search for
OK
Cancel

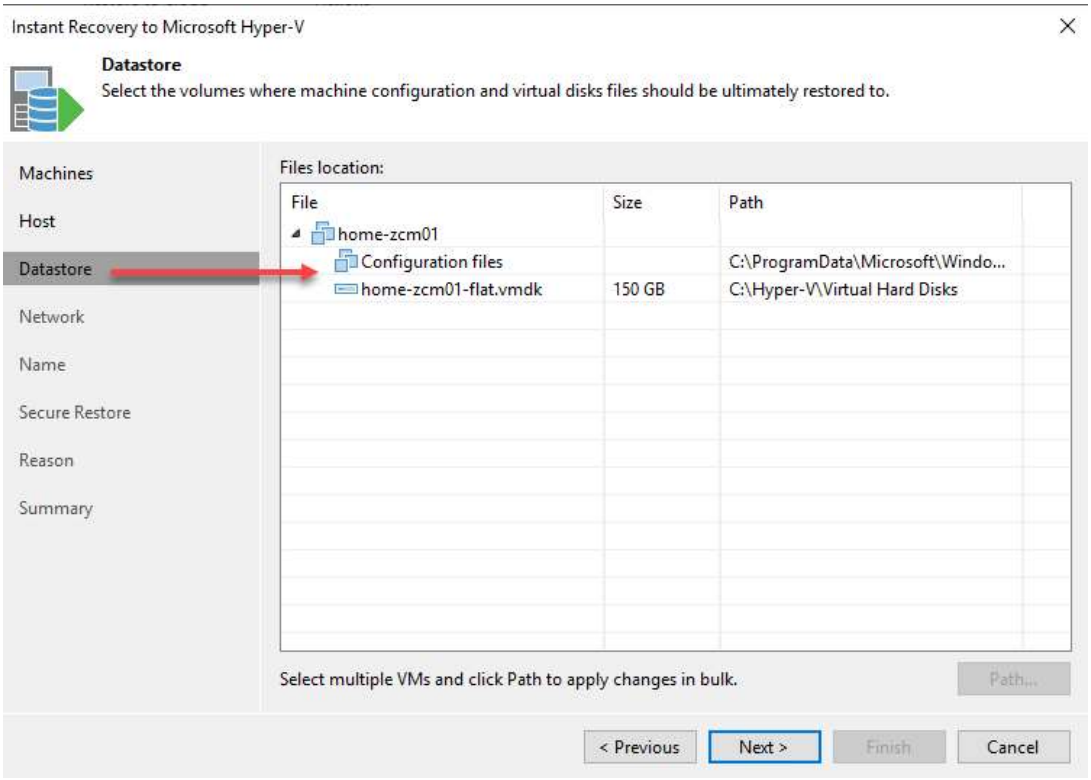

Instant File Share Recovery
Access Permissions
Use the following access permissions for the file system objects without permissions assigned in the backup.
File Shares
Mount Servers
Access Permissions
Reason
Summary
Specify access permissions to assign to objects without a valid security descriptor. These settings will be applied to all objects in the share starting from the root folder.
File shares:
File share
Owner account
Permissions
\\HOME-VBK02\Vanguar...
<Click to set owner>
Allow to everyone
Set Owner...
Permissions...
< Previous
Next >
Finish
Cancel

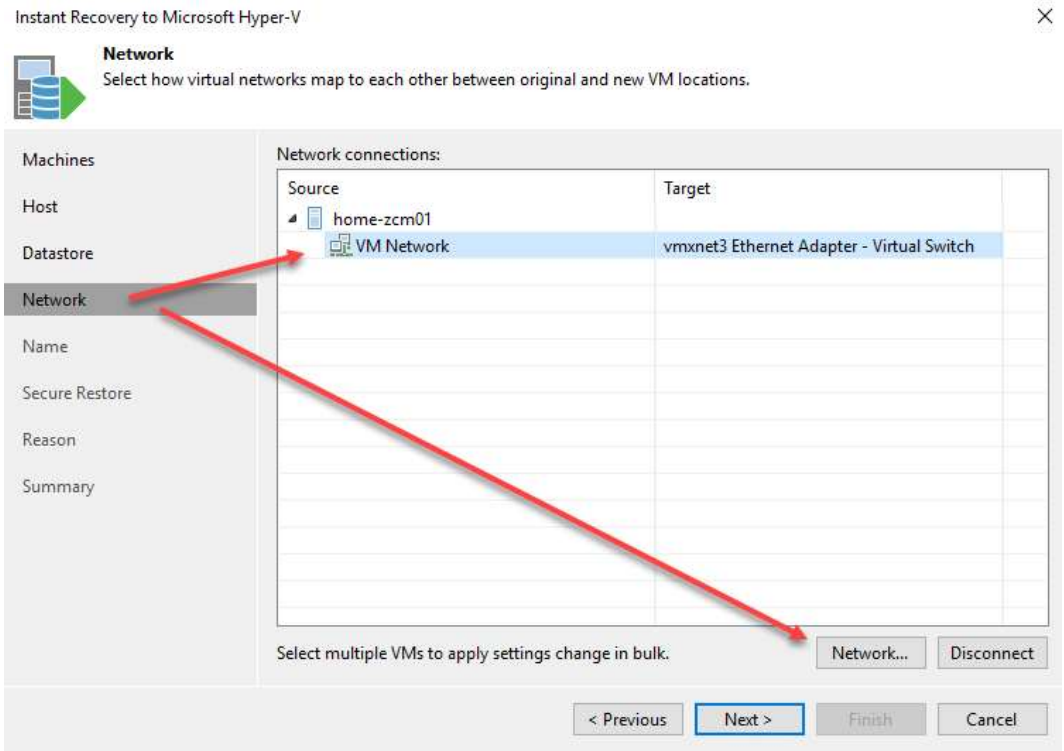

Restore Session
Name: \\192.168.2.199\VanguardSummit
Status: In progress
Restore type: Instant File Share Recovery
Start time: 2021-12-13 4:41:38 PM
Initiated by: HOME\administrator
Reason
Parameters
Log
Message
Duration
Creating database records
Mounting directories
0:00:11
Updating database records
File share has been published successfully
Open file share
Close
Backup Infrastructure
Storage Infrastructure
Tape Infrastructure
Files
\\HOME-VBK02\VanguardSummit
File
Home
Share
View
Pin to Quick access
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New
Properties
Open
Edit
Open
Select all
Select none
Invert selection
Select
Network
HOME-VBK02
VanguardSummit
Search VanguardSummit
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
BACKUPS (E:)
BACKUPS (E:)
Network
Name
Date modified
Type
Size
#recycle
2021-10-21 9:09 AM
File folder
01-part1.mkv
2021-10-20 7:51 AM
MKV Video
490,168 KB
02-part3.mkv
2021-10-20 7:55 AM
MKV Video
1,027,045 KB
03-part2.mkv
2021-10-20 7:58 AM
MKV Video
1,837,126 KB
04-part2and4.mkv
2021-10-20 7:55 AM
MKV Video
967,084 KB
05-part4.mkv
2021-10-20 7:49 AM
MKV Video
328,758 KB
06-part5.mkv
2021-10-20 7:53 AM
MKV Video
718,723 KB
07-part6.mp4
2021-10-20 7:55 AM
MP4 Video
890,146 KB
08-small-things.mp4
2021-10-20 7:55 AM
MP4 Video
930,595 KB
08-tape.mp4
2021-10-20 7:49 AM
MP4 Video
333,409 KB
08-vdro.mp4
2021-10-20 7:57 AM
MP4 Video
1,560,131 KB
09-cdp.mp4
2021-10-20 7:47 AM
MP4 Video
201,421 KB
09-part7.mp4
2021-10-20 7:46 AM
MP4 Video
91,609 KB
10-vb365.mp4
2021-10-20 7:59 AM
MP4 Video
2,381,012 KB
11-vbs.mp4
2021-10-20 9:47 AM
MP4 Video
1,730,690 KB
12-enterprise-questions.mp4
2021-10-20 9:44 AM
MP4 Video
1,101,361 KB
13-cloud-backup.mp4
2021-10-20 10:39 ...
MP4 Video
1,117,532 KB
14-worst-practices.mp4
2021-10-21 3:57 AM
MP4 Video
1,552,548 KB

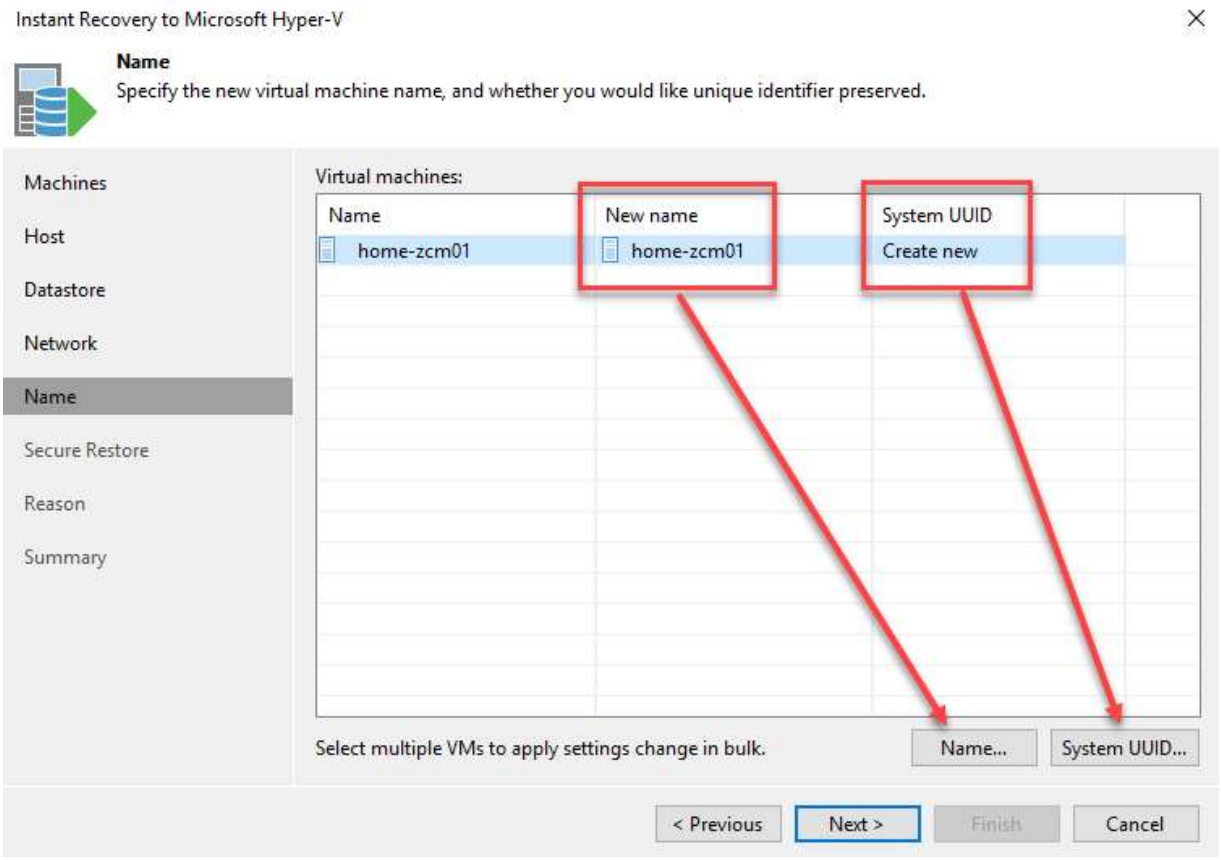

Recovery Tools
Veeam Backup and Replication
Home
Instant Recovery
Open Share...
Stop Publishing
Actions
Properties
Share Info
Home
Instant Recovery (1)
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Running (2)
Success
Warning
Home
Name
Type
Host
Status
Restore Point
Backup Name
\\192.168.2.199\\an...
Instant File Sh...
HOME-VBK02...
Mounted
2021-12-13 3:09:17 PM
File Backup Job 1


Backup Tools
Veeam Backup and Replication
Home
Backup
Instant Recovery
Instant Disk Recovery
Entire VM
Virtual Disks
VM Files
Guest Files
Application Items
Amazon EC2
Microsoft Azure Iaas
Google CE
Restore to Cloud
Export Backup
Delete from Disk
Actions
VMware vSphere...
Microsoft Hyper-V...
Type in an object name to search for
Jobs
Backup
CDP
Backups
Disk
Replicas
Ready
Last 24 Hours
Running (1)
Success
Warning
Home
Job Name
Creation Time
Restore Points
Repository
Platform
Agent Backup Job 1
2021-12-11 4:00 AM
Scale-out Backup Repository 1
Windows
Backup Job - Hardened Repository
2021-12-04 9:00 PM
Linux Hardened Repository
VMware
Backup Job 1
2021-12-04 10:00 PM
Scale-out Backup Repository 1
VMware
home-vbk01
2021-12-13 3:34 PM
1
home-zcm01
2021-12-13 3:34 PM
10
home-zvm01
2021-12-13 3:34 PM
10
File Backup Job 1
2021-12-13 3:09 PM
Scale-out Backup Repository 1
File share

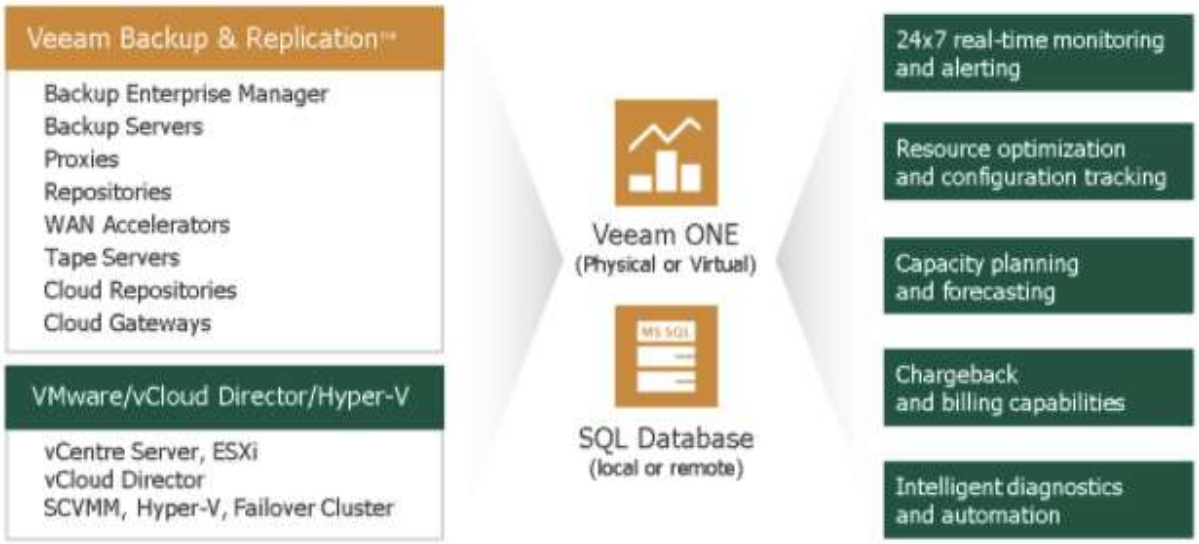

Instant Recovery to Microsoft Hyper-V
Host
Select the host to recover machine to.
Machines
Host
Datastore
Network
Name
Secure Restore
Reason
Summary
VM location:
Name
Host
Cluster Resource
home-zcm01
home-hyperv01.home.lab
Select multiple VMs and click Host to apply changes in bulk.
Host...
Resource...
< Previous
Next >
Finish
Cancel

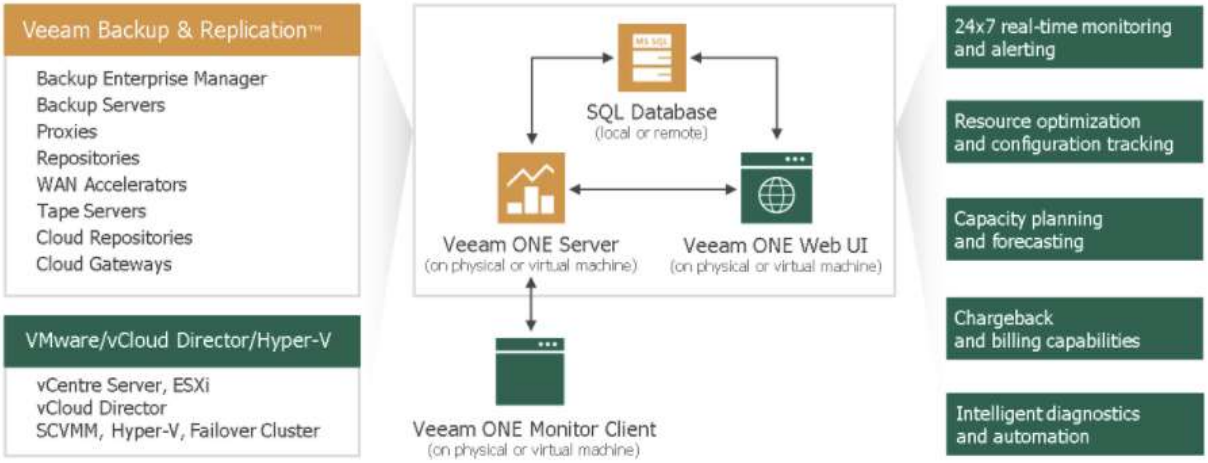

Instant Recovery to Microsoft Hyper-V
Datastore
Select the volumes where machine configuration and virtual disks files should be ultimately restored to.
Machines
Host
Datastore
Network
Name
Secure Restore
Reason
Summary
Files location:
File
Size
Path
home-zcm01
Configuration files
C:\ProgramData\Microsoft\Windo...
home-zcm01-flat.vmdk
150 GB
C:\Hyper-V\Virtual Hard Disks
Select multiple VMs and click Path to apply changes in bulk.
Path...
< Previous
Next >
Finish
Cancel


Instant Recovery to Microsoft Hyper-V
Network
Select how virtual networks map to each other between original and new VM locations.
Machines
Host
Datastore
Network
Name
Secure Restore
Reason
Summary
Network connections:
Source
Target
home-zcm01
VM Network
vmxnet3 Ethernet Adapter - Virtual Switch
Select multiple VMs to apply settings change in bulk.
Network...
Disconnect
< Previous
Next >
Finish
Cancel

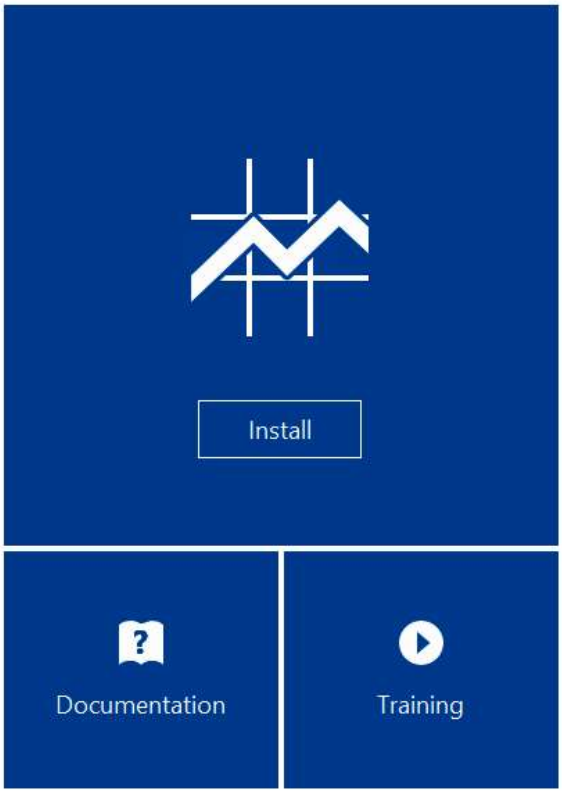

Instant Recovery to Microsoft Hyper-V
Name
Specify the new virtual machine name, and whether you would like unique identifier preserved.
Machines
Host
Datastore
Network
Name
Secure Restore
Reason
Summary
Virtual machines:
Name
New name
System UUID
home-zcm01
home-zcm01
Create new
Select multiple VMs to apply settings change in bulk.
Name...
System UUID...
< Previous
Next >
Finish
Cancel

Chapter 9: Understanding Instant Recovery





Veeam ONE 11a



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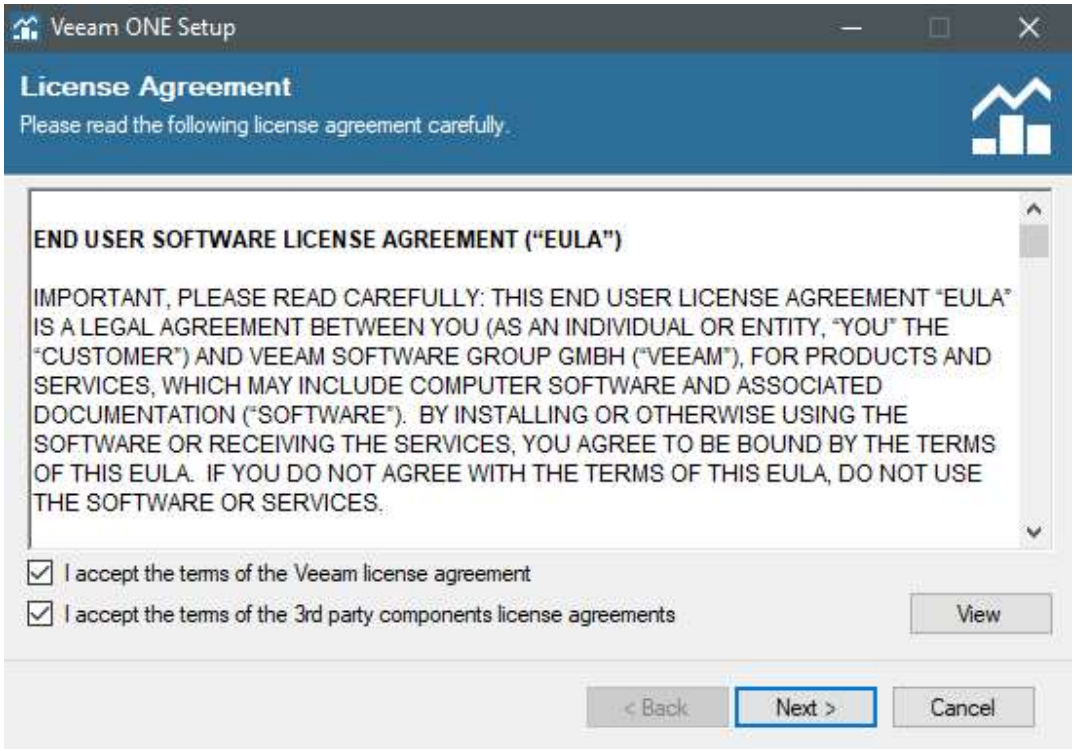
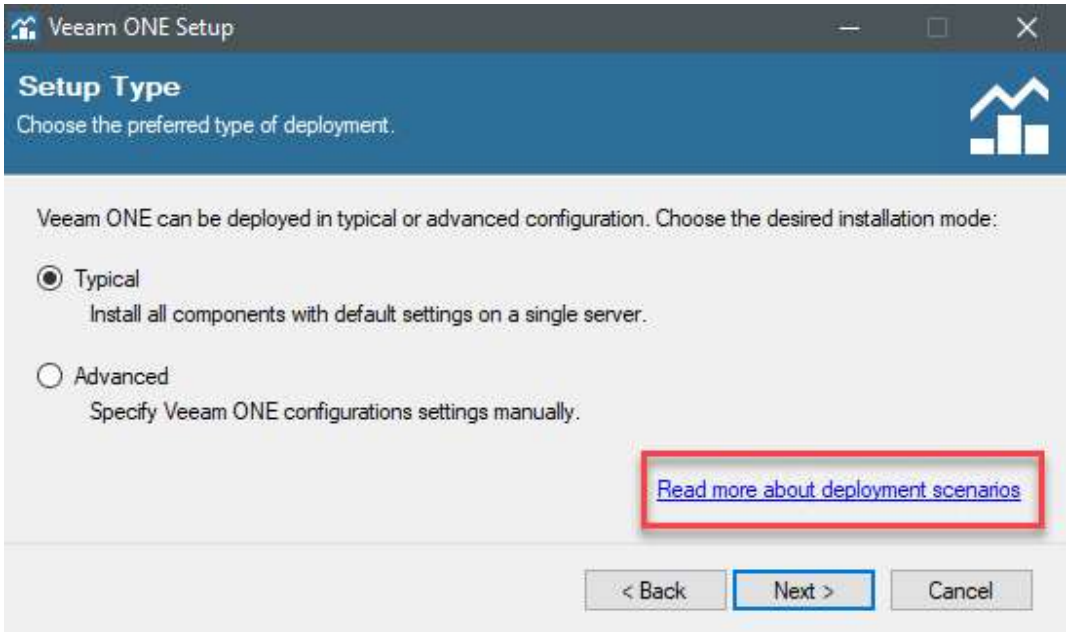
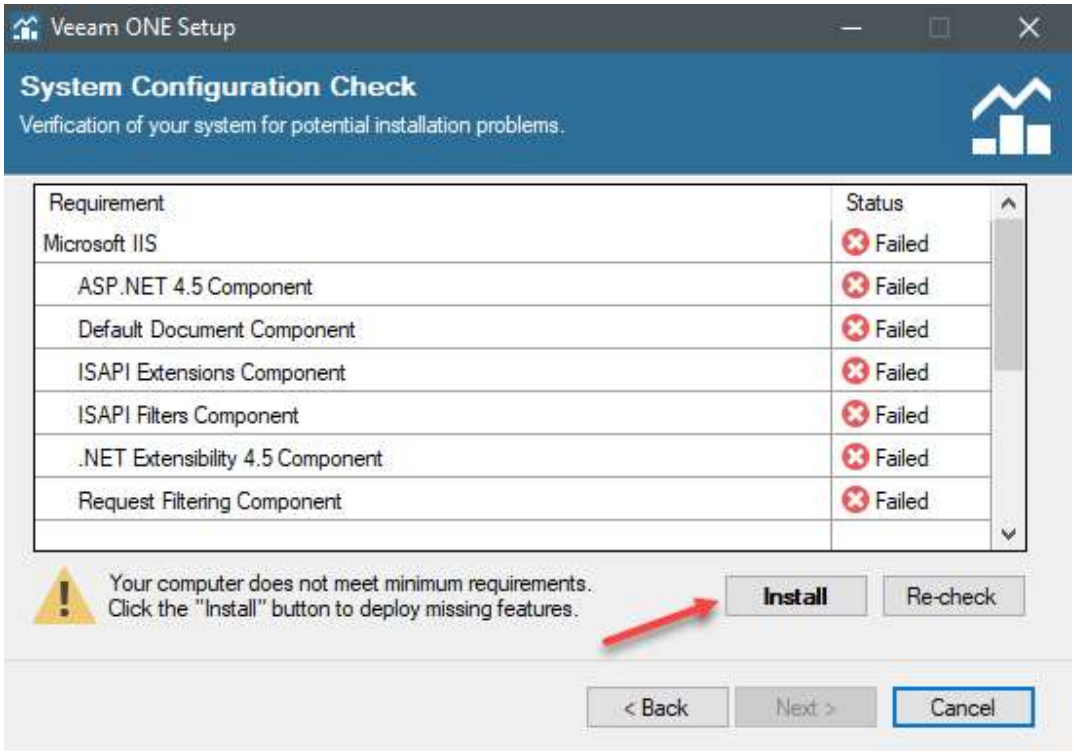
Standalone components:

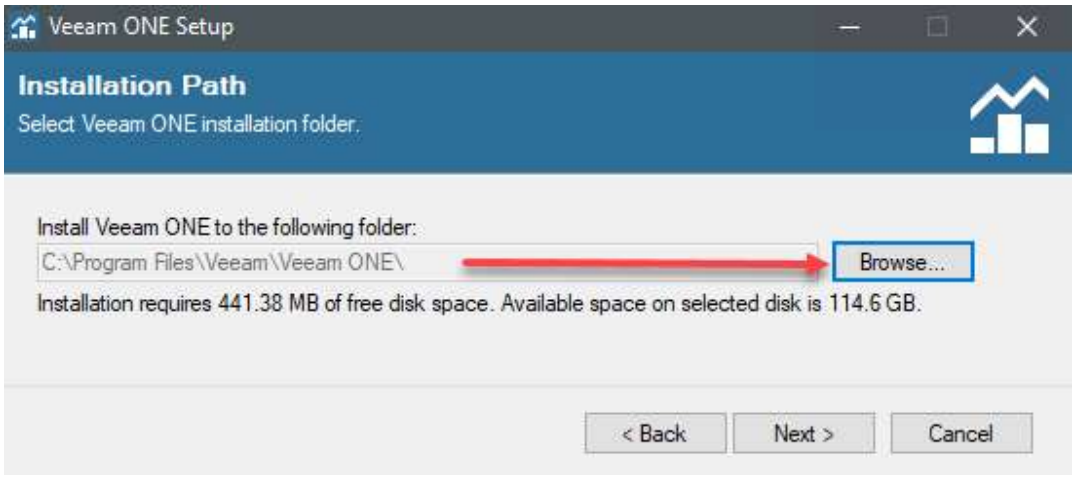
Veeam ONE Server
Install

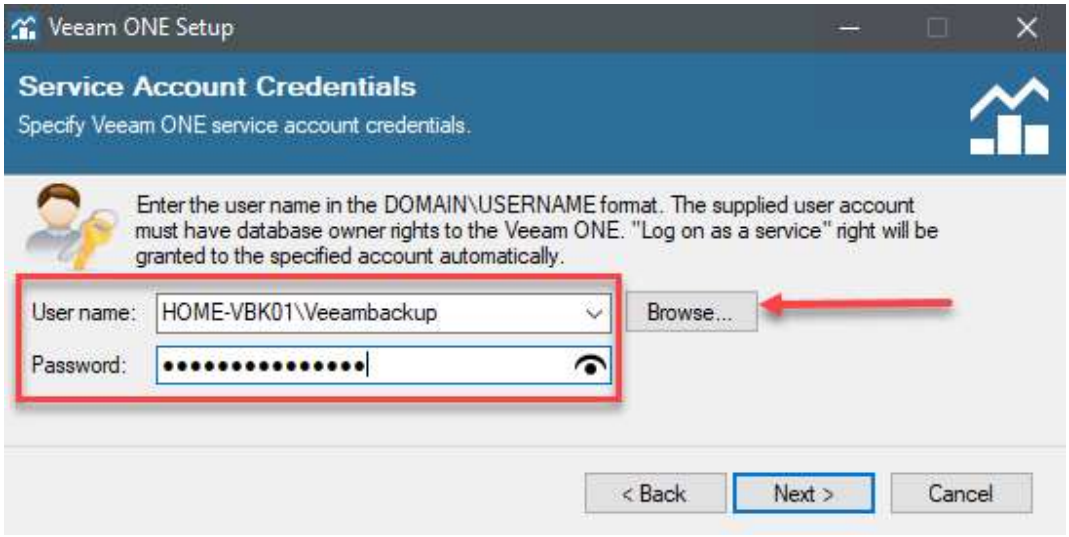
Veeam ONE Client
Install

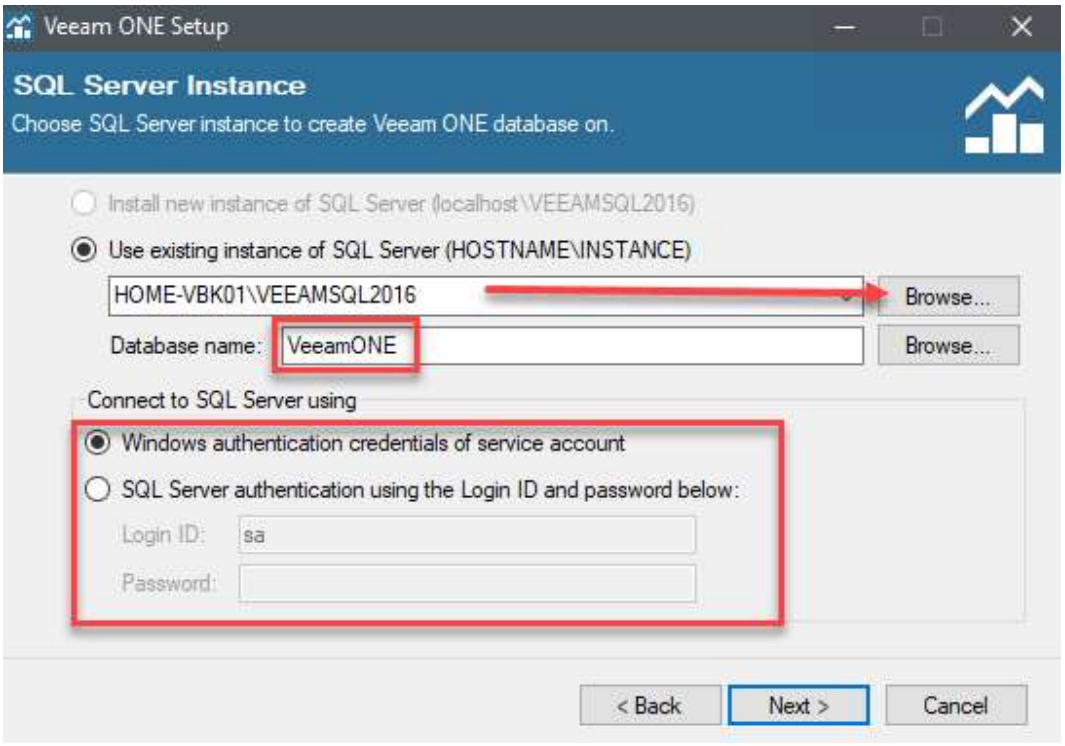

Veeam ONE Setup
License Agreement
Please read the following license agreement carefully.
END USER SOFTWARE LICENSE AGREEMENT ("EULA")
IMPORTANT, PLEASE READ CAREFULLY: THIS END USER LICENSE AGREEMENT "EULA" IS A LEGAL AGREEMENT BETWEEN YOU (AS AN INDIVIDUAL OR ENTITY, "YOU" THE "CUSTOMER") AND VEEAM SOFTWARE GROUP GMBH ("VEEAM"), FOR PRODUCTS AND SERVICES, WHICH MAY INCLUDE COMPUTER SOFTWARE AND ASSOCIATED DOCUMENTATION ("SOFTWARE"). BY INSTALLING OR OTHERWISE USING THE SOFTWARE OR RECEIVING THE SERVICES, YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA. IF YOU DO NOT AGREE WITH THE TERMS OF THIS EULA, DO NOT USE THE SOFTWARE OR SERVICES.
I accept the terms of the Veeam license agreement
I accept the terms of the 3rd party components license agreements
View
< Back
Next >
Cancel

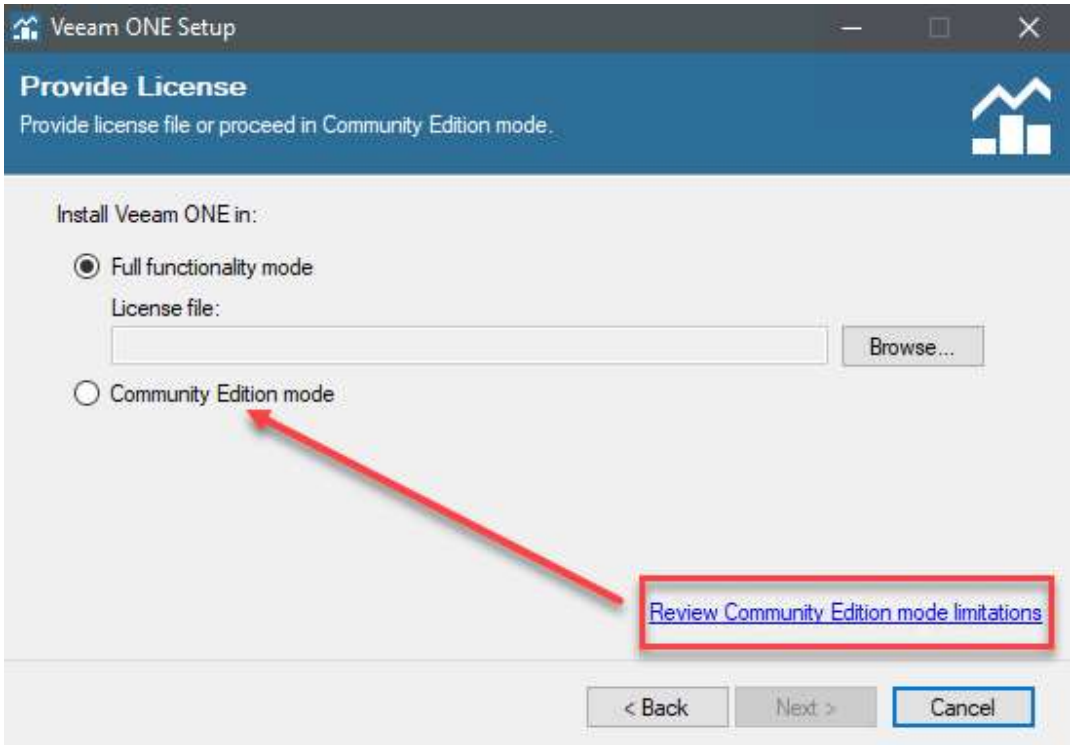

Veeam ONE Setup
Setup Type
Choose the preferred type of deployment.
Veeam ONE can be deployed in typical or advanced configuration. Choose the desired installation mode:
Typical
Install all components with default settings on a single server.
Advanced
Specify Veeam ONE configurations settings manually.
Read more about deployment scenarios
< Back
Next >
Cancel

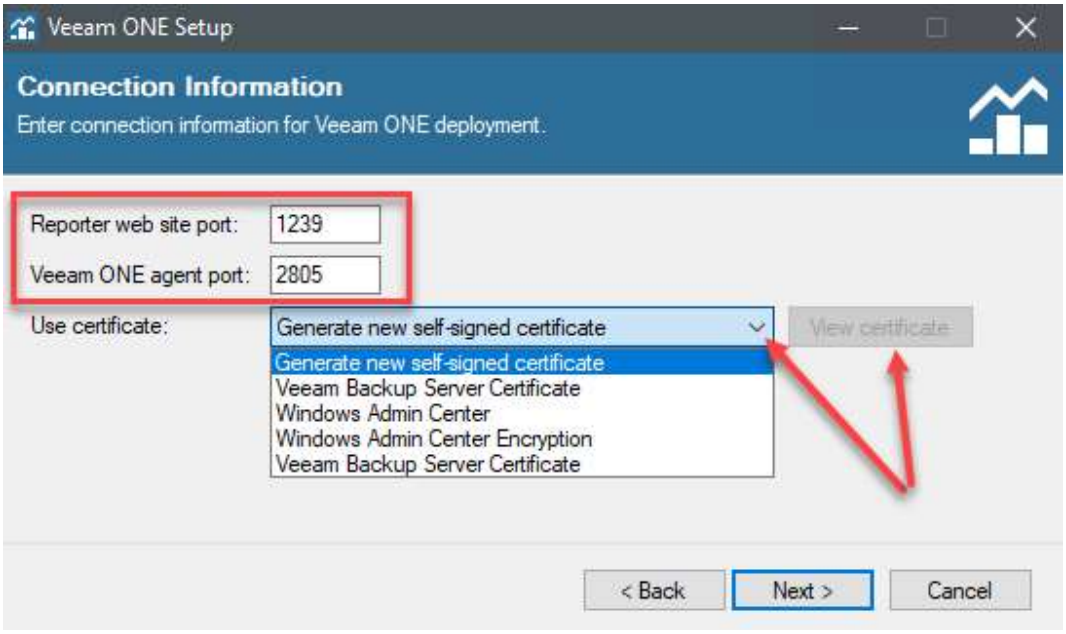

Veeam ONE Setup
System Configuration Check
Verification of your system for potential installation problems.
Requirement
Status
Microsoft IIS
Failed
ASP.NET 4.5 Component
Failed
Default Document Component
Failed
ISAPI Extensions Component
Failed
ISAPI Filters Component
Failed
.NET Extensibility 4.5 Component
Failed
Request Filtering Component
Failed
Your computer does not meet minimum requirements.
Click the "Install" button to deploy missing features.
Install
Re-check
< Back
Next >
Cancel

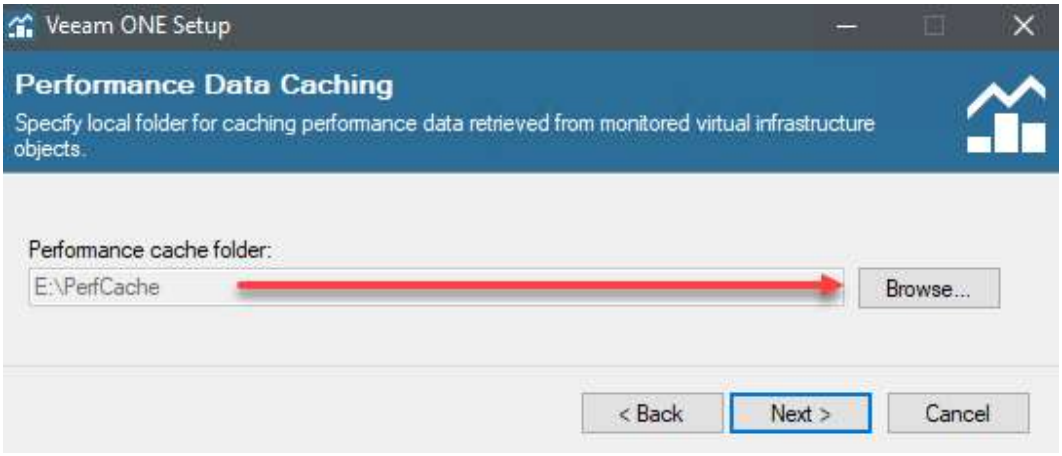

Veeam ONE Setup
Installation Path
Select Veeam ONE installation folder.
Install Veeam ONE to the following folder:
C:\Program Files\Veeam\Veeam ONE\
Browse...
Installation requires 441.38 MB of free disk space. Available space on selected disk is 114.6 GB.
< Back
Next >
Cancel

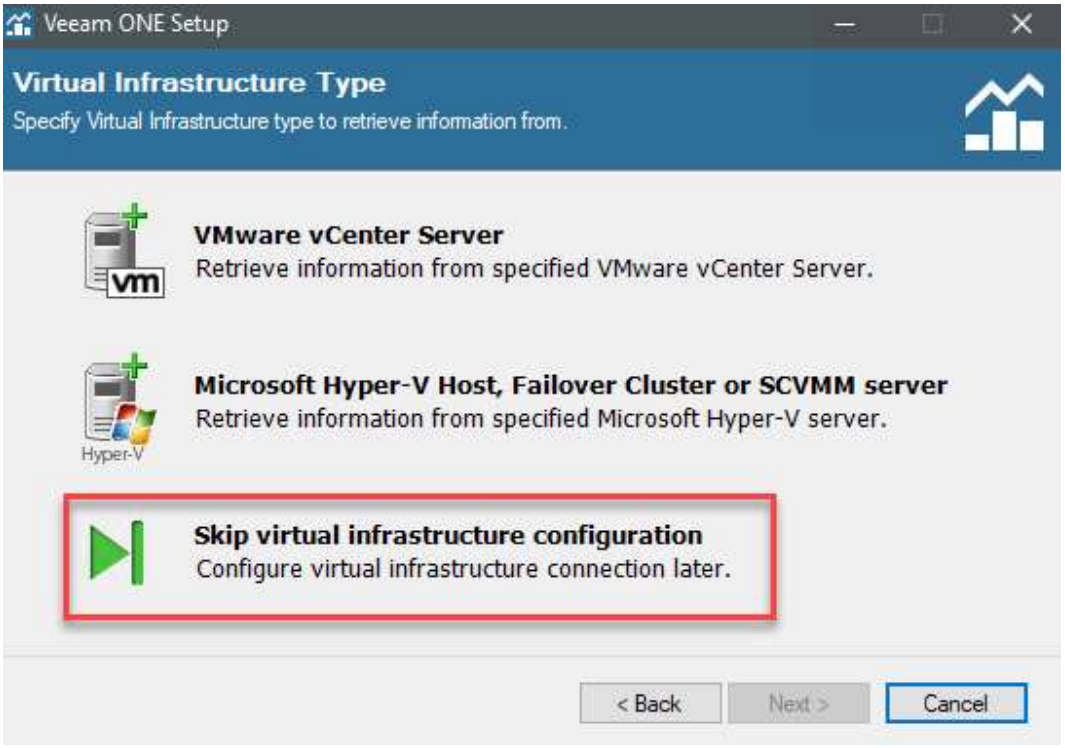

Veeam ONE Setup
Service Account Credentials
Specify Veeam ONE service account credentials.
Enter the user name in the DOMAIN\USERNAME format. The supplied user account must have database owner rights to the Veeam ONE. "Log on as a service" right will be granted to the specified account automatically.
User name:
HOME-VBK01\Veeambackup
Browse...
Password:
< Back
Next >
Cancel

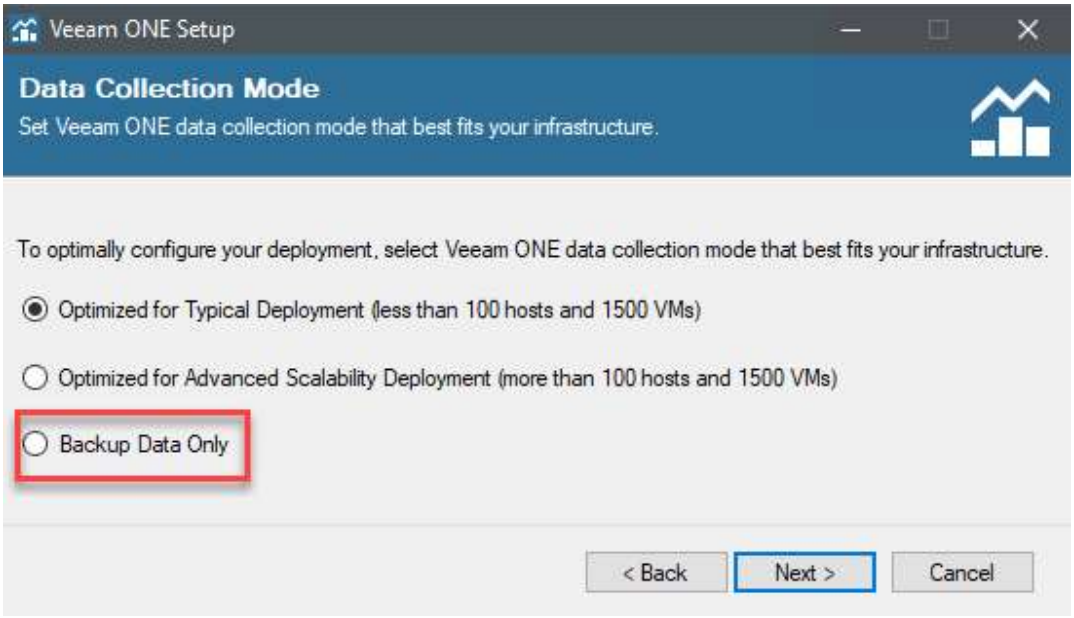

Veeam ONE Setup
SQL Server Instance
Choose SQL Server instance to create Veeam ONE database on.
Install new instance of SQL Server (localhost\VEEAMSQL2016)
Use existing instance of SQL Server (HOSTNAME\INSTANCE)
HOME-VBK01\VEEAMSQL2016
Browse...
Database name:
VeeamONE
Browse...
Connect to SQL Server using
Windows authentication credentials of service account
SQL Server authentication using the Login ID and password below:
Login ID:
sa
Password:
< Back
Next >
Cancel

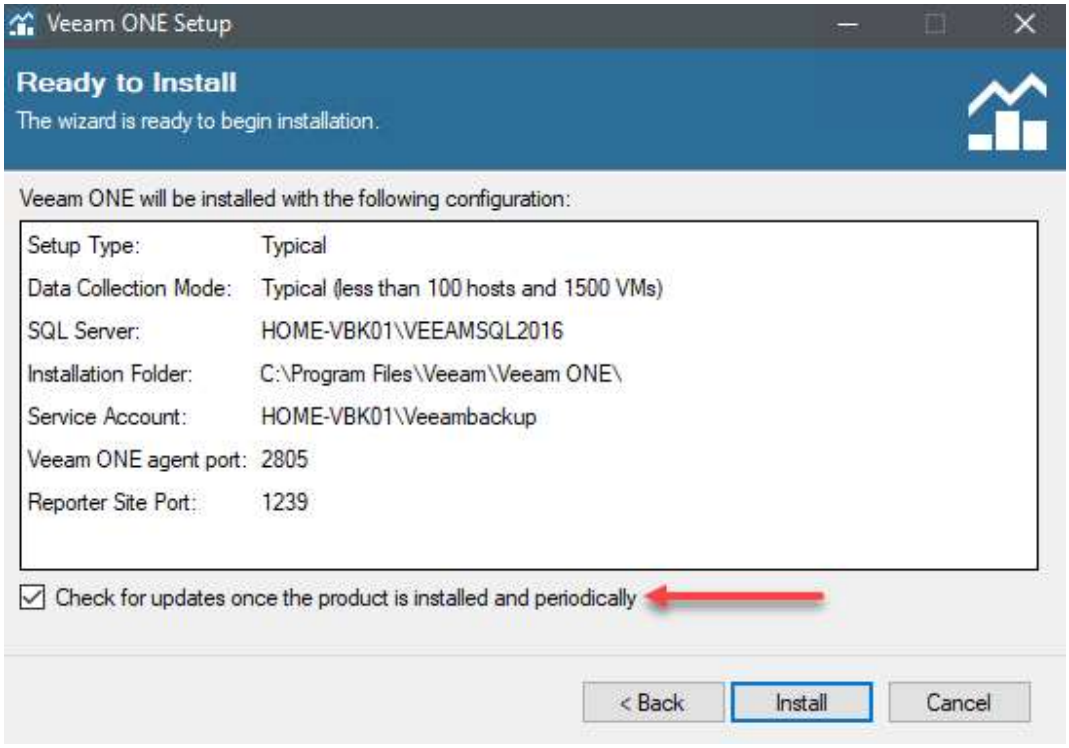

Veeam ONE Setup
Provide License
Provide license file or proceed in Community Edition mode.
Install Veeam ONE in:
Full functionality mode
License file:
Browse...
Community Edition mode
Review Community Edition mode limitations
< Back
Next >
Cancel


Veeam ONE Setup
Connection Information
Enter connection information for Veeam ONE deployment.
Reporter web site port:
1239
Veeam ONE agent port:
2805
Use certificate:
Generate new self-signed certificate
View certificate
Generate new self-signed certificate
Veeam Backup Server Certificate
Windows Admin Center
Windows Admin Center Encryption
Veeam Backup Server Certificate
< Back
Next >
Cancel

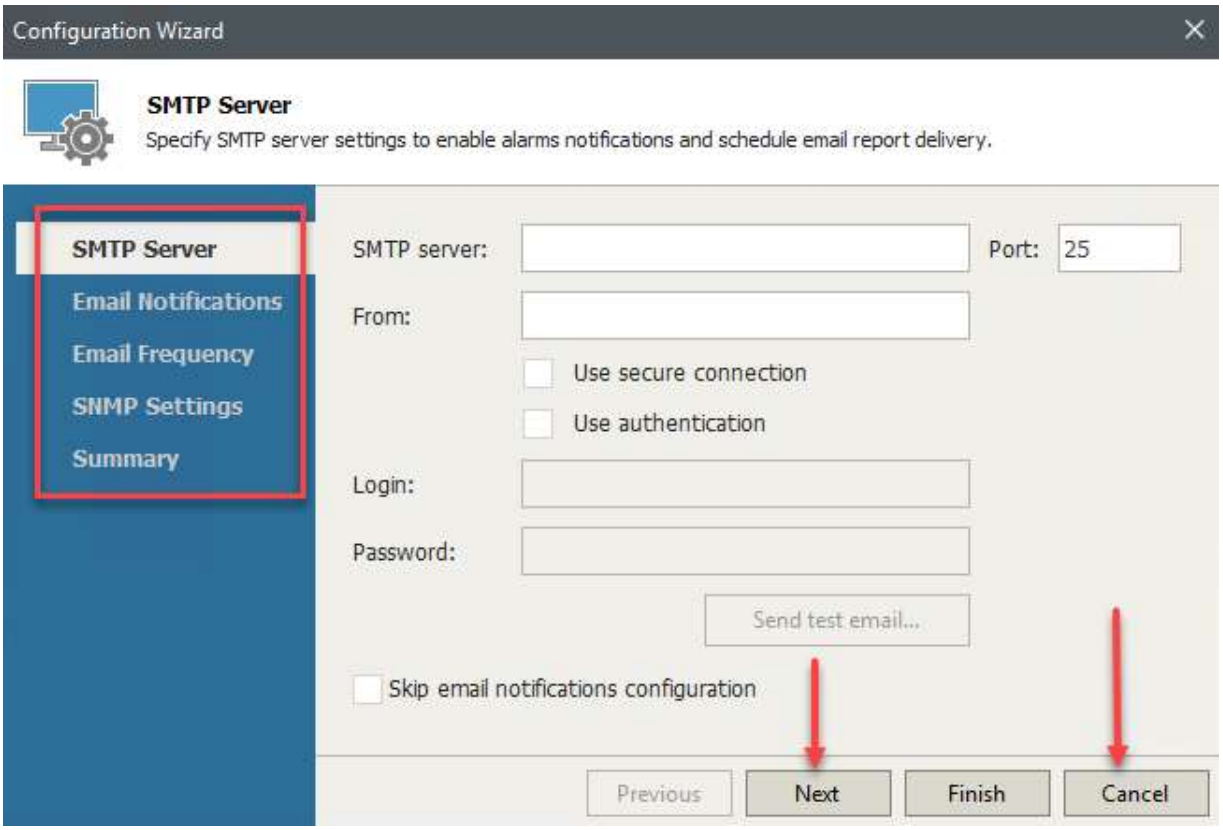

Veeam ONE Setup
Performance Data Caching
Specify local folder for caching performance data retrieved from monitored virtual infrastructure objects.
Performance cache folder:
E:\PerfCache
Browse...
< Back
Next >
Cancel

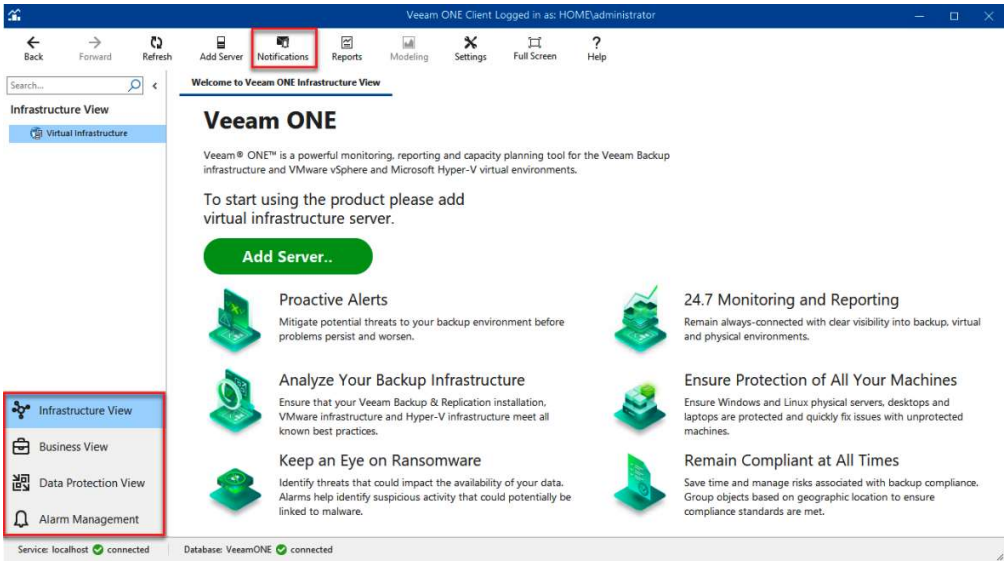

Veeam ONE Setup
Virtual Infrastructure Type
Specify Virtual Infrastructure type to retrieve information from.
VMware vCenter Server
Retrieve information from specified VMware vCenter Server.
Microsoft Hyper-V Host, Failover Cluster or SCVMM server
Retrieve information from specified Microsoft Hyper-V server.
Hyper-V
Skip virtual infrastructure configuration
Configure virtual infrastructure connection later.
< Back
Next >
Cancel

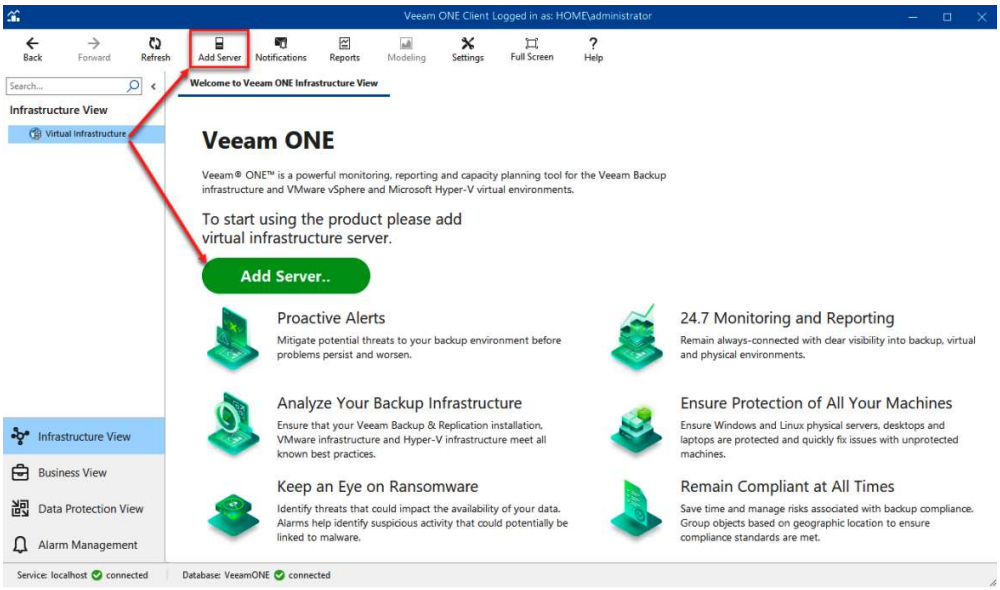

Veeam ONE Setup
Data Collection Mode
Set Veeam ONE data collection mode that best fits your infrastructure.
To optimally configure your deployment, select Veeam ONE data collection mode that best fits your infrastructure.
Optimized for Typical Deployment (less than 100 hosts and 1500 VMs)
Optimized for Advanced Scalability Deployment (more than 100 hosts and 1500 VMs)
Backup Data Only
< Back
Next >
Cancel


Veeam ONE Setup
Ready to Install
The wizard is ready to begin installation.
Veeam ONE will be installed with the following configuration:
Setup Type: Typical
Data Collection Mode: Typical (less than 100 hosts and 1500 VMs)
SQL Server: HOME-VBK01\VEEAMSQL2016
Installation Folder: C:\Program Files\Veeam\Veeam ONE\
Service Account: HOME-VBK01\Veeambackup
Veeam ONE agent port: 2805
Reporter Site Port: 1239
Check for updates once the product is installed and periodically
< Back
Install
Cancel

Veeam ONE Monitor
Veeam ONE Reporter


Configuration Wizard
SMTP Server
Specify SMTP server settings to enable alarms notifications and schedule email report delivery.
SMTP Server
Email Notifications
Email Frequency
SNMP Settings
Summary
SMTP server:
Port:
25
From:
Use secure connection
Use authentication
Login:
Password:
Send test email...
Skip email notifications configuration
Previous
Next
Finish
Cancel


Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Search...
Infrastructure View
Virtual Infrastructure
Welcome to Veeam ONE Infrastructure View
Veeam ONE
Veeam® ONE™ is a powerful monitoring, reporting and capacity planning tool for the Veeam Backup infrastructure and VMware vSphere and Microsoft Hyper-V virtual environments.
To start using the product please add virtual infrastructure server.
Add Server..
Proactive Alerts
Mitigate potential threats to your backup environment before problems persist and worsen.
24.7 Monitoring and Reporting
Remain always-connected with clear visibility into backup, virtual and physical environments.
Analyze Your Backup Infrastructure
Ensure that your Veeam Backup & Replication installation, VMware infrastructure and Hyper-V infrastructure meet all known best practices.
Ensure Protection of All Your Machines
Ensure Windows and Linux physical servers, desktops and laptops are protected and quickly fix issues with unprotected machines.
Keep an Eye on Ransomware
Identify threats that could impact the availability of your data. Alarms help identify suspicious activity that could potentially be linked to malware.
Remain Compliant at All Times
Save time and manage risks associated with backup compliance. Group objects based on geographic location to ensure compliance standards are met.
Infrastructure View
Business View
Data Protection View
Alarm Management
Service: localhost connected
Database: VeeamONE connected


Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Search...
Infrastructure View
Virtual Infrastructure
Welcome to Veeam ONE Infrastructure View
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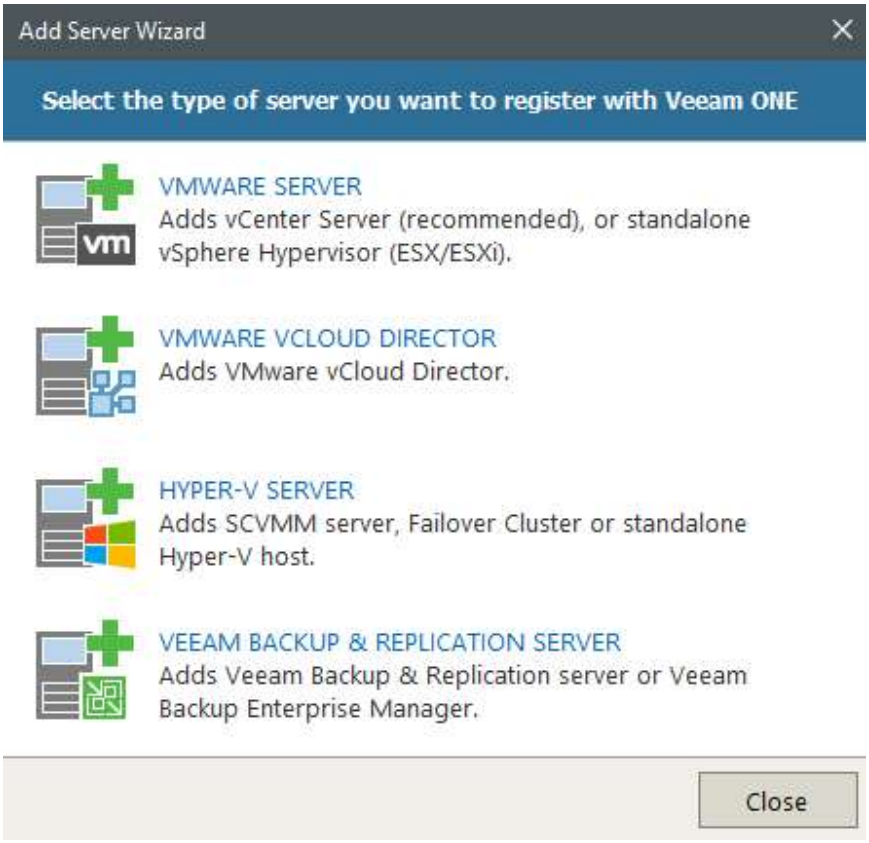
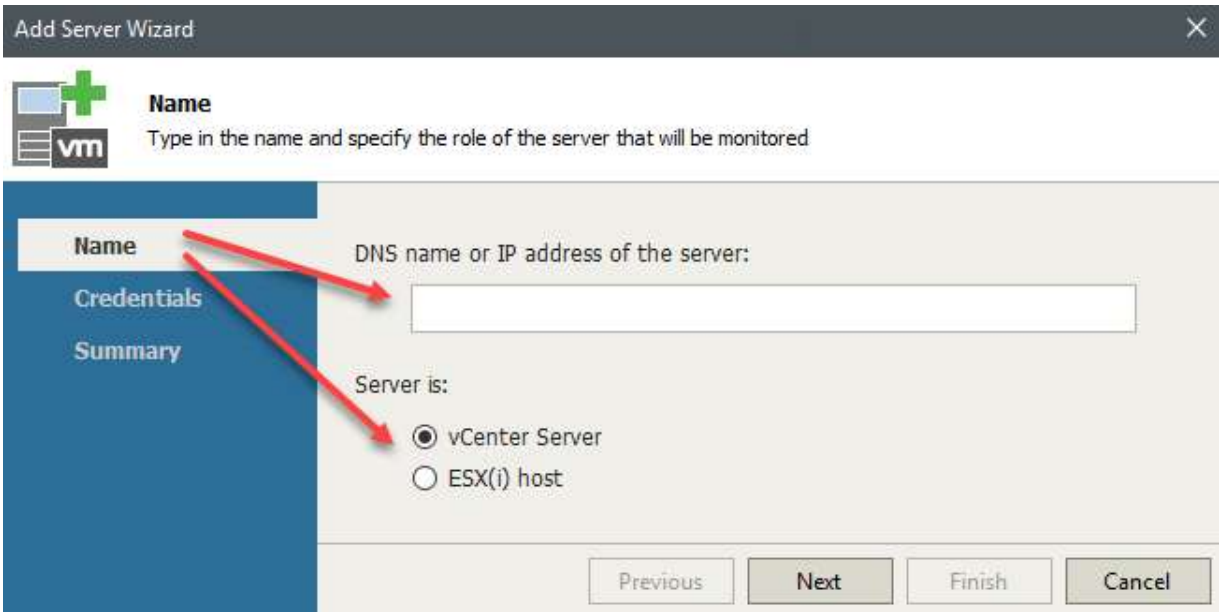
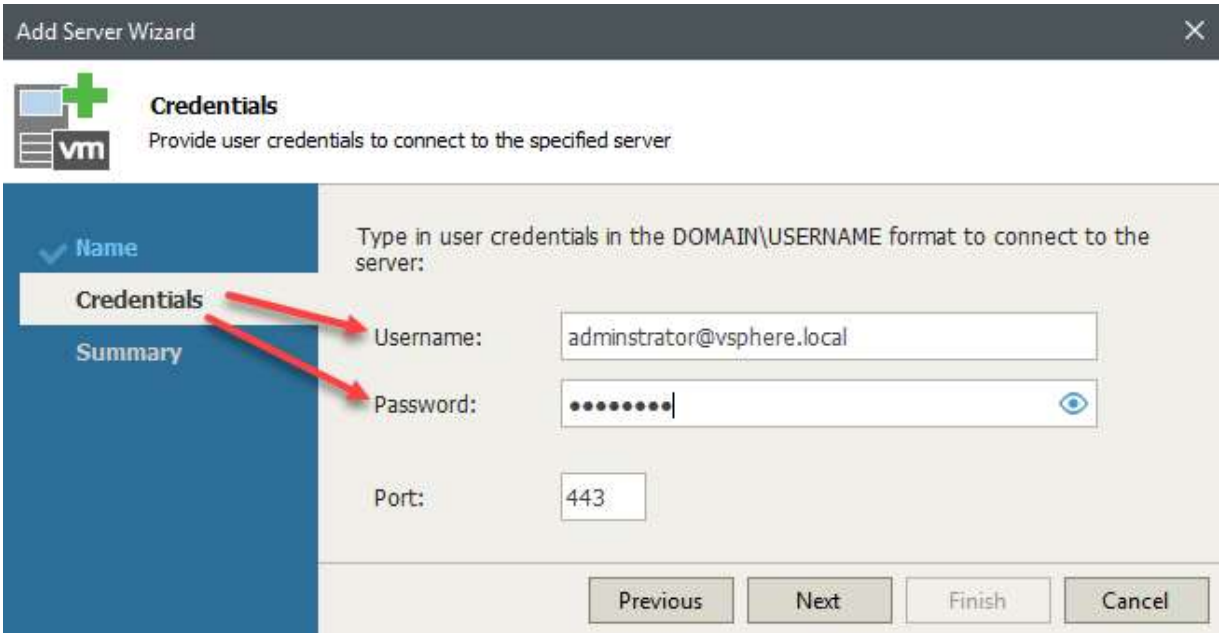
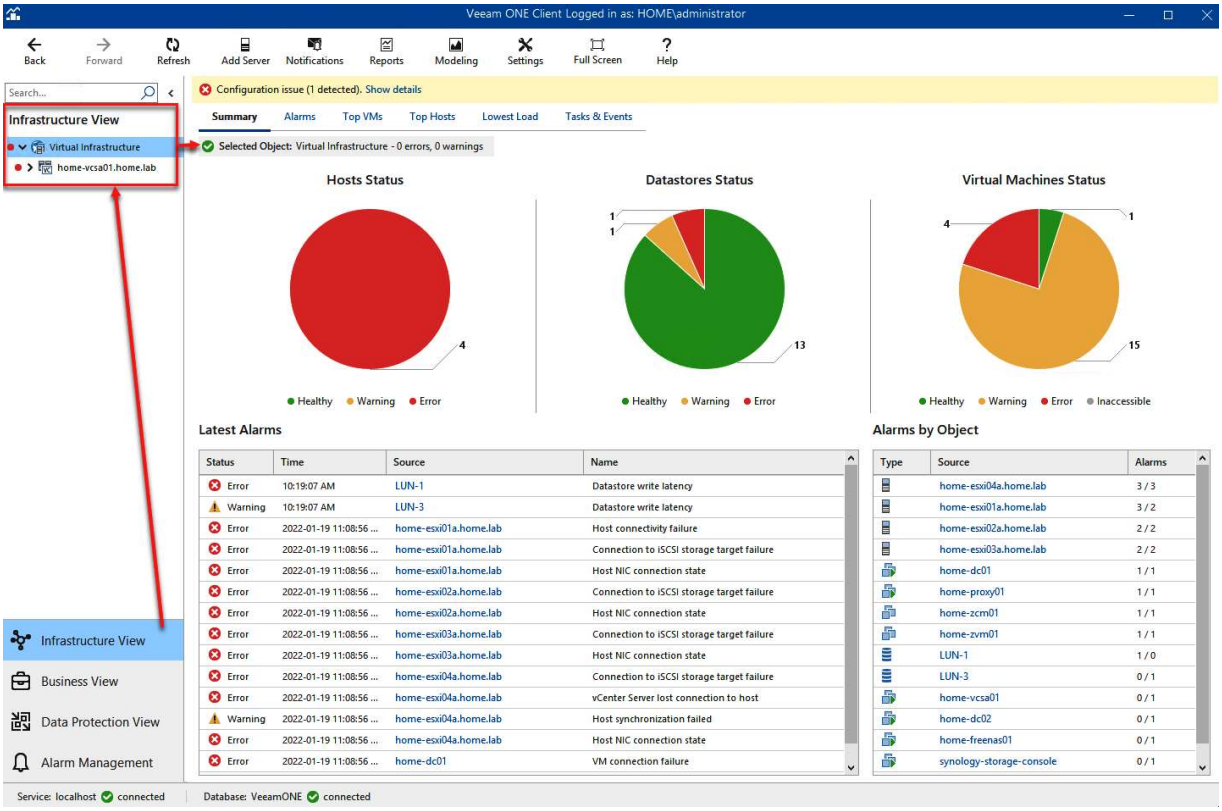
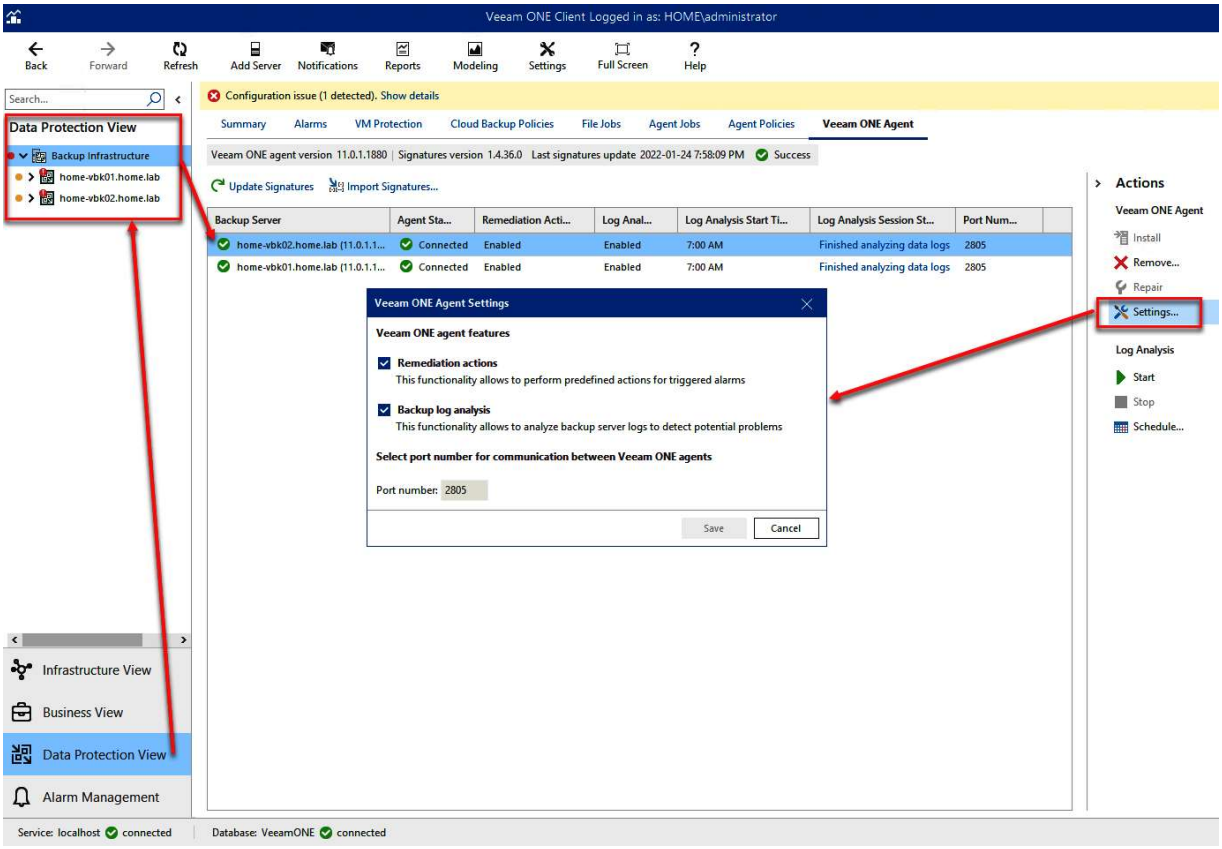
Save time and manage risks associated with backup compliance. Group objects based on geographic location to ensure compliance standards are met.
Infrastructure View
Business View
Data Protection View
Alarm Management
Service: localhost connected
Database: VeeamONE connected

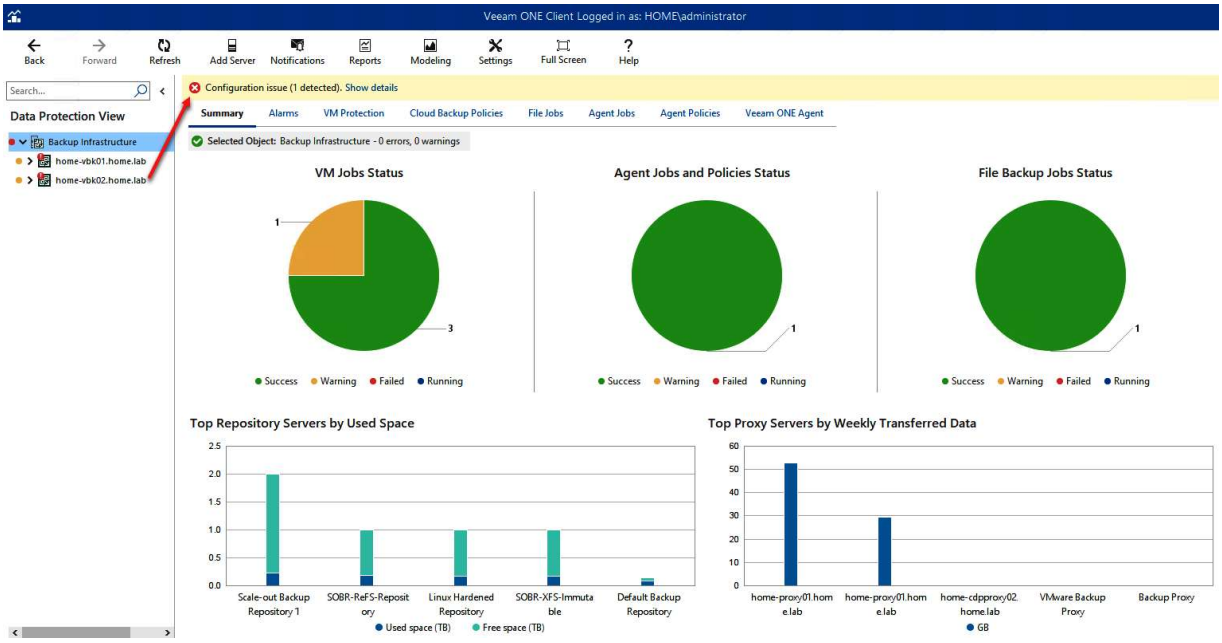

Add Server Wizard
Select the type of server you want to register with Veeam ONE
VMWARE SERVER
Adds vCenter Server (recommended), or standalone vSphere Hypervisor (ESX/ESXi).
VMWARE VCLOUD DIRECTOR
Adds VMware vCloud Director.
HYPER-V SERVER
Adds SCVMM server, Failover Cluster or standalone Hyper-V host.
VEEAM BACKUP & REPLICATION SERVER
Adds Veeam Backup & Replication server or Veeam Backup Enterprise Manager.
Close


Add Server Wizard
Name
Type in the name and specify the role of the server that will be monitored
Name
Credentials
Summary
DNS name or IP address of the server:
Server is:
vCenter Server
ESX(i) host
Previous
Next
Finish
Cancel

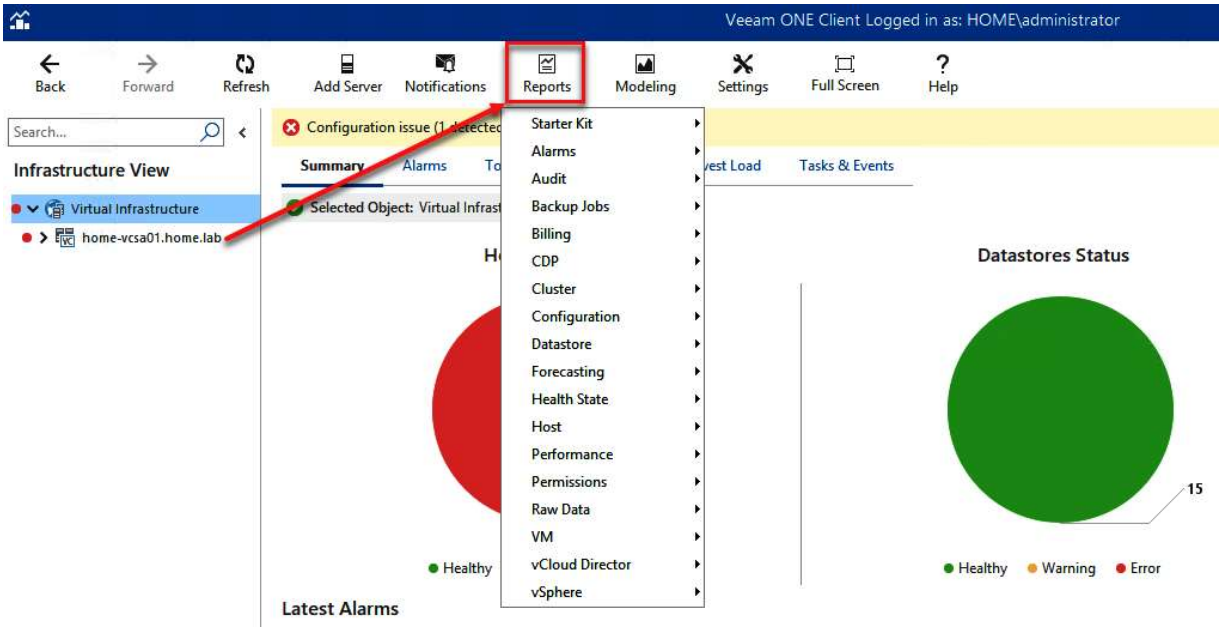

Add Server Wizard
Credentials
Provide user credentials to connect to the specified server
Name
Credentials
Summary
Type in user credentials in the DOMAIN\USERNAME format to connect to the server:
Username:
adminstrator@vsphere.local
Password:
Port:
443
Previous
Next
Finish
Cancel

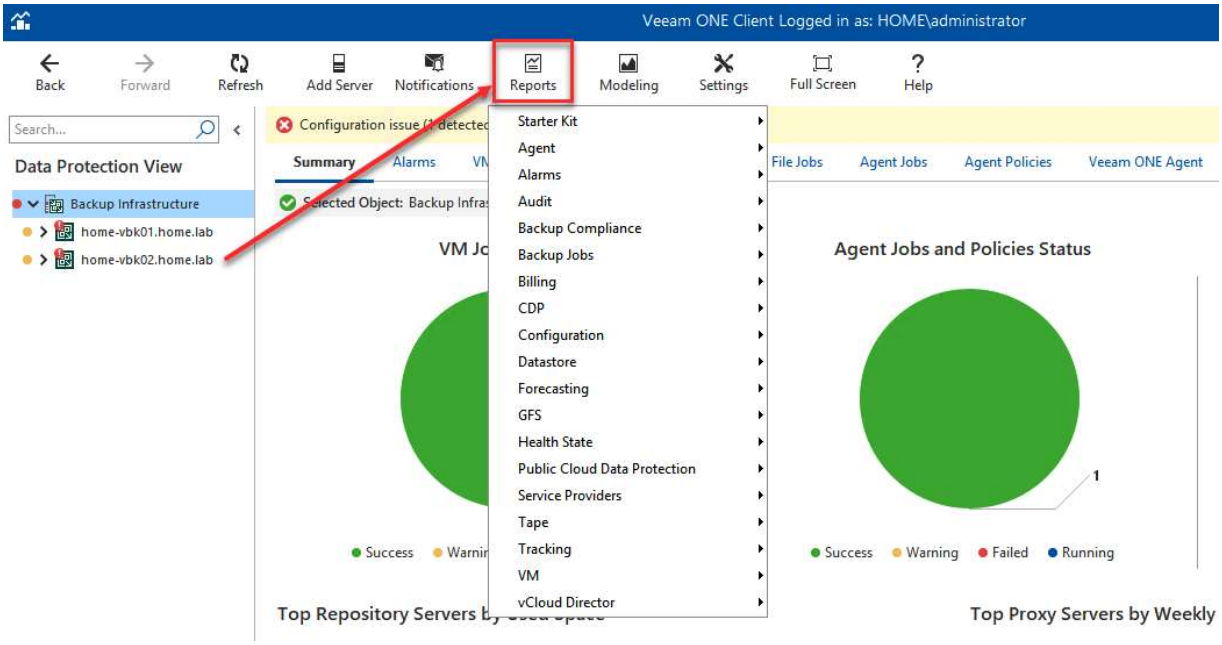

Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Infrastructure View
Virtual Infrastructure
home-vcsa01.home.lab
Configuration issue (1 detected). Show details
Summary
Alarms
Top VMs
Top Hosts
Lowest Load
Tasks & Events
Selected Object: Virtual Infrastructure - 0 errors, 0 warnings
Hosts Status
Datastores Status
Virtual Machines Status
Healthy
Warning
Error
Inaccessible
Latest Alarms
Alarms by Object
Infrastructure View
Business View
Data Protection View
Alarm Management
Service: localhost connected
Database: VeeamONE connected

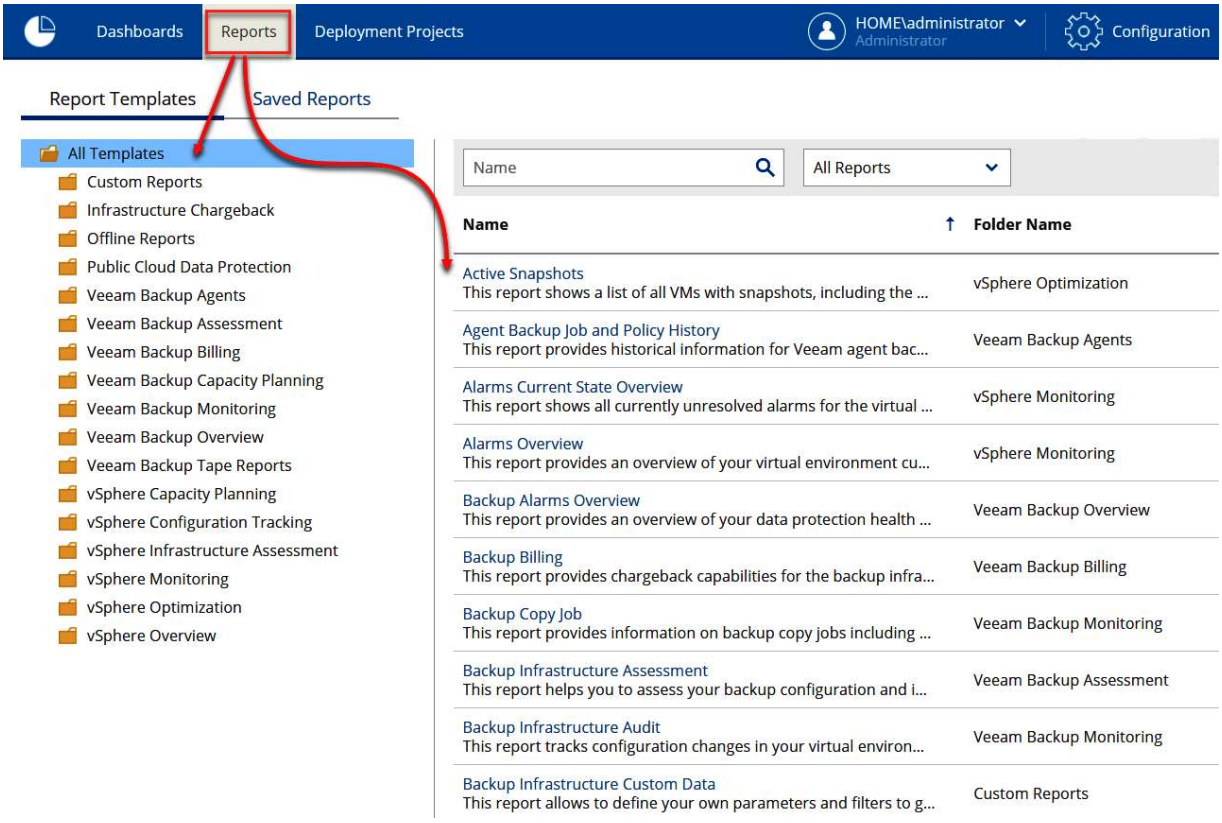

Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Search...
Data Protection View
Backup Infrastructure
home-vbk01.home.lab
home-vbk02.home.lab
Configuration issue (1 detected). Show details
Summary
Alarms
VM Protection
Cloud Backup Policies
File Jobs
Agent Jobs
Agent Policies
Veeam ONE Agent
Veeam ONE agent version 11.0.1.1880 | Signatures version 1.4.36.0 Last signatures update 2022-01-24 7:58:09 PM Success
Update Signatures
Import Signatures...
Backup Server
Agent Sta...
Remediation Acti...
Log Anal...
Log Analysis Start Ti...
Log Analysis Session St...
Port Num...
home-vbk02.home.lab (11.0.1.1... Connected Enabled Enabled 7:00 AM Finished analyzing data logs 2805
home-vbk01.home.lab (11.0.1.1... Connected Enabled Enabled 7:00 AM Finished analyzing data logs 2805
Veeam ONE Agent Settings
Veeam ONE agent features
Remediation actions
This functionality allows to perform predefined actions for triggered alarms
Backup log analysis
This functionality allows to analyze backup server logs to detect potential problems
Select port number for communication between Veeam ONE agents
Port number: 2805
Save
Cancel
Actions
Veeam ONE Agent
Install
Remove...
Repair
Settings...
Log Analysis
Start
Stop
Schedule...
Infrastructure View
Business View
Data Protection View
Alarm Management
Service: localhost connected
Database: VeeamONE connected

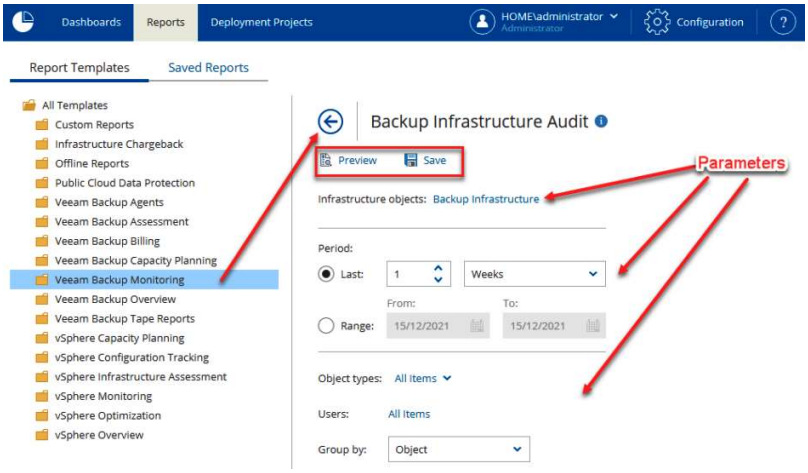

Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Search...
Data Protection View
Backup Infrastructure
home-vbk01.home.lab
home-vbk02.home.lab
Configuration issue (1 detected). Show details
Summary
Alarms
VM Protection
Cloud Backup Policies
File Jobs
Agent Jobs
Agent Policies
Veeam ONE Agent
Selected Object: Backup Infrastructure - 0 errors, 0 warnings
VM Jobs Status
Agent Jobs and Policies Status
File Backup Jobs Status
Success
Warning
Failed
Running
Top Repository Servers by Used Space
Scale-out Backup Repository 1
SOBR-ReFS-Repository
Linux Hardened Repository
SOBR-XFS-Immutable
Default Backup Repository
Used space (TB)
Free space (TB)
Top Proxy Servers by Weekly Transferred Data
home-proxy01.home.lab
home-proxy01.home.lab
home-cdpproxy02.home.lab
VMware Backup Proxy
Backup Proxy
GB

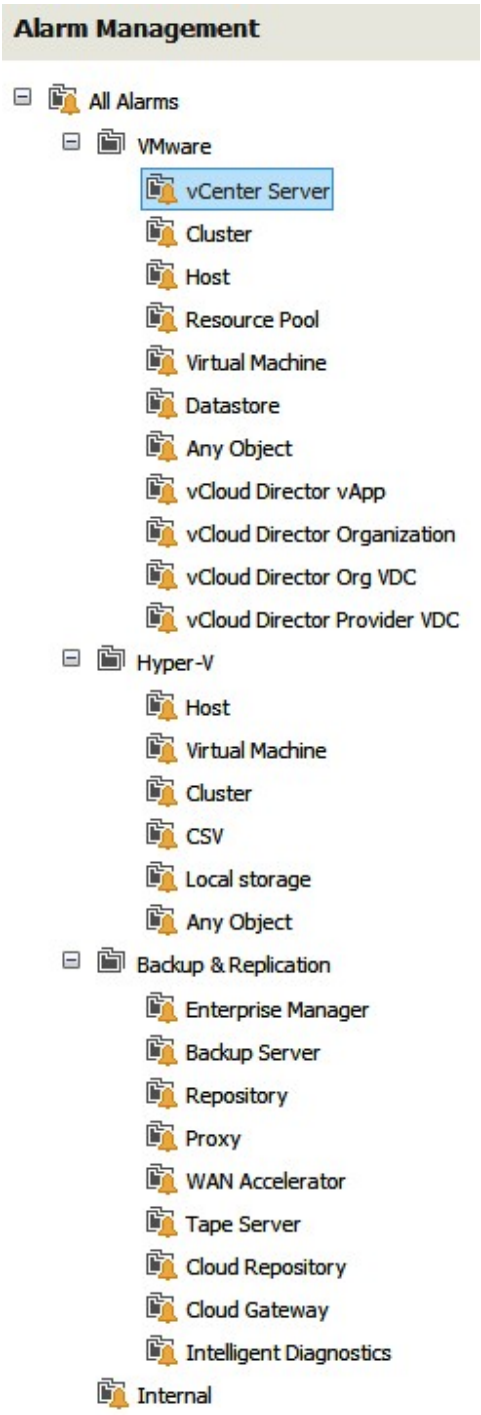
- Nutanix AHV Protection
- Infrastructure Chargeback
- Veeam Cloud Connect
- Veeam Backup Assessment
- Veeam Backup Billing
- Veeam Backup Capacity Planning
- Veeam Backup Monitoring
- Veeam Backup Overview
- Veeam Backup Tape Reports
- Veeam Backup Agents
- Public Cloud Data Protection
- VMware Infrastructure Assessment
- VMware Overview
- VMware Monitoring
- VMware Optimization
- VMware Capacity Planning
- VMware Configuration Tracking
- Hyper-V Infrastructure Assessment
- Hyper-V Overview
- Hyper-V Monitoring
- Hyper-V Optimization
- Hyper-V Capacity Planning
- Custom Reports
- vCloud Director
- Offline Reports

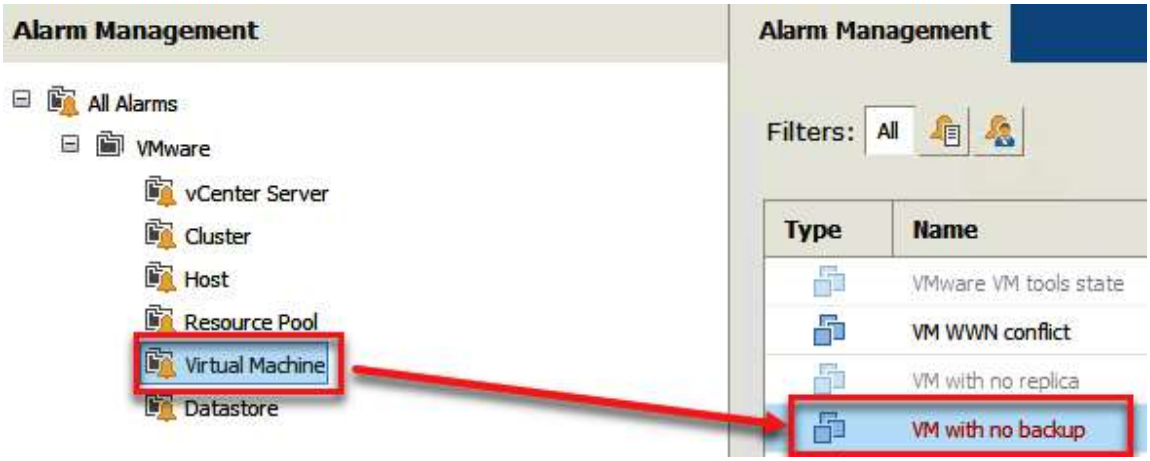

Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Search...
Infrastructure View
Virtual Infrastructure
home-vcsa01.home.lab
Configuration issue (1 detected)
Summary
Alarms
Tasks & Events
Selected Object: Virtual Infrast
Starter Kit
Alarms
Audit
Backup Jobs
Billing
CDP
Cluster
Configuration
Datastore
Forecasting
Health State
Host
Performance
Permissions
Raw Data
VM
vCloud Director
vSphere
Datastores Status
15
Healthy
Warning
Error
Healthy
Latest Alarms

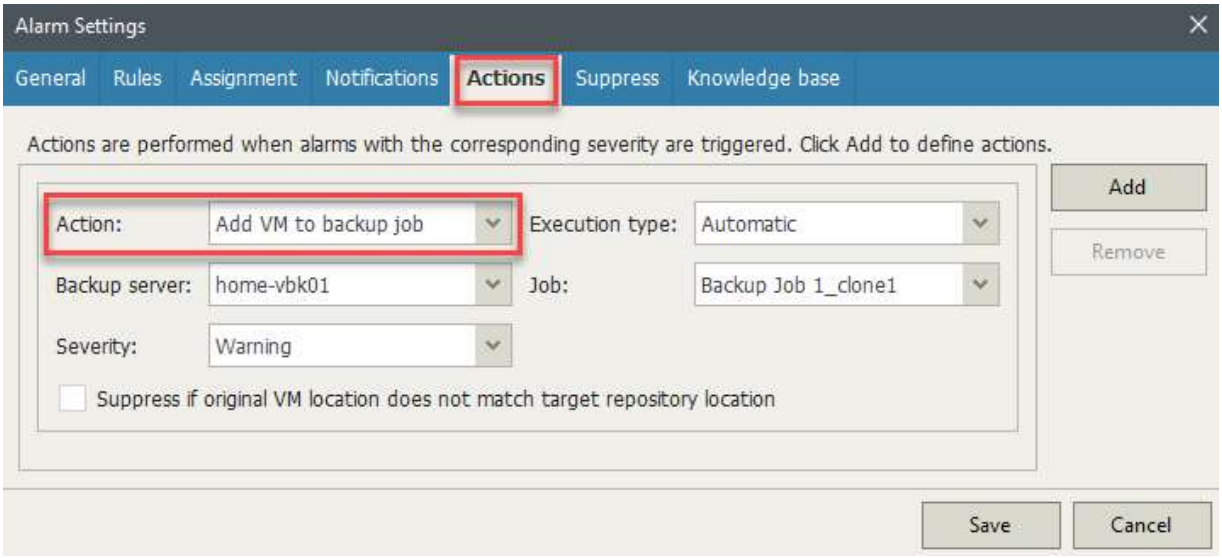

Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Search...
Data Protection View
Backup Infrastructure
home-vbk01.home.lab
home-vbk02.home.lab
Configuration issue (2 detected)
Summary
Alarms
File Jobs
Agent Jobs
Agent Policies
Veeam ONE Agent
Selected Object: Backup Infras
Starter Kit
Agent
Alarms
Audit
Backup Compliance
Backup Jobs
Billing
CDP
Configuration
Datastore
Forecasting
GFS
Health State
Public Cloud Data Protection
Service Providers
Tape
Tracking
VM
vCloud Director
Agent Jobs and Policies Status
1
Success
Warning
Failed
Running
Success
Top Repository Servers
Top Proxy Servers by Weekly

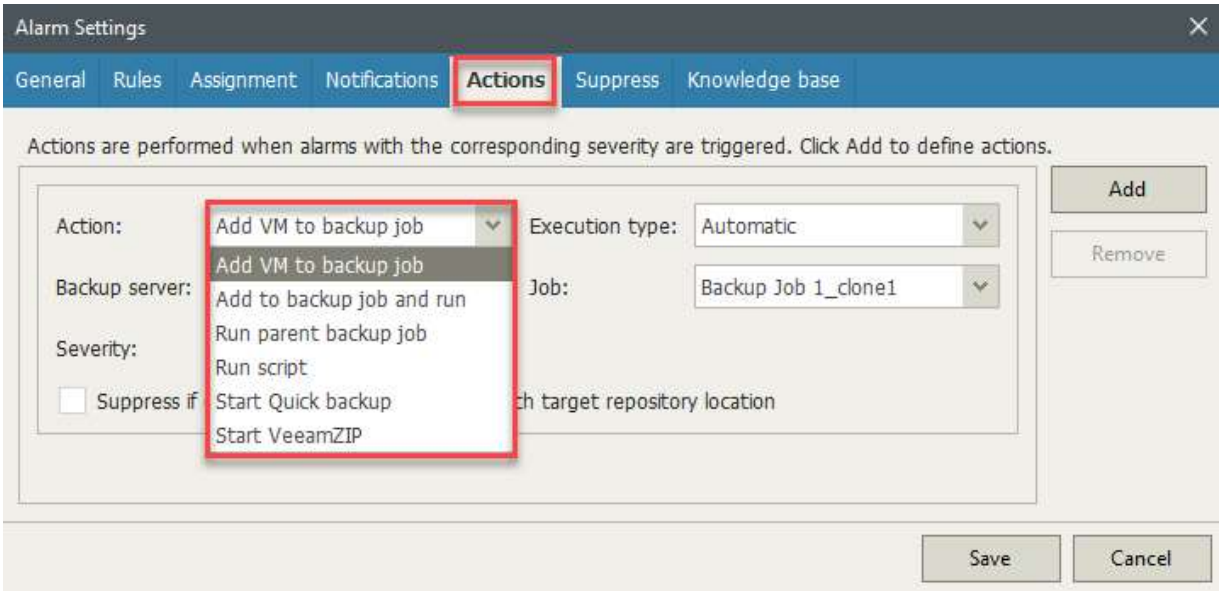

Dashboards
Reports
Deployment Projects
HOME\administrator
Administrator
Configuration
Report Templates
Saved Reports
All Templates
Custom Reports
Infrastructure Chargeback
Offline Reports
Public Cloud Data Protection
Veeam Backup Agents
Veeam Backup Assessment
Veeam Backup Billing
Veeam Backup Capacity Planning
Veeam Backup Monitoring
Veeam Backup Overview
Veeam Backup Tape Reports
vSphere Capacity Planning
vSphere Configuration Tracking
vSphere Infrastructure Assessment
vSphere Monitoring
vSphere Optimization
vSphere Overview
Name
All Reports
Name
Folder Name
Active Snapshots
This report shows a list of all VMs with snapshots, including the ...
vSphere Optimization
Agent Backup Job and Policy History
This report provides historical information for Veeam agent bac...
Veeam Backup Agents
Alarms Current State Overview
This report shows all currently unresolved alarms for the virtual ...
vSphere Monitoring
Alarms Overview
This report provides an overview of your virtual environment cu...
vSphere Monitoring
Backup Alarms Overview
This report provides an overview of your data protection health ...
Veeam Backup Overview
Backup Billing
This report provides chargeback capabilities for the backup infra...
Veeam Backup Billing
Backup Copy Job
This report provides information on backup copy jobs including ...
Veeam Backup Monitoring
Backup Infrastructure Assessment
This report helps you to assess your backup configuration and i...
Veeam Backup Assessment
Backup Infrastructure Audit
This report tracks configuration changes in your virtual environ...
Veeam Backup Monitoring
Backup Infrastructure Custom Data
This report allows to define your own parameters and filters to g...
Custom Reports

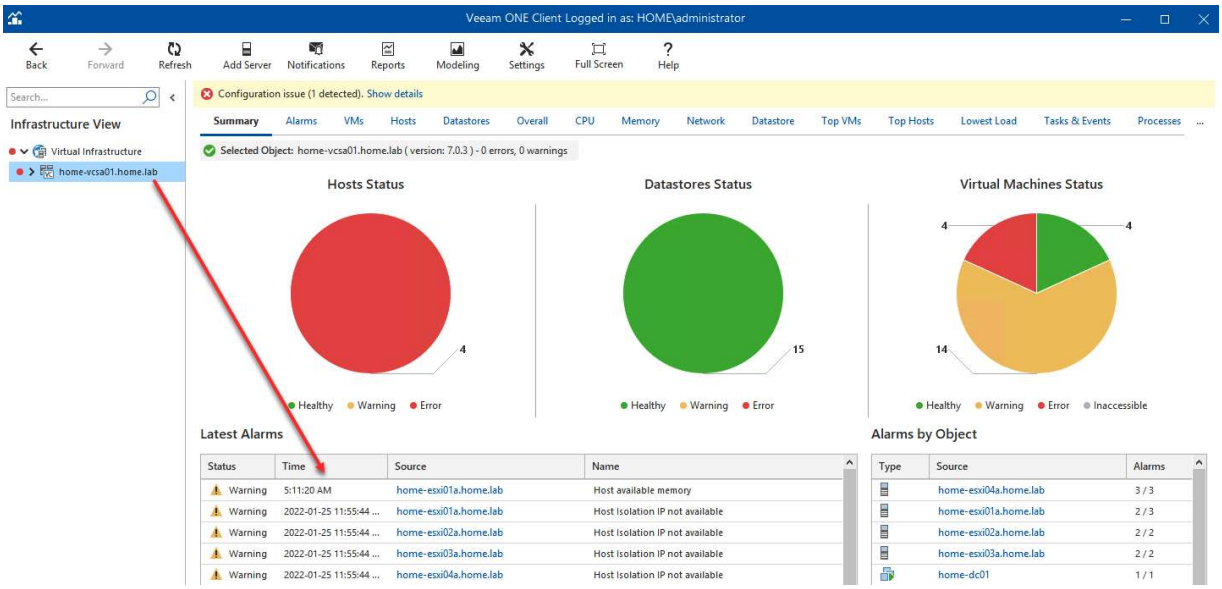

Dashboards
Reports
Deployment Projects
HOME\administrator
Administrator
Configuration
Report Templates
Saved Reports
All Templates
Custom Reports
Infrastructure Chargeback
Offline Reports
Public Cloud Data Protection
Veeam Backup Agents
Veeam Backup Assessment
Veeam Backup Billing
Veeam Backup Capacity Planning
Veeam Backup Monitoring
Veeam Backup Overview
Veeam Backup Tape Reports
vSphere Capacity Planning
vSphere Configuration Tracking
vSphere Infrastructure Assessment
vSphere Monitoring
vSphere Optimization
vSphere Overview
Backup Infrastructure Audit
Preview
Save
Parameters
Infrastructure objects: Backup Infrastructure
Period:
Last:
1
Weeks
From:
To:
Range:
15/12/2021
15/12/2021
Object types: All items
Users: All items
Group by:
Object


Alarm Management
All Alarms
VMware
vCenter Server
Cluster
Host
Resource Pool
Virtual Machine
Datastore
Any Object
vCloud Director vApp
vCloud Director Organization
vCloud Director Org VDC
vCloud Director Provider VDC
Hyper-V
Host
Virtual Machine
Cluster
CSV
Local storage
Any Object
Backup & Replication
Enterprise Manager
Backup Server
Repository
Proxy
WAN Accelerator
Tape Server
Cloud Repository
Cloud Gateway
Intelligent Diagnostics
Internal

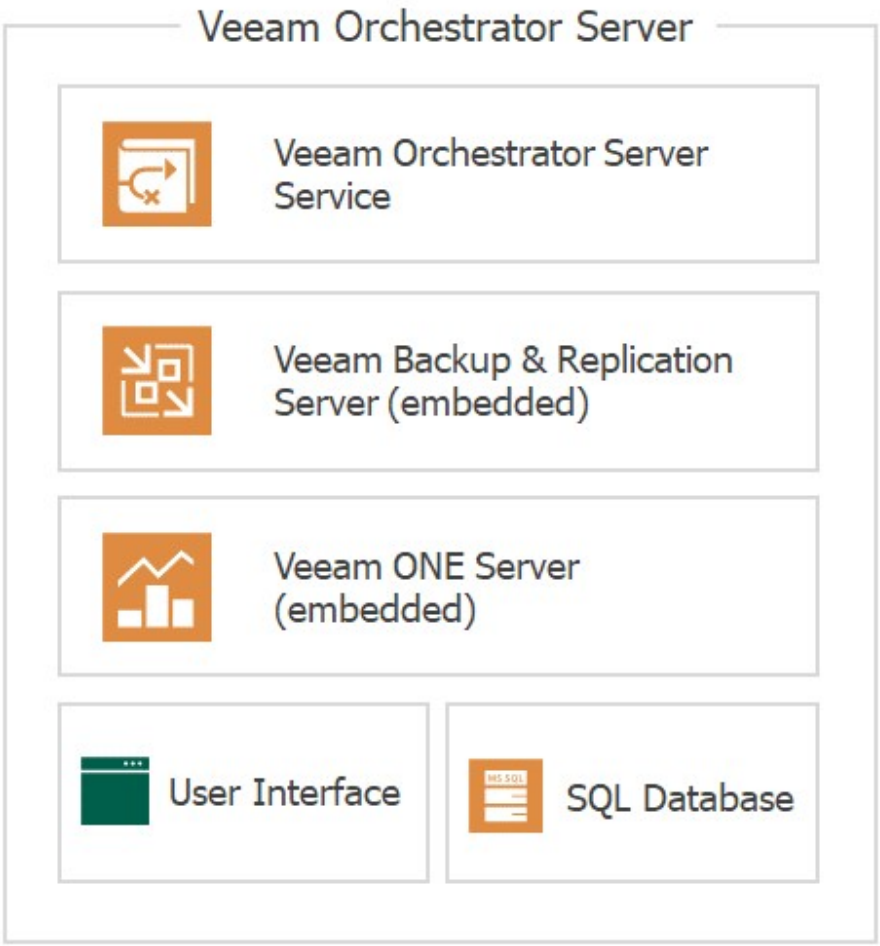

Alarm Management
All Alarms
VMware
vCenter Server
Cluster
Host
Resource Pool
Virtual Machine
Datastore
Alarm Management
Filters:
All
Type
Name
VMware VM tools state
VM WWN conflict
VM with no replica
VM with no backup

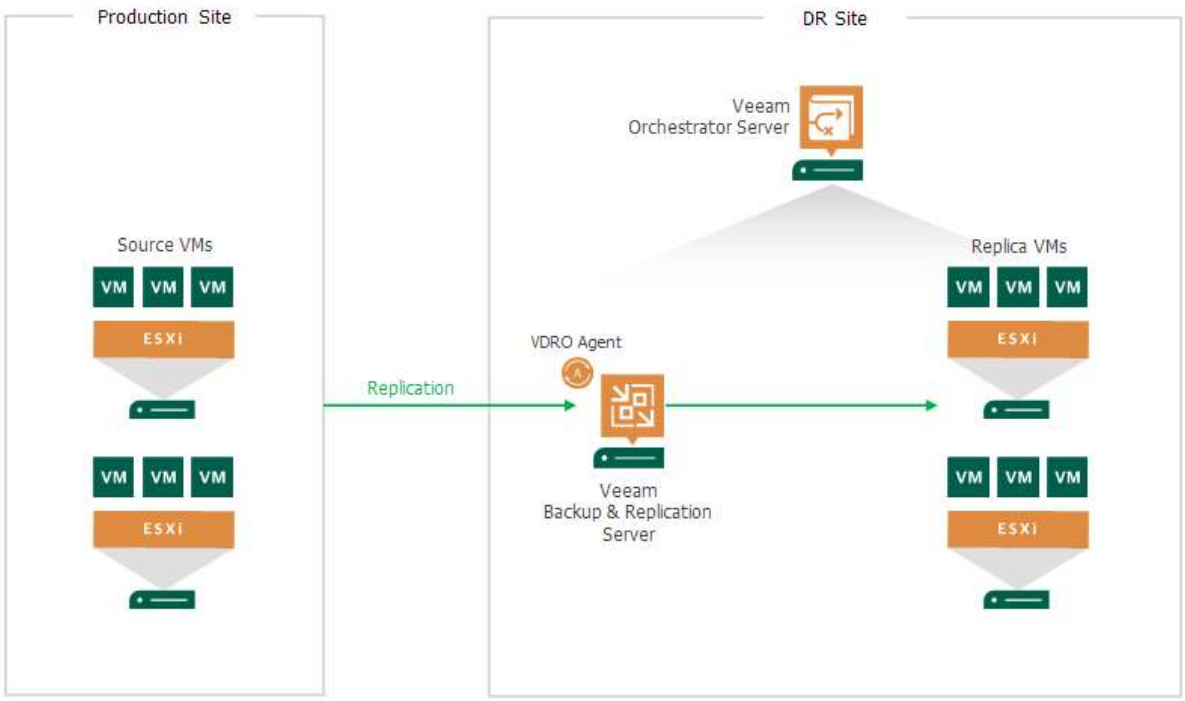

Alarm Settings
General
Rules
Assignment
Notifications
Actions
Suppress
Knowledge base
Actions are performed when alarms with the corresponding severity are triggered. Click Add to define actions.
Action:
Add VM to backup job
Execution type:
Automatic
Backup server:
home-vbk01
Job:
Backup Job 1_clone1
Severity:
Warning
Suppress if original VM location does not match target repository location
Add
Remove
Save
Cancel

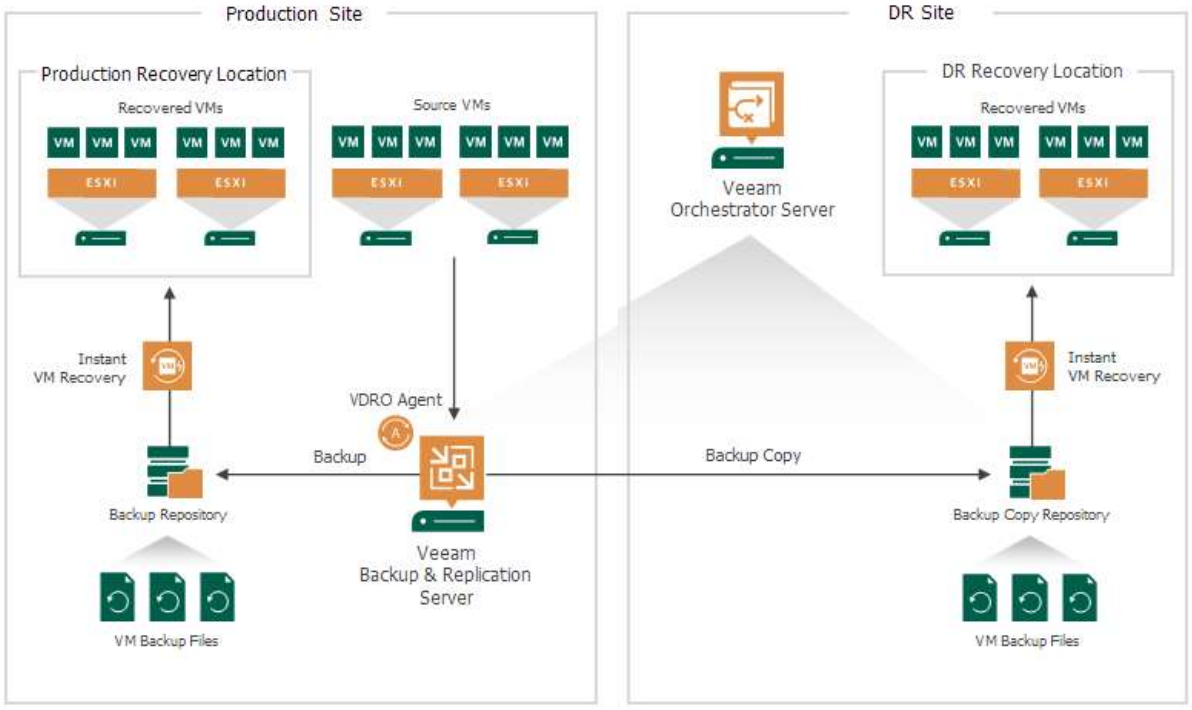

Alarm Settings
General
Rules
Assignment
Notifications
Actions
Suppress
Knowledge base
Actions are performed when alarms with the corresponding severity are triggered. Click Add to define actions.
Action:
Add VM to backup job
Add VM to backup job
Add to backup job and run
Run parent backup job
Run script
Start Quick backup
Start VeeamZIP
Execution type:
Automatic
Backup server:
Job:
Backup Job 1_clone1
Severity:
Suppress if
th target repository location
Add
Remove
Save
Cancel

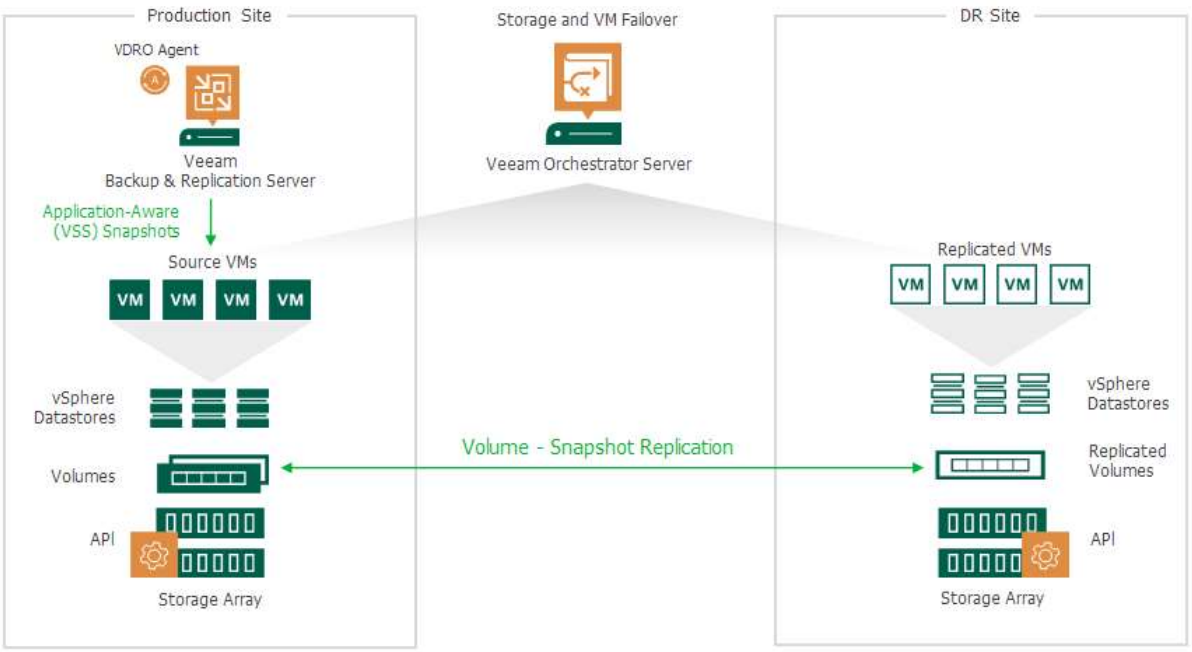

Veeam ONE Client Logged in as: HOME\administrator
Back
Forward
Refresh
Add Server
Notifications
Reports
Modeling
Settings
Full Screen
Help
Infrastructure View
Virtual Infrastructure
home-vcsa01.home.lab
Configuration issue (1 detected). Show details
Summary
Alarms
VMs
Hosts
Datastores
Overall
CPU
Memory
Network
Datastore
Top VMs
Top Hosts
Lowest Load
Tasks & Events
Processes
Selected Object: home-vcsa01.home.lab (version: 7.0.3) - 0 errors, 0 warnings
Hosts Status
Datastores Status
Virtual Machines Status
Healthy
Warning
Error
Inaccessible
Latest Alarms
Status
Time
Source
Name
Warning
5:11:20 AM
home-esxi01a.home.lab
Host available memory
Warning
2022-01-25 11:55:44 ...
home-esxi01a.home.lab
Host Isolation IP not available
Warning
2022-01-25 11:55:44 ...
home-esxi02a.home.lab
Host Isolation IP not available
Warning
2022-01-25 11:55:44 ...
home-esxi03a.home.lab
Host Isolation IP not available
Warning
2022-01-25 11:55:44 ...
home-esxi04a.home.lab
Host Isolation IP not available
Alarms by Object
Type
Source
Alarms
home-esxi04a.home.lab
3 / 3
home-esxi01a.home.lab
2 / 3
home-esxi02a.home.lab
2 / 2
home-esxi03a.home.lab
2 / 2
home-dc01
1 / 1

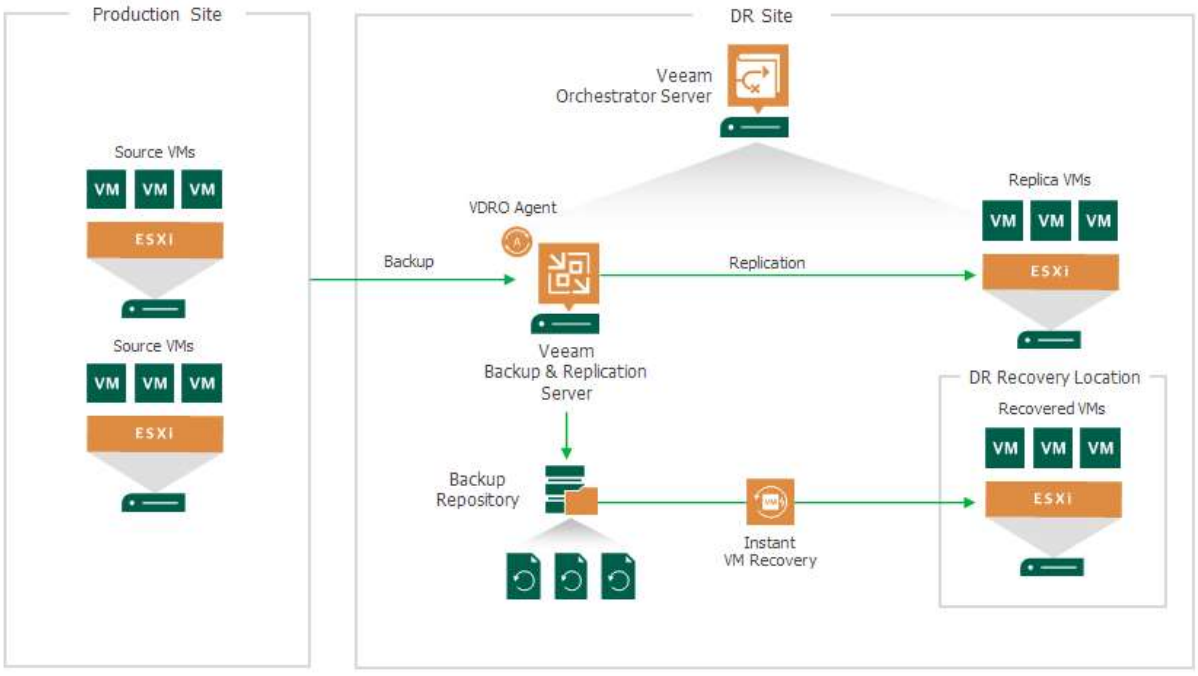
Chapter 10: Introducing Veeam Disaster Recovery Orchestrator



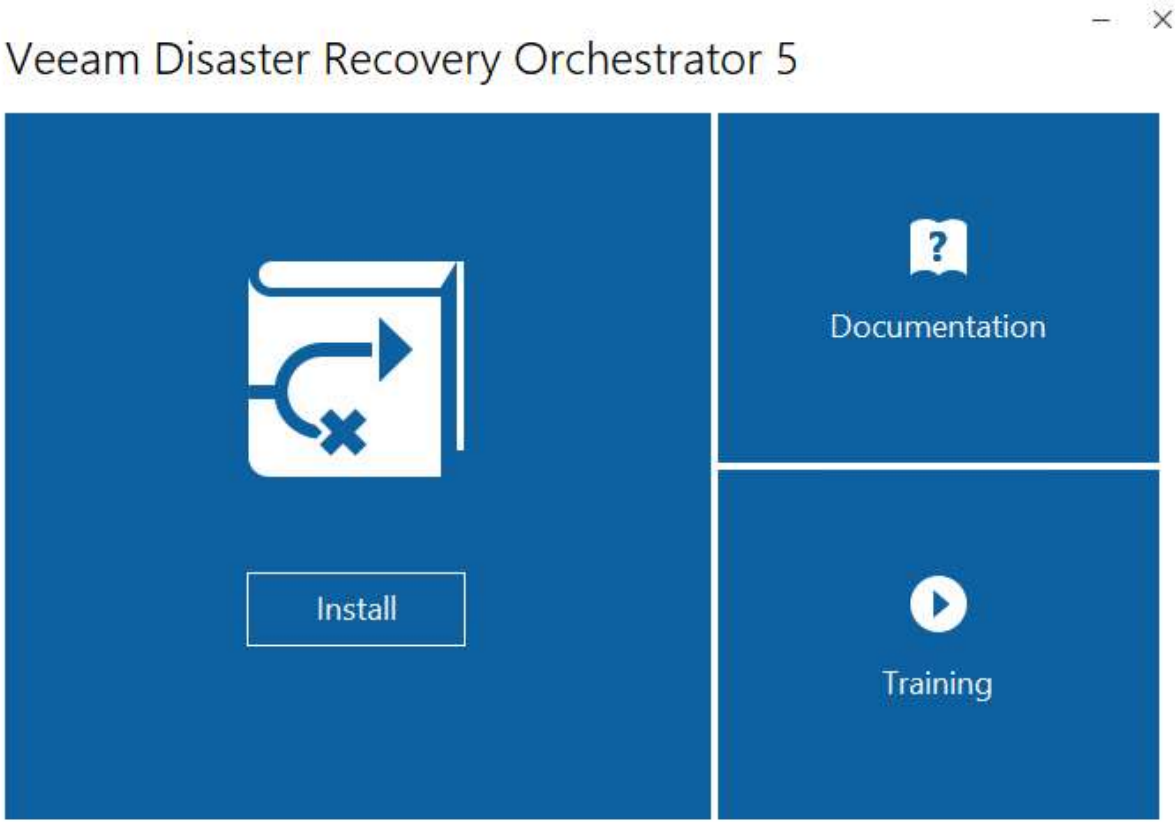

Production Site
DR Site
Veeam
Orchestrator Server
Source VMs
Replica VMs
VM
ESXi
VDRO Agent
Replication
Veeam
Backup & Replication
Server


Production Site
DR Site
Production Recovery Location
Recovered VMs
Source VMs
DR Recovery Location
Veeam
Orchestrator Server
Instant
VM Recovery
VDRO Agent
Backup
Backup Copy
Backup Repository
Backup Copy Repository
Veeam
Backup & Replication
Server
VM Backup Files


Production Site
VDRO Agent
Veeam
Backup & Replication Server
Application-Aware
(VSS) Snapshots
Source VMs
VM
VM
VM
VM
vSphere
Datastores
Volumes
API
Storage Array
Storage and VM Failover
Veeam Orchestrator Server
Volume - Snapshot Replication
DR Site
Replicated VMs
VM
VM
VM
VM
vSphere
Datastores
Replicated
Volumes
API
Storage Array


Production Site
Source VMs
VM
VM
VM
ESXi
Source VMs
VM
VM
VM
ESXi
DR Site
Veeam
Orchestrator Server
VDRO Agent
Backup
Replication
Veeam
Backup & Replication
Server
Backup
Repository
Instant
VM Recovery
Replica VMs
VM
VM
VM
ESXi
DR Recovery Location
Recovered VMs
VM
VM
VM
ESXi

Number of Virtualization Hosts*	100	100-500	500-1000	>1000
CPU	6 vCPUs (minimum) - 8 vCPUs (recommended) for the Orchestrator server 4 vCPUs (minimum) - 8 vCPUs (recommended) for the Microsoft SQL Server and Veeam ONE database	8 vCPUs (minimum) - 12 vCPUs (recommended) for the Orchestrator server 8 vCPUs (minimum) - 12 vCPUs (recommended) for the Microsoft SQL Server and Veeam ONE database	12 vCPUs (minimum) - 16 vCPUs (recommended) for the Orchestrator server 12 vCPUs (minimum) - 16 vCPUs (recommended) for the Microsoft SQL Server and Veeam ONE database	>16 vCPUs for the Orchestrator server >16 vCPUs for the Microsoft SQL Server and Veeam ONE database
Memory	6 GB (minimum) - 8 GB (recommended) for the Orchestrator server 4 GB (minimum) - 8 GB (recommended) for the Microsoft SQL Server and Veeam ONE database	8 GB (minimum) - 40 GB (recommended) for the Orchestrator server 8 GB (minimum) - 40 GB (recommended) for the Microsoft SQL Server and Veeam ONE database	40 GB (minimum) - 70 GB (recommended) for the Orchestrator server 40 GB (minimum) - 70 GB (recommended) for the Microsoft SQL Server and Veeam ONE database	>70 GB for the Orchestrator server >70 GB for the Microsoft SQL Server and Veeam ONE database
Hard Disk Space	50 GB for product installation and sufficient disk space for the Microsoft SQL Server and Veeam ONE database (if installed locally). Use the Veeam ONE Database Calculator to size application data.			



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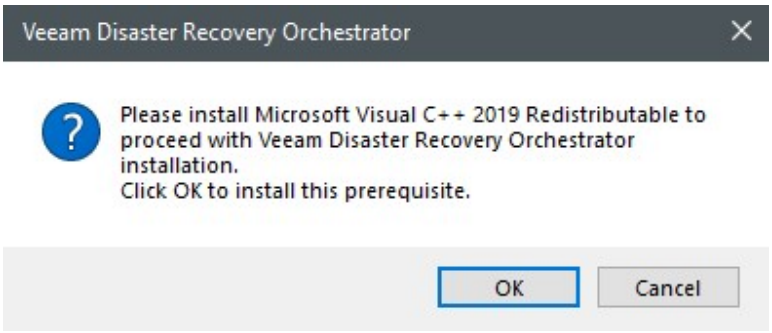
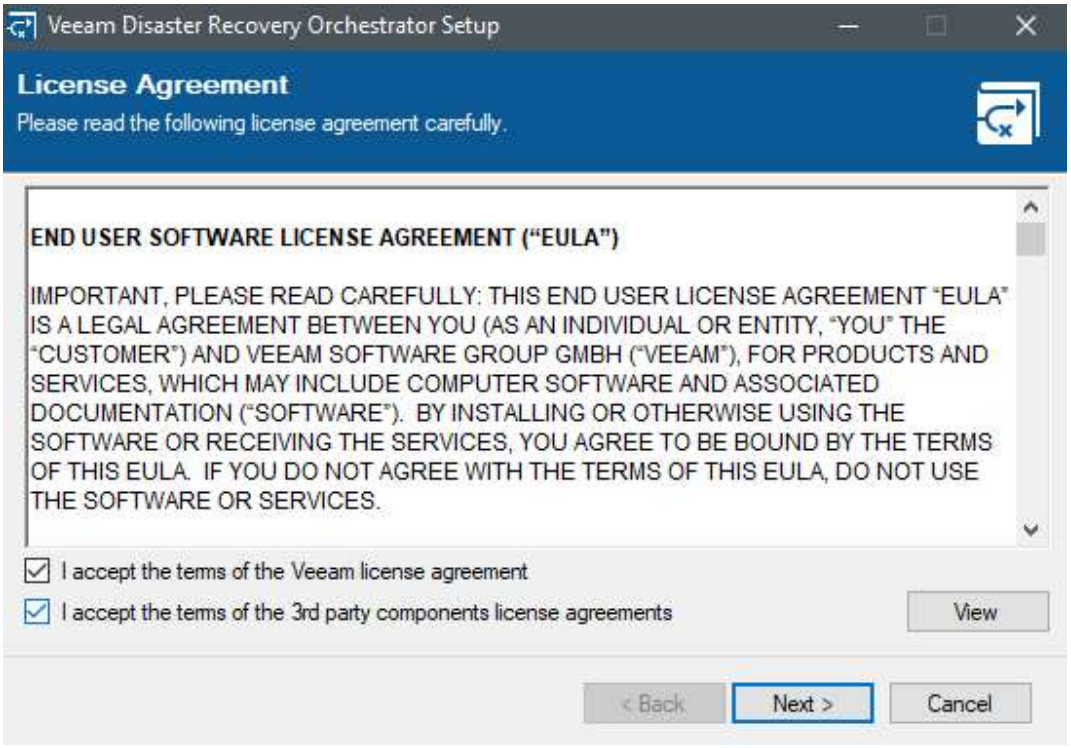
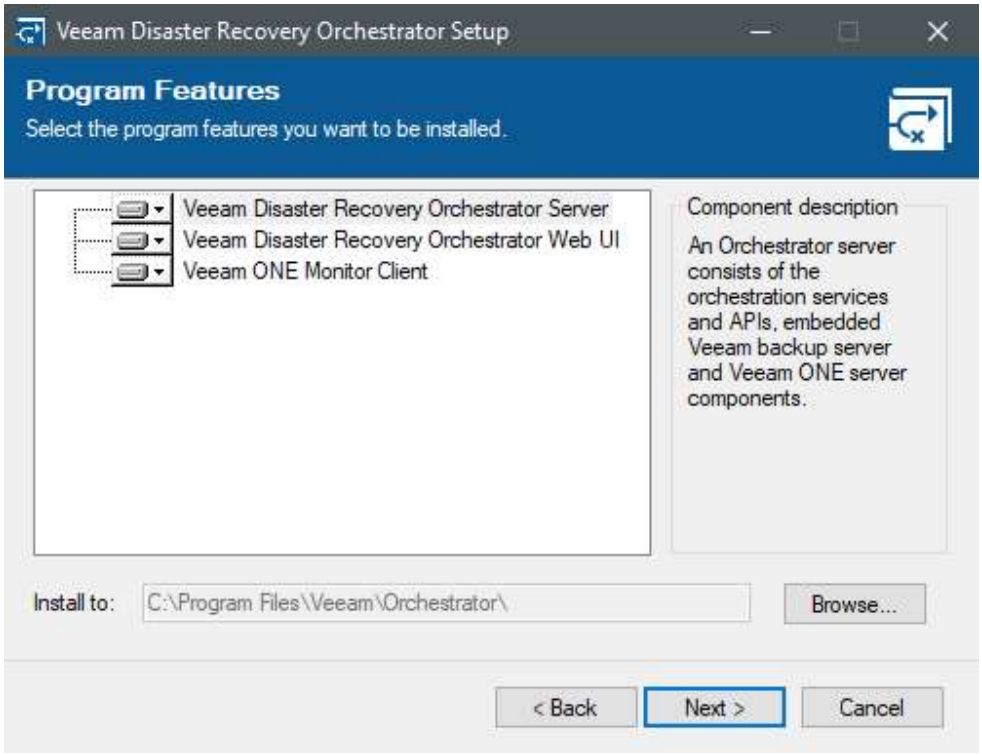
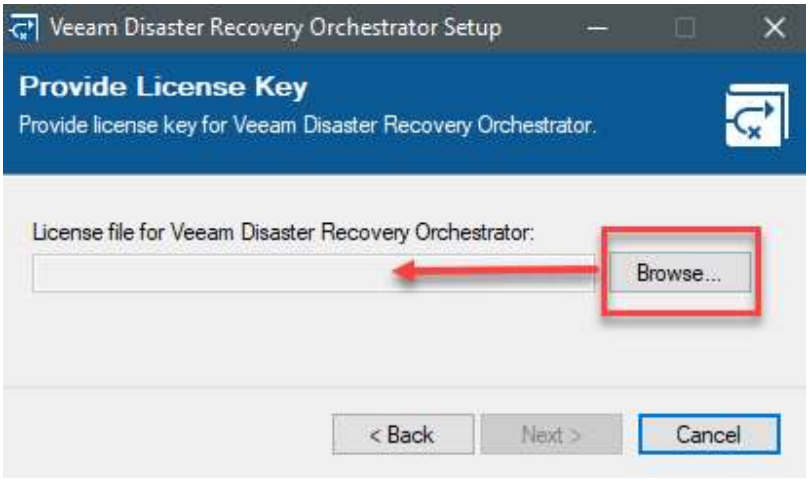
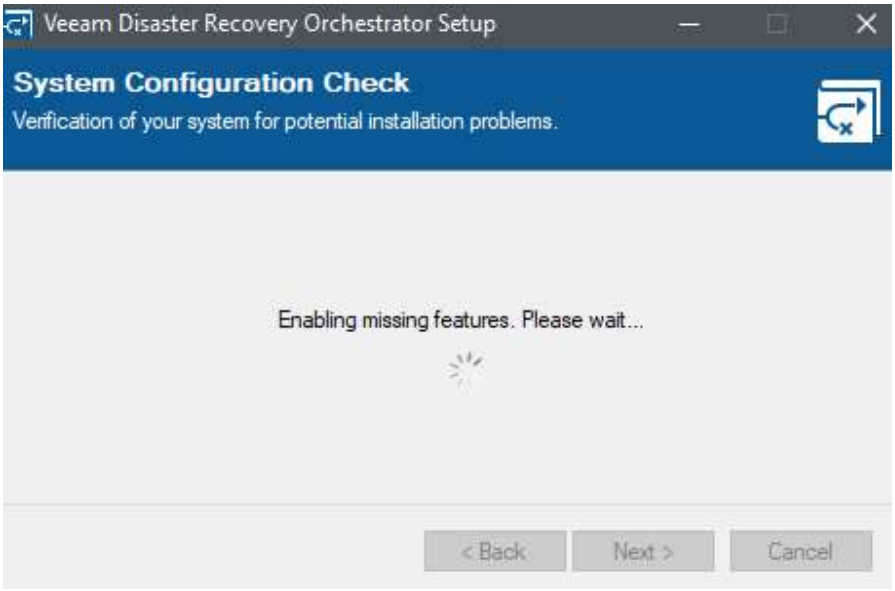
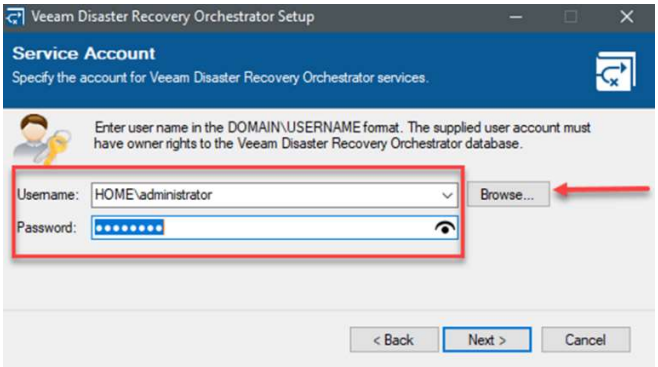


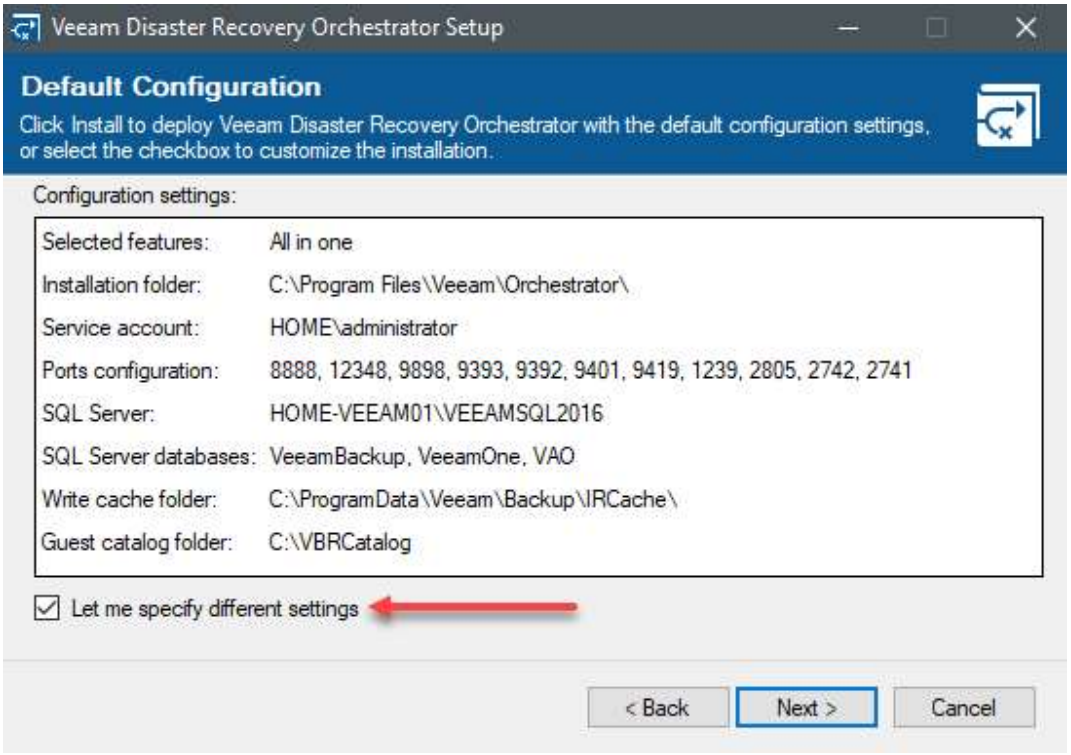

Veeam Disaster Recovery Orchestrator Setup
License Agreement
Please read the following license agreement carefully.
END USER SOFTWARE LICENSE AGREEMENT ("EULA")
IMPORTANT, PLEASE READ CAREFULLY: THIS END USER LICENSE AGREEMENT "EULA" IS A LEGAL AGREEMENT BETWEEN YOU (AS AN INDIVIDUAL OR ENTITY, "YOU" THE "CUSTOMER") AND VEEAM SOFTWARE GROUP GMBH ("VEEAM"), FOR PRODUCTS AND SERVICES, WHICH MAY INCLUDE COMPUTER SOFTWARE AND ASSOCIATED DOCUMENTATION ("SOFTWARE"). BY INSTALLING OR OTHERWISE USING THE SOFTWARE OR RECEIVING THE SERVICES, YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA. IF YOU DO NOT AGREE WITH THE TERMS OF THIS EULA, DO NOT USE THE SOFTWARE OR SERVICES.
I accept the terms of the Veeam license agreement
I accept the terms of the 3rd party components license agreements
View
< Back
Next >
Cancel

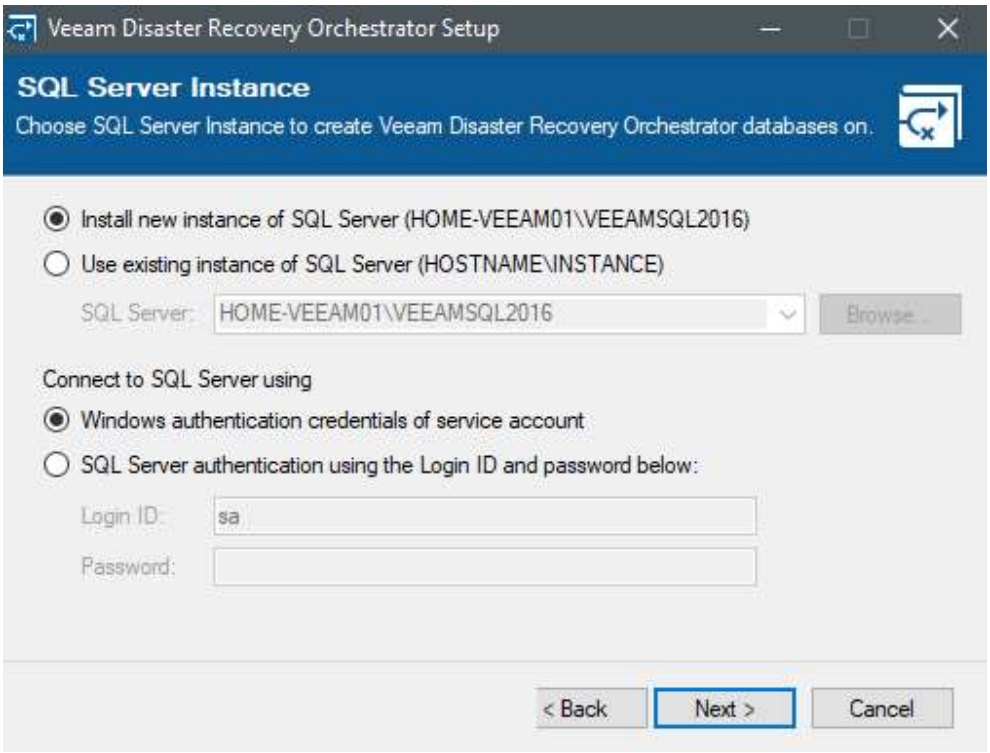

Veeam Disaster Recovery Orchestrator Setup
Program Features
Select the program features you want to be installed.
Veeam Disaster Recovery Orchestrator Server
Veeam Disaster Recovery Orchestrator Web UI
Veeam ONE Monitor Client
Component description
An Orchestrator server consists of the orchestration services and APIs, embedded Veeam backup server and Veeam ONE server components.
Install to:
C:\Program Files\Veeam\Orchestrator\
Browse...
< Back
Next >
Cancel

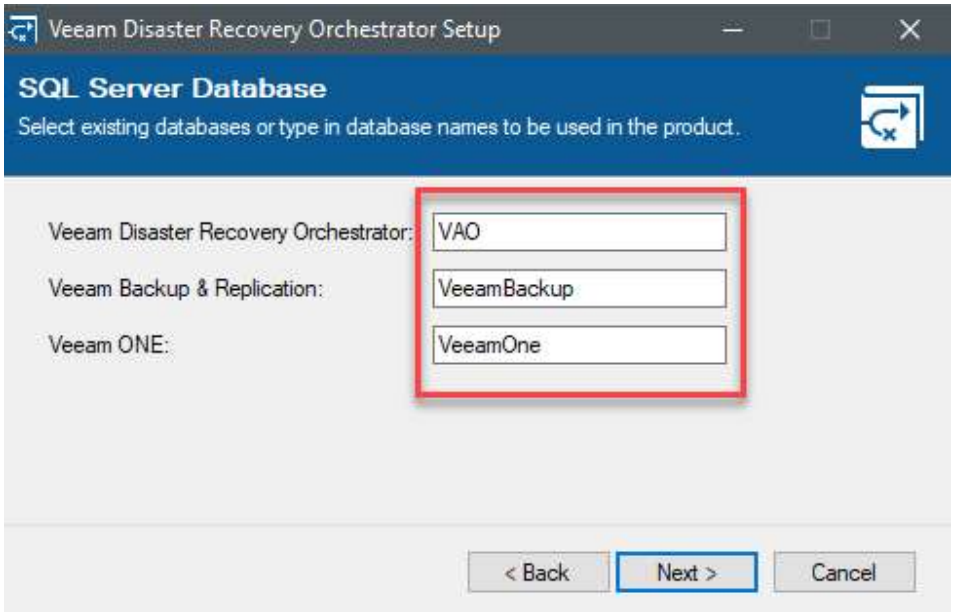

Veeam Disaster Recovery Orchestrator Setup
Provide License Key
Provide license key for Veeam Disaster Recovery Orchestrator.
License file for Veeam Disaster Recovery Orchestrator:
Browse...
< Back
Next >
Cancel

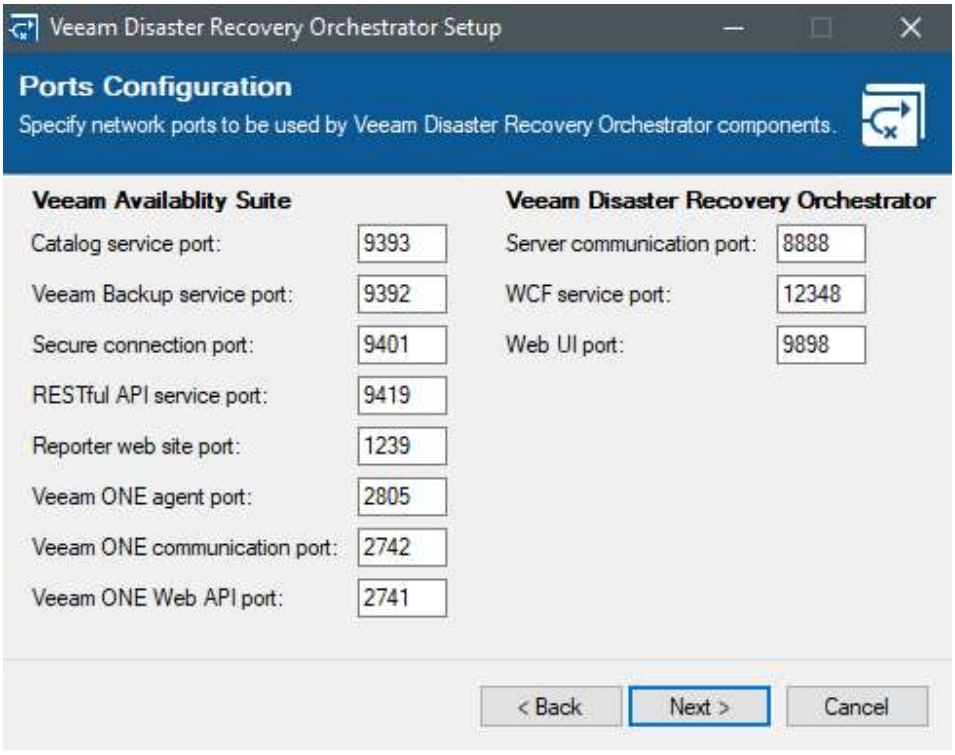

Veeam Disaster Recovery Orchestrator Setup
System Configuration Check
Verification of your system for potential installation problems.
Enabling missing features. Please wait...
< Back
Next >
Cancel

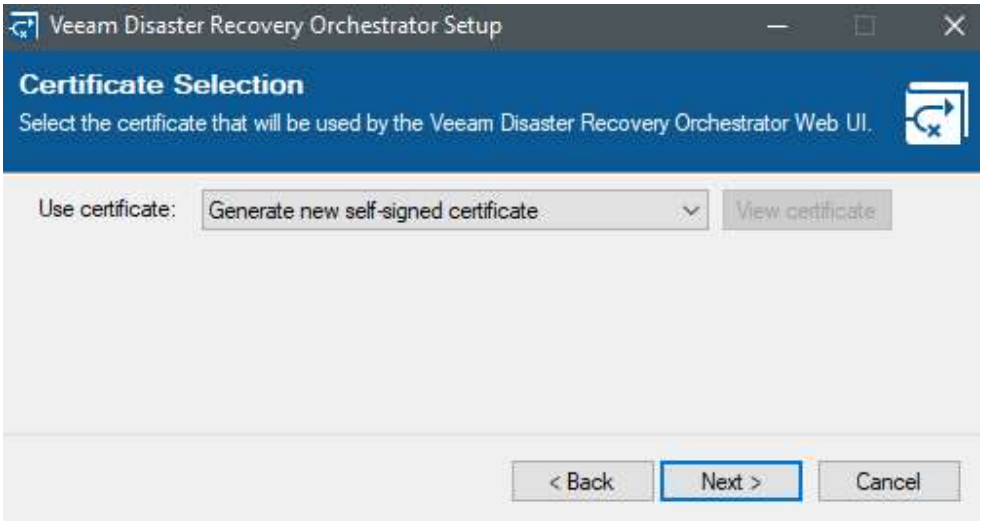

Veeam Disaster Recovery Orchestrator Setup
Service Account
Specify the account for Veeam Disaster Recovery Orchestrator services.
Enter user name in the DOMAIN\USERNAME format. The supplied user account must have owner rights to the Veeam Disaster Recovery Orchestrator database.
Username:
HOME\administrator
Browse...
Password:
< Back
Next >
Cancel

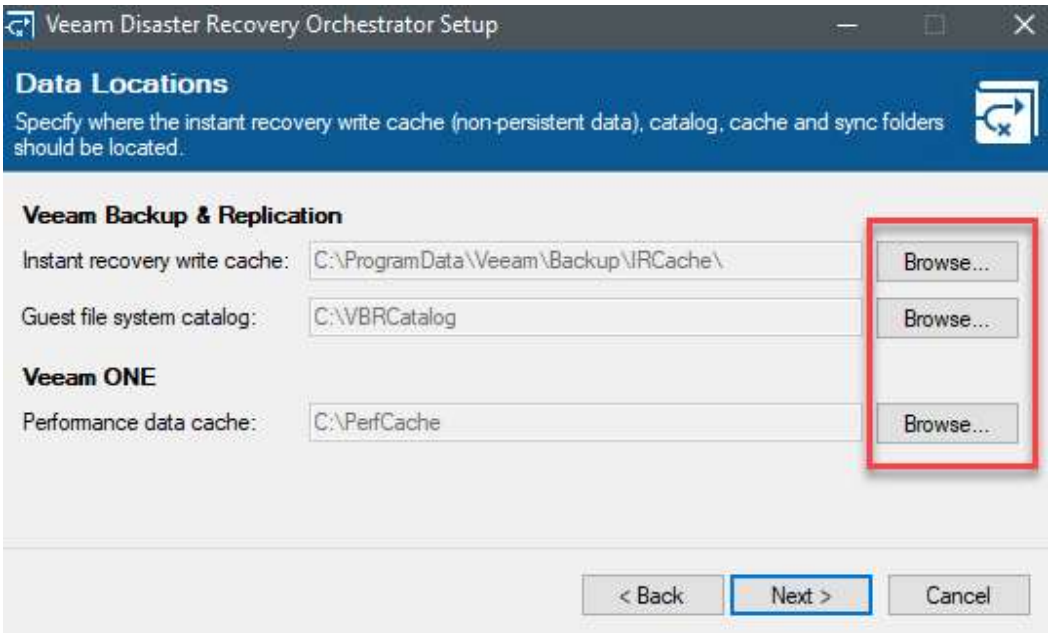

Veeam Disaster Recovery Orchestrator Setup
Default Configuration
Click Install to deploy Veeam Disaster Recovery Orchestrator with the default configuration settings, or select the checkbox to customize the installation.
Configuration settings:
Selected features: All in one
Installation folder: C:\Program Files\Veeam\Orchestrator\
Service account: HOME\administrator
Ports configuration: 8888, 12348, 9898, 9393, 9392, 9401, 9419, 1239, 2805, 2742, 2741
SQL Server: HOME-VEEAM01\VEEAMSQL2016
SQL Server databases: VeeamBackup, VeeamOne, VAO
Write cache folder: C:\ProgramData\Veeam\Backup\IRCache\
Guest catalog folder: C:\VBRCatalog
Let me specify different settings
< Back
Next >
Cancel

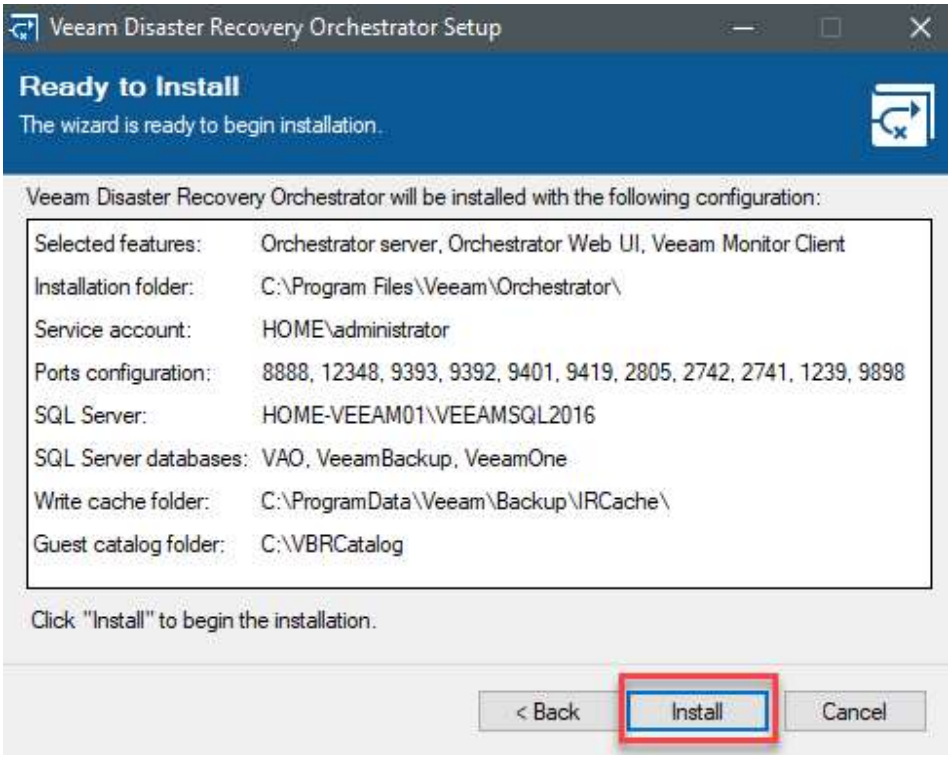

Veeam Disaster Recovery Orchestrator Setup
SQL Server Instance
Choose SQL Server Instance to create Veeam Disaster Recovery Orchestrator databases on.
Install new instance of SQL Server (HOME-VEEAM01\VEEAMSQL2016)
Use existing instance of SQL Server (HOSTNAME\INSTANCE)
SQL Server: HOME-VEEAM01\VEEAMSQL2016
Browse...
Connect to SQL Server using
Windows authentication credentials of service account
SQL Server authentication using the Login ID and password below:
Login ID: sa
Password:
< Back
Next >
Cancel


Veeam Disaster Recovery Orchestrator Setup
SQL Server Database
Select existing databases or type in database names to be used in the product.
Veeam Disaster Recovery Orchestrator:
VAO
Veeam Backup & Replication:
VeeamBackup
Veeam ONE:
VeeamOne
< Back
Next >
Cancel

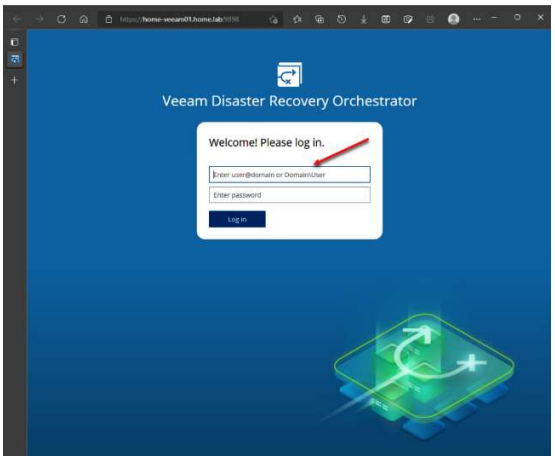

Veeam Disaster Recovery Orchestrator Setup
Ports Configuration
Specify network ports to be used by Veeam Disaster Recovery Orchestrator components.
Veeam Availablity Suite
Catalog service port:
9393
Veeam Backup service port:
9392
Secure connection port:
9401
RESTful API service port:
9419
Reporter web site port:
1239
Veeam ONE agent port:
2805
Veeam ONE communication port:
2742
Veeam ONE Web API port:
2741
Veeam Disaster Recovery Orchestrator
Server communication port:
8888
WCF service port:
12348
Web UI port:
9898
< Back
Next >
Cancel

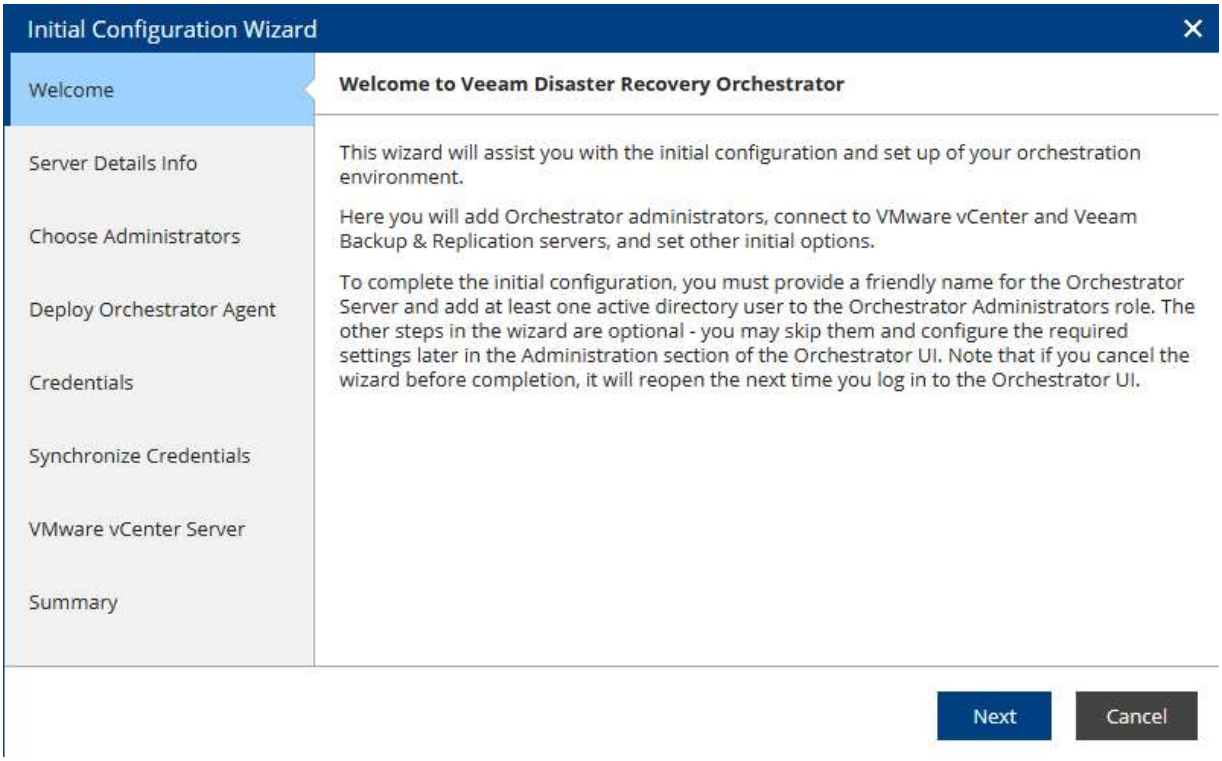

Veeam Disaster Recovery Orchestrator Setup
Certificate Selection
Select the certificate that will be used by the Veeam Disaster Recovery Orchestrator Web UI.
Use certificate:
Generate new self-signed certificate
View certificate
< Back
Next >
Cancel

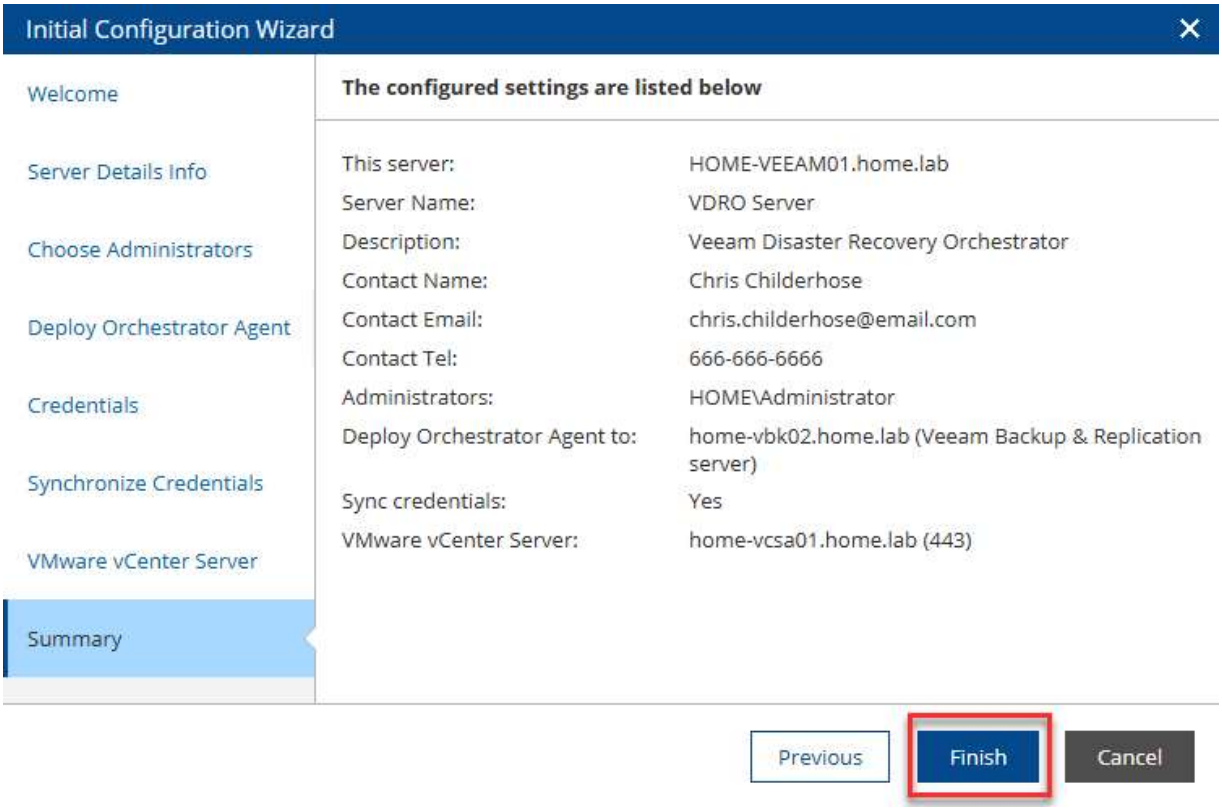

Veeam Disaster Recovery Orchestrator Setup
Data Locations
Specify where the instant recovery write cache (non-persistent data), catalog, cache and sync folders should be located.
Veeam Backup & Replication
Instant recovery write cache:
C:\ProgramData\Veeam\Backup\IRCache\
Browse...
Guest file system catalog:
C:\VBRCatalog
Browse...
Veeam ONE
Performance data cache:
C:\PerfCache
Browse...
< Back
Next >
Cancel

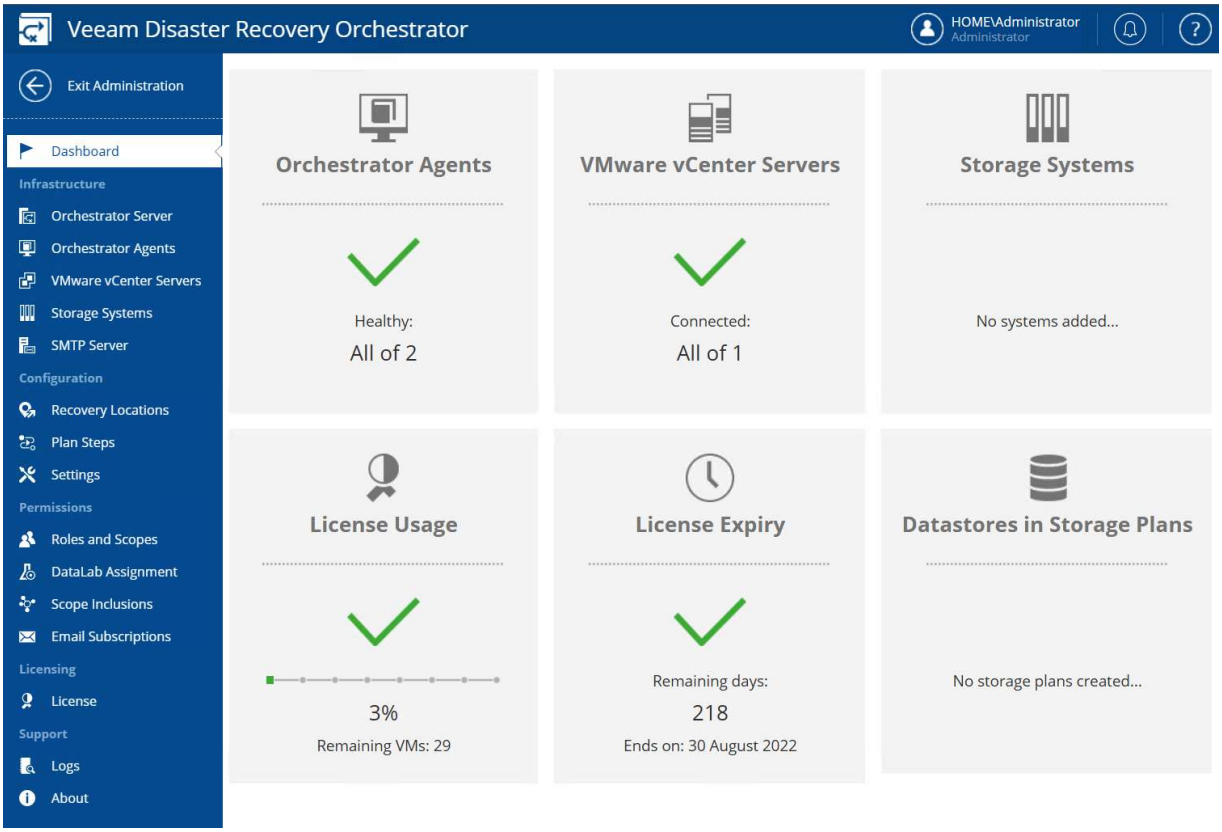

Veeam Disaster Recovery Orchestrator Setup
Ready to Install
The wizard is ready to begin installation.
Veeam Disaster Recovery Orchestrator will be installed with the following configuration:
Selected features: Orchestrator server, Orchestrator Web UI, Veeam Monitor Client
Installation folder: C:\Program Files\Veeam\Orchestrator\
Service account: HOME\administrator
Ports configuration: 8888, 12348, 9393, 9392, 9401, 9419, 2805, 2742, 2741, 1239, 9898
SQL Server: HOME-VEEAM01\VEEAMSQL2016
SQL Server databases: VAO, VeeamBackup, VeeamOne
Write cache folder: C:\ProgramData\Veeam\Backup\IRCache\
Guest catalog folder: C:\VBRCatalog
Click "Install" to begin the installation.
< Back
Install
Cancel

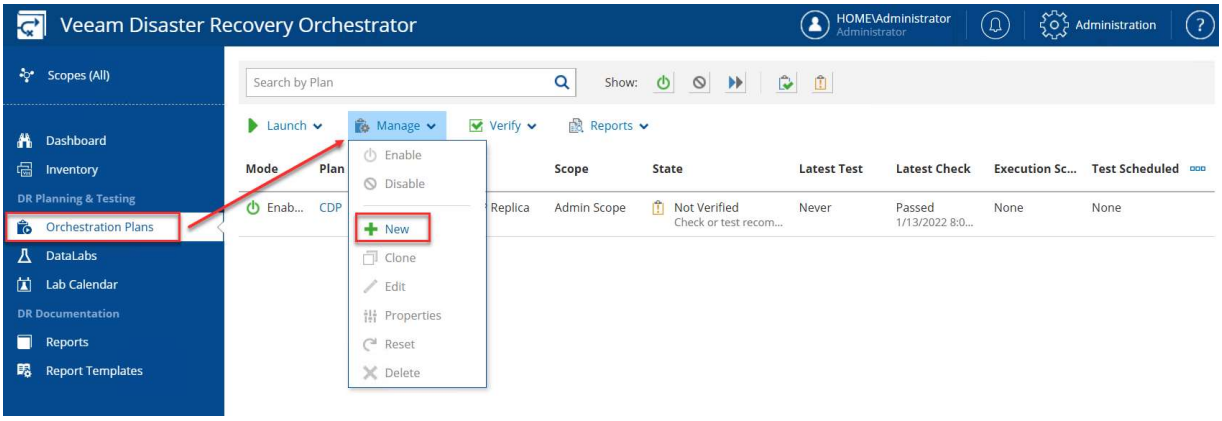
Veeam Backup ...
Veeam ONE Client
Veeam Disaster Recovery Orchestrator

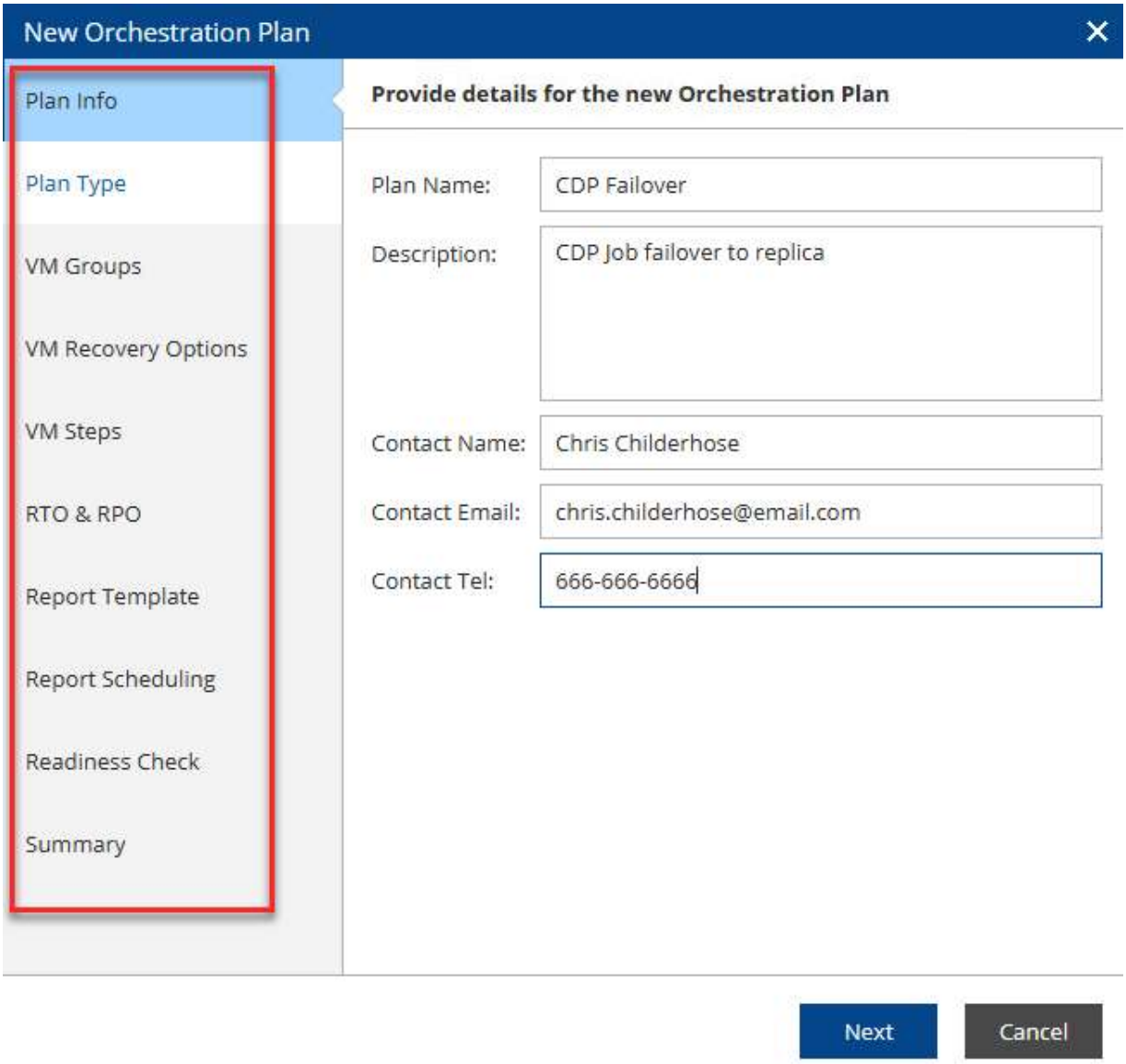

Veeam Disaster Recovery Orchestrator
Welcome! Please log in.
Log in

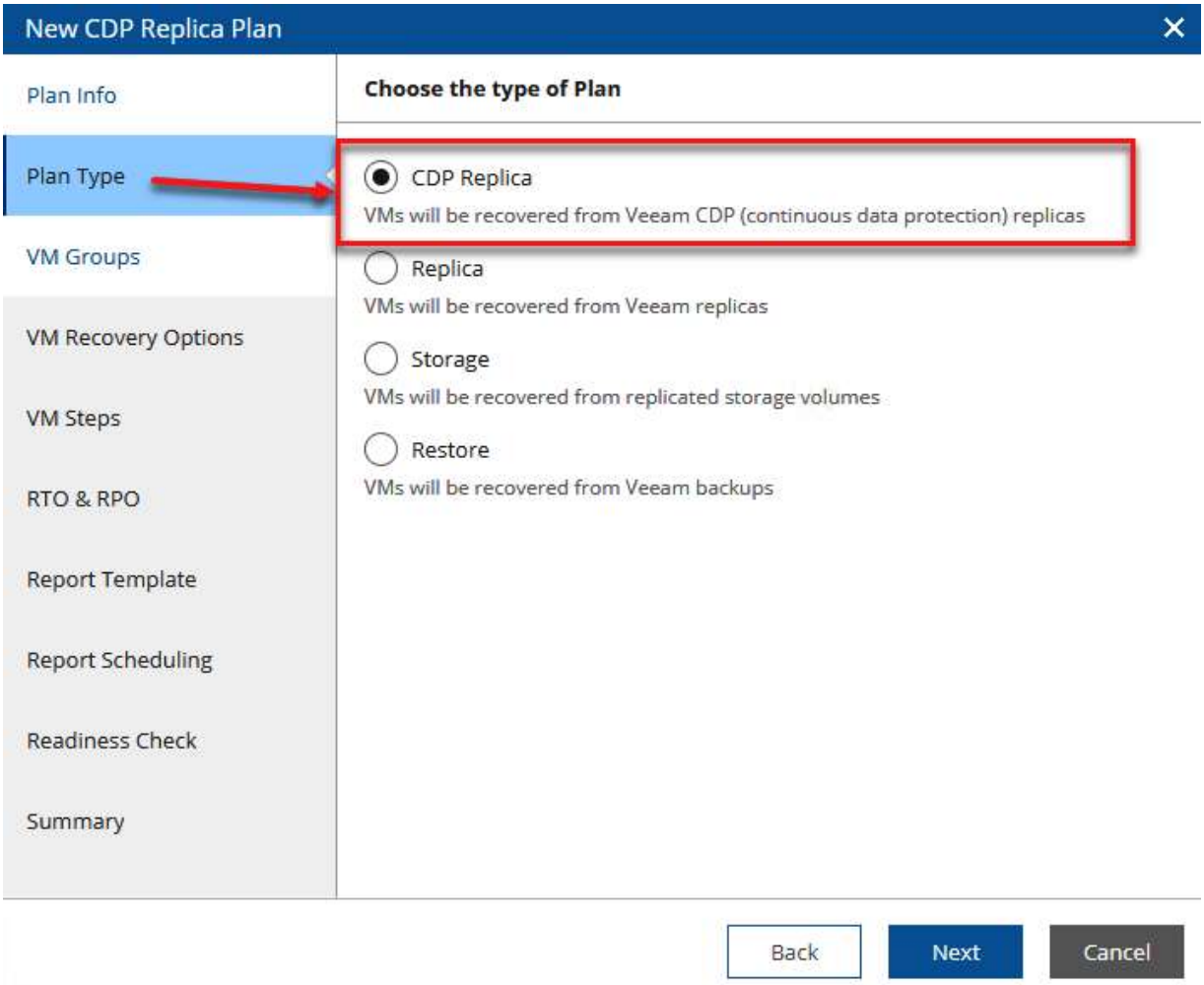

Initial Configuration Wizard
Welcome
Server Details Info
Choose Administrators
Deploy Orchestrator Agent
Credentials
Synchronize Credentials
VMware vCenter Server
Summary
Welcome to Veeam Disaster Recovery Orchestrator
This wizard will assist you with the initial configuration and set up of your orchestration environment.
Here you will add Orchestrator administrators, connect to VMware vCenter and Veeam Backup & Replication servers, and set other initial options.
To complete the initial configuration, you must provide a friendly name for the Orchestrator Server and add at least one active directory user to the Orchestrator Administrators role. The other steps in the wizard are optional - you may skip them and configure the required settings later in the Administration section of the Orchestrator UI. Note that if you cancel the wizard before completion, it will reopen the next time you log in to the Orchestrator UI.
Next
Cancel

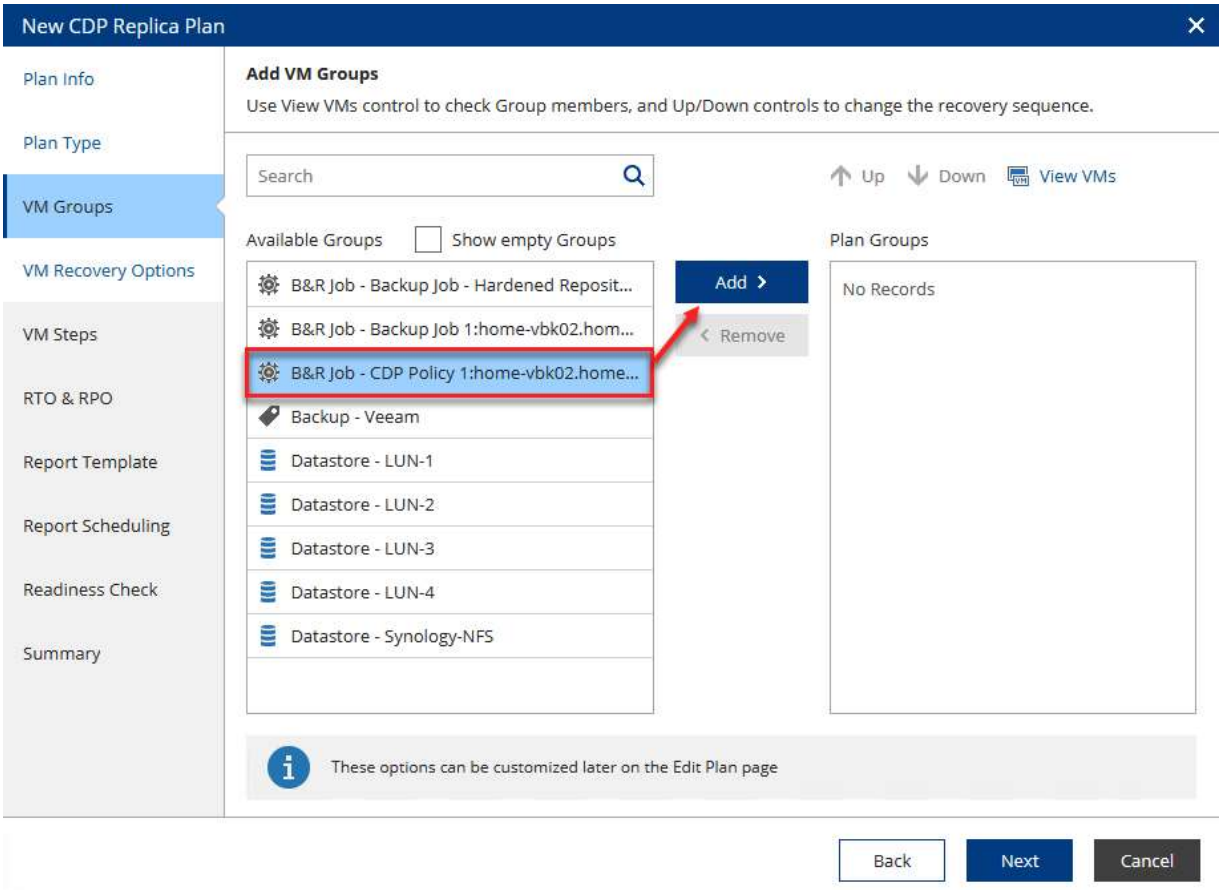

Initial Configuration Wizard
Welcome
Server Details Info
Choose Administrators
Deploy Orchestrator Agent
Credentials
Synchronize Credentials
VMware vCenter Server
Summary
The configured settings are listed below
This server: HOME-VEEAM01.home.lab
Server Name: VDRO Server
Description: Veeam Disaster Recovery Orchestrator
Contact Name: Chris Childerhose
Contact Email: chris.childerhose@email.com
Contact Tel: 666-666-6666
Administrators: HOME\Administrator
Deploy Orchestrator Agent to: home-vbk02.home.lab (Veeam Backup & Replication server)
Sync credentials: Yes
VMware vCenter Server: home-vcsa01.home.lab (443)
Previous
Finish
Cancel

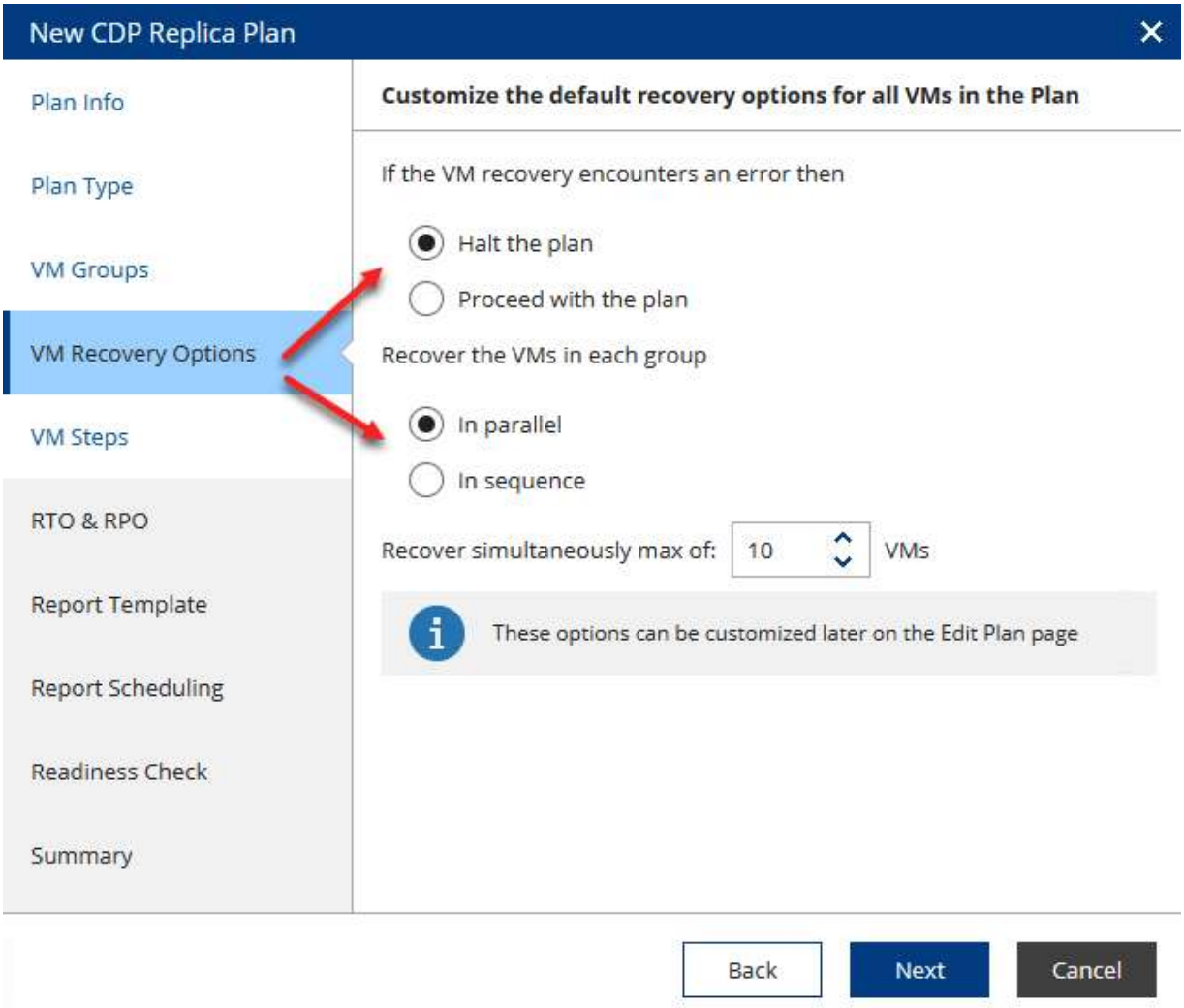

Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Exit Administration
Dashboard
Infrastructure
Orchestrator Server
Orchestrator Agents
VMware vCenter Servers
Storage Systems
SMTP Server
Configuration
Recovery Locations
Plan Steps
Settings
Permissions
Roles and Scopes
DataLab Assignment
Scope Inclusions
Email Subscriptions
Licensing
License
Support
Logs
About
Orchestrator Agents
Healthy:
All of 2
VMware vCenter Servers
Connected:
All of 1
Storage Systems
No systems added...
License Usage
3%
Remaining VMs: 29
License Expiry
Remaining days:
218
Ends on: 30 August 2022
Datastores in Storage Plans
No storage plans created...

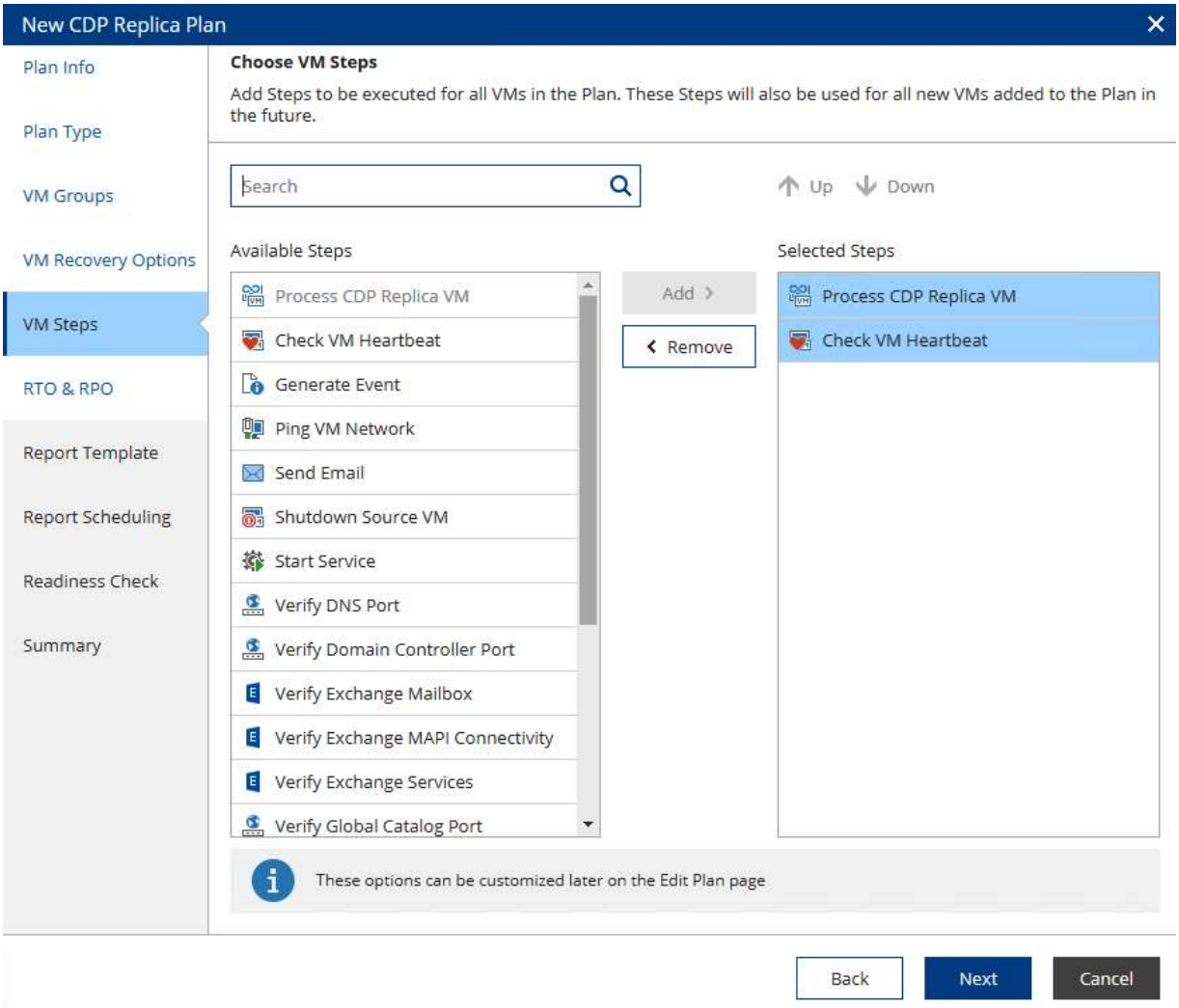

Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Search by Plan
Show:
Launch
Manage
Verify
Reports
Enable
Disable
New
Clone
Edit
Properties
Reset
Delete
Mode
Plan
Scope
State
Latest Test
Latest Check
Execution Sc...
Test Scheduled
Enab...
CDP
Replica
Admin Scope
Not Verified
Check or test recom...
Never
Passed
1/13/2022 8:0...
None
None

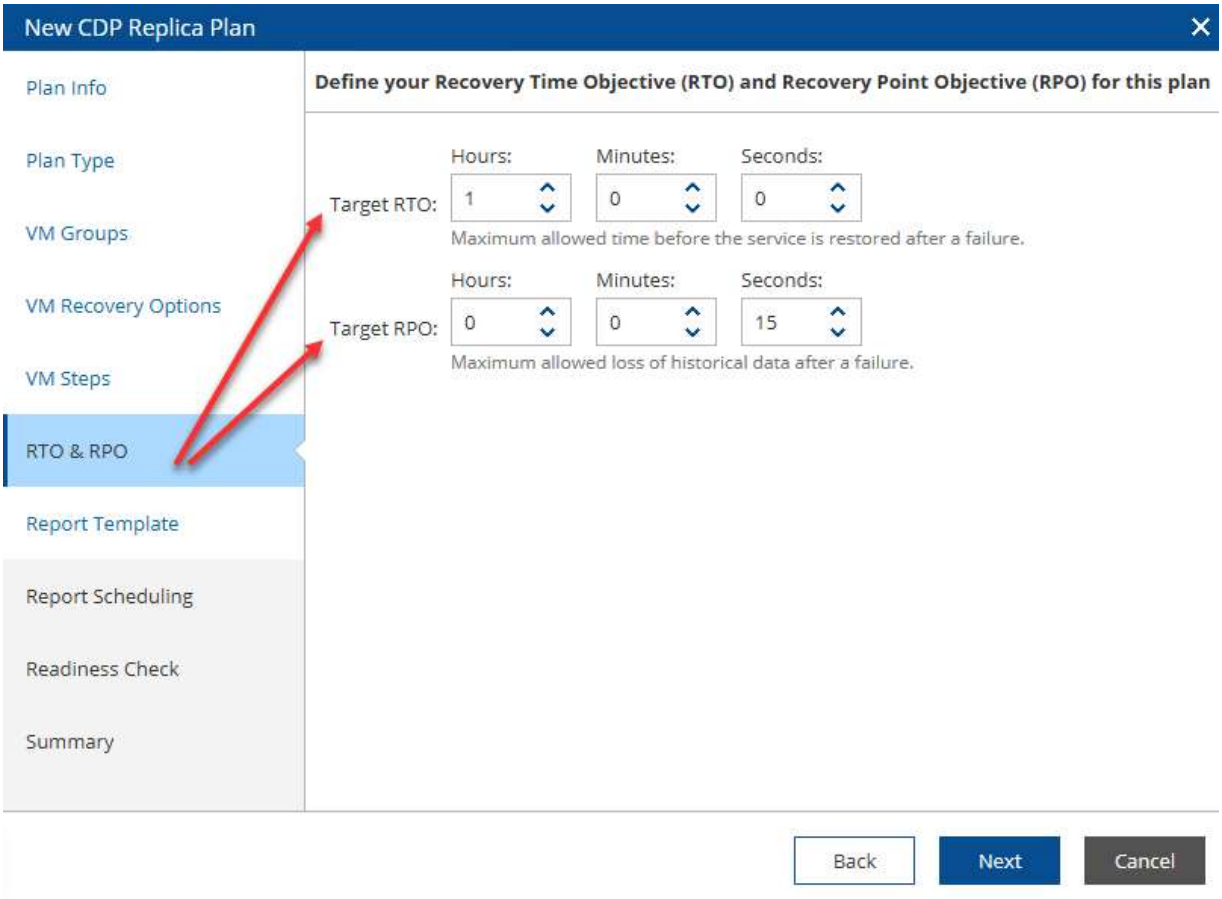

New Orchestration Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Provide details for the new Orchestration Plan
Plan Name:
CDP Failover
Description:
CDP Job failover to replica
Contact Name:
Chris Childerhose
Contact Email:
chris.childerhose@email.com
Contact Tel:
666-666-6666
Next
Cancel

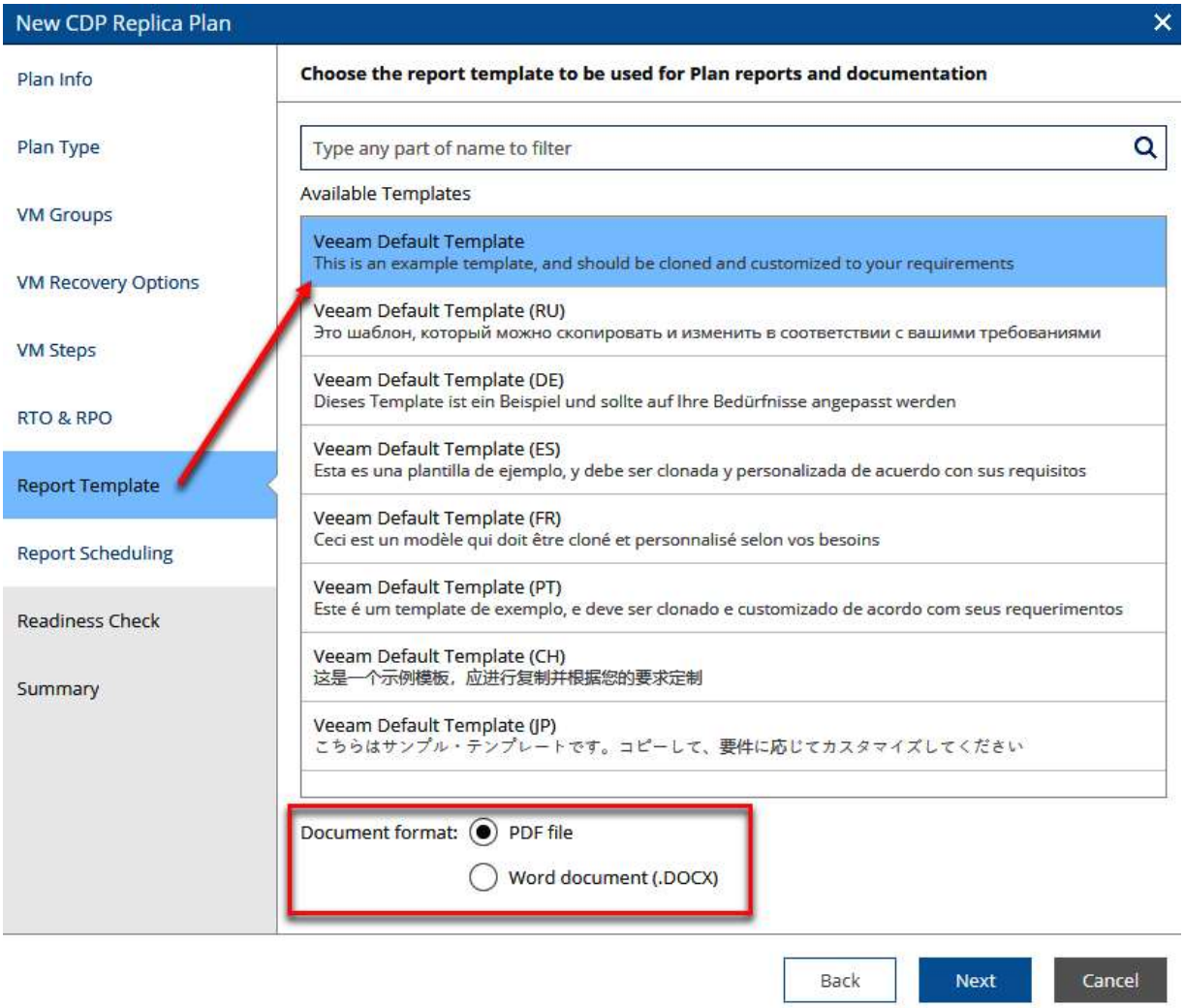

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Choose the type of Plan
CDP Replica
VMs will be recovered from Veeam CDP (continuous data protection) replicas
Replica
VMs will be recovered from Veeam replicas
Storage
VMs will be recovered from replicated storage volumes
Restore
VMs will be recovered from Veeam backups
Back
Next
Cancel

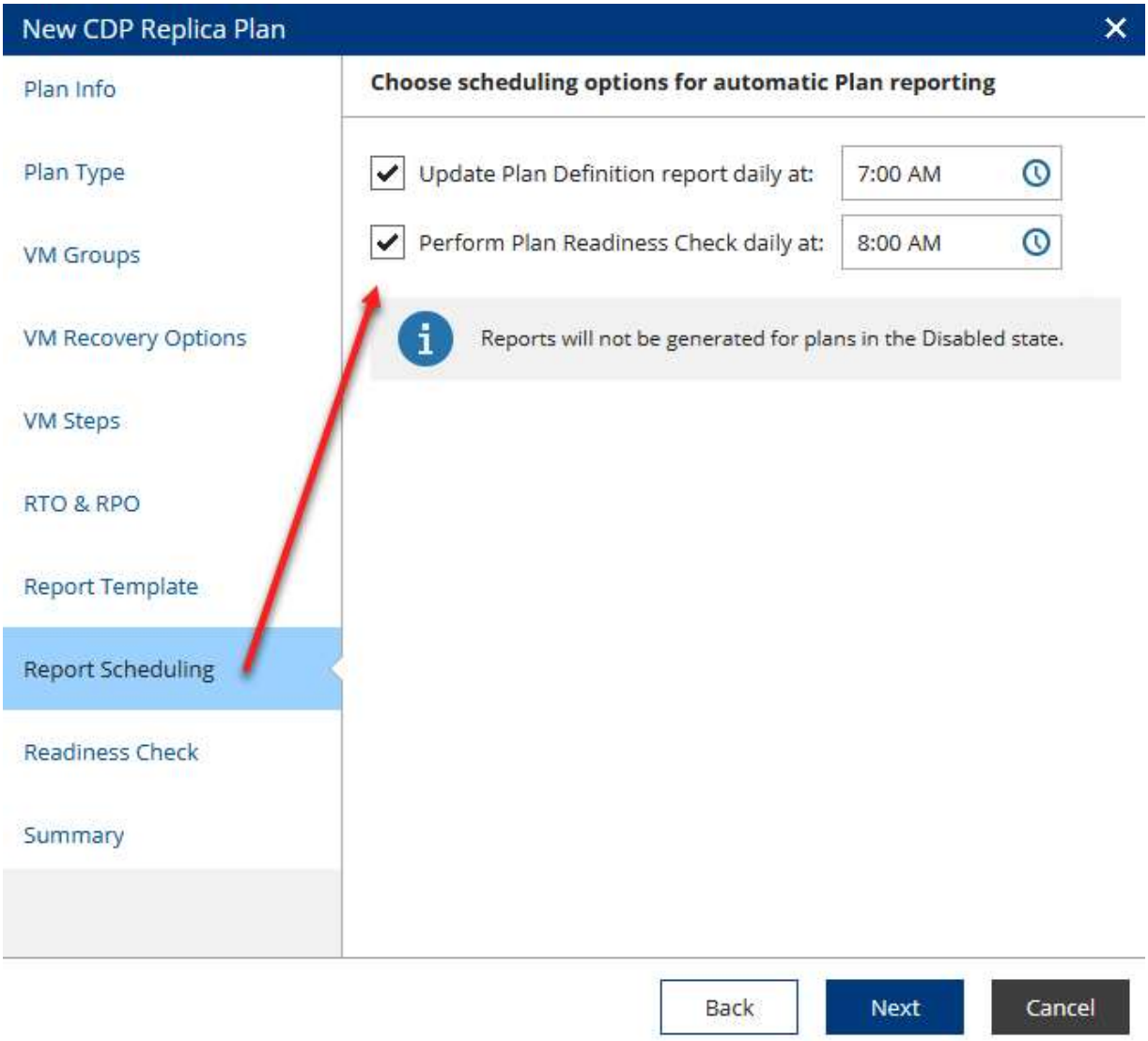

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Add VM Groups
Use View VMs control to check Group members, and Up/Down controls to change the recovery sequence.
Search
Up
Down
View VMs
Available Groups
Show empty Groups
B&R Job - Backup Job - Hardened Reposit...
B&R Job - Backup Job 1:home-vbk02.hom...
B&R Job - CDP Policy 1:home-vbk02.home...
Backup - Veeam
Datastore - LUN-1
Datastore - LUN-2
Datastore - LUN-3
Datastore - LUN-4
Datastore - Synology-NFS
Add
Remove
Plan Groups
No Records
These options can be customized later on the Edit Plan page
Back
Next
Cancel

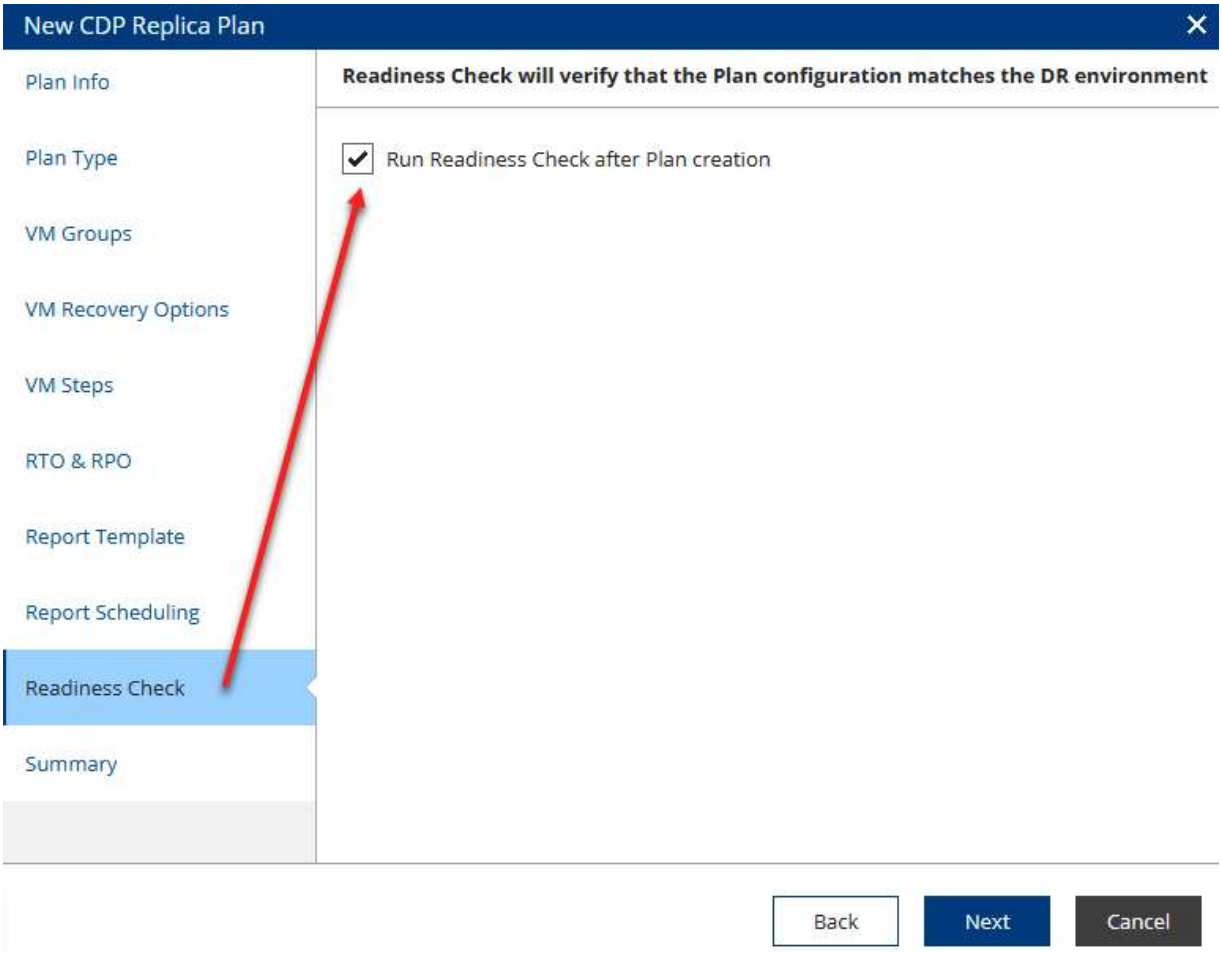

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Customize the default recovery options for all VMs in the Plan
If the VM recovery encounters an error then
Halt the plan
Proceed with the plan
Recover the VMs in each group
In parallel
In sequence
Recover simultaneously max of:
10
VMs
These options can be customized later on the Edit Plan page
Back
Next
Cancel

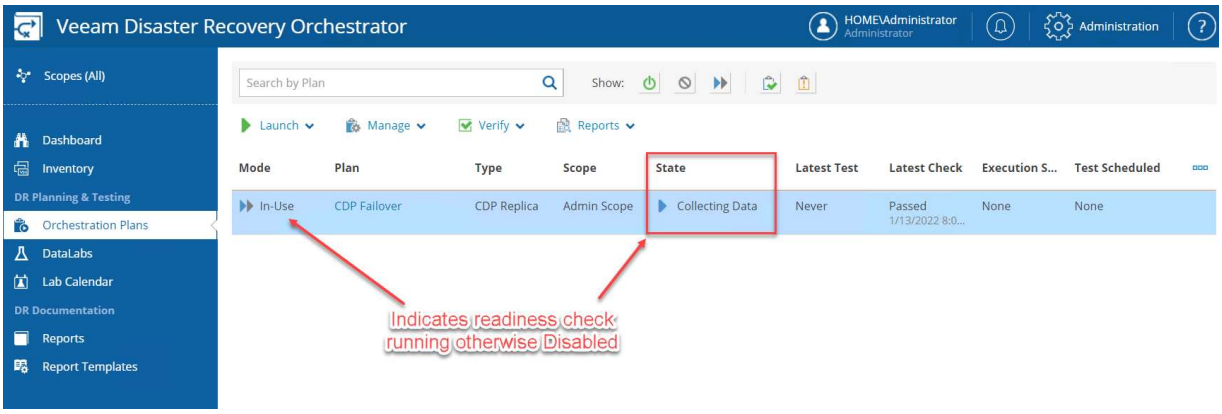

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Choose VM Steps
Add Steps to be executed for all VMs in the Plan. These Steps will also be used for all new VMs added to the Plan in the future.
Search
Up
Down
Available Steps
Process CDP Replica VM
Check VM Heartbeat
Generate Event
Ping VM Network
Send Email
Shutdown Source VM
Start Service
Verify DNS Port
Verify Domain Controller Port
Verify Exchange Mailbox
Verify Exchange MAPI Connectivity
Verify Exchange Services
Verify Global Catalog Port
Add
Remove
Selected Steps
Process CDP Replica VM
Check VM Heartbeat
These options can be customized later on the Edit Plan page
Back
Next
Cancel

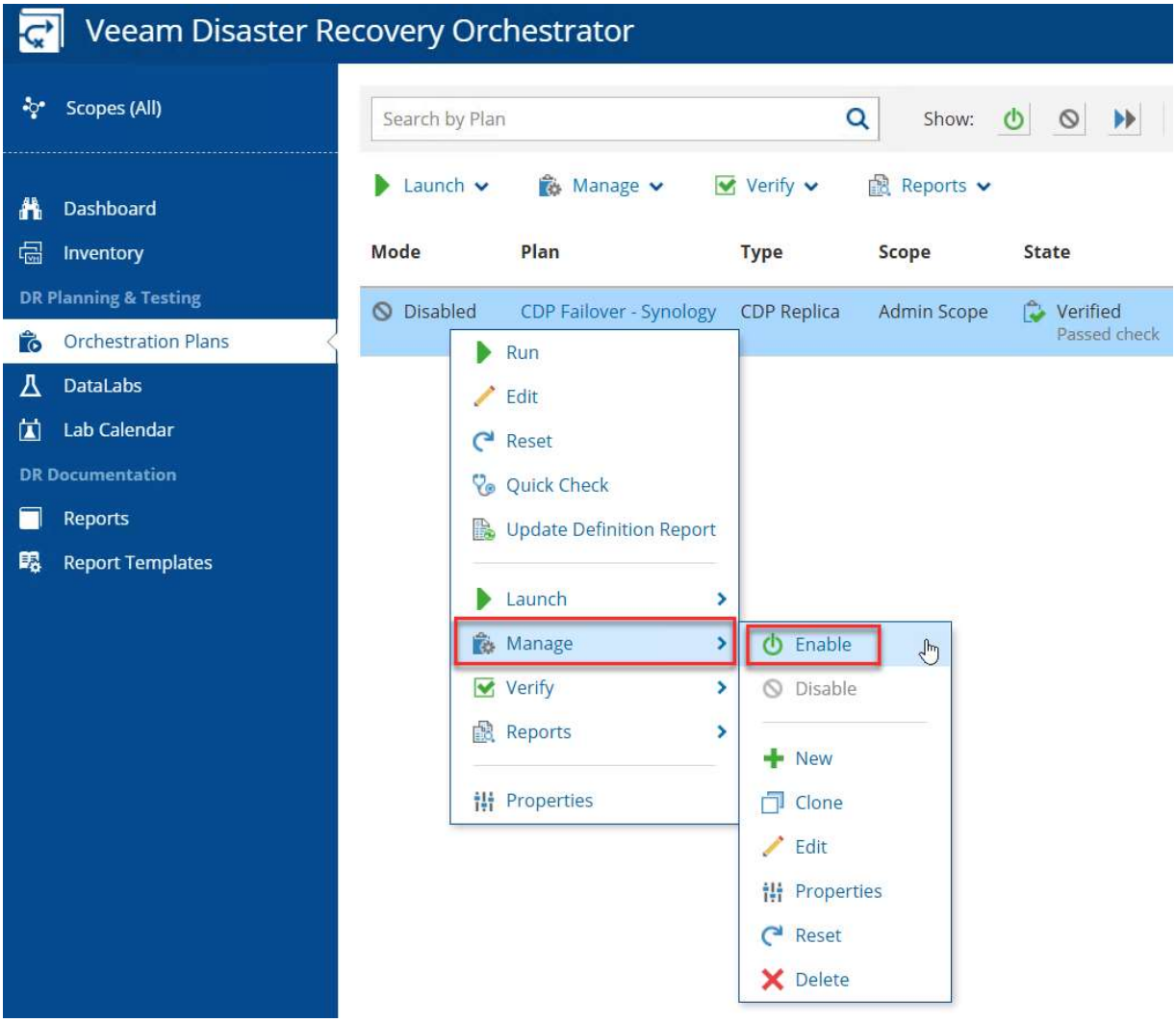

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Define your Recovery Time Objective (RTO) and Recovery Point Objective (RPO) for this plan
Hours:
Minutes:
Seconds:
Target RTO:
1
0
0
Maximum allowed time before the service is restored after a failure.
Hours:
Minutes:
Seconds:
Target RPO:
0
0
15
Maximum allowed loss of historical data after a failure.
Back
Next
Cancel

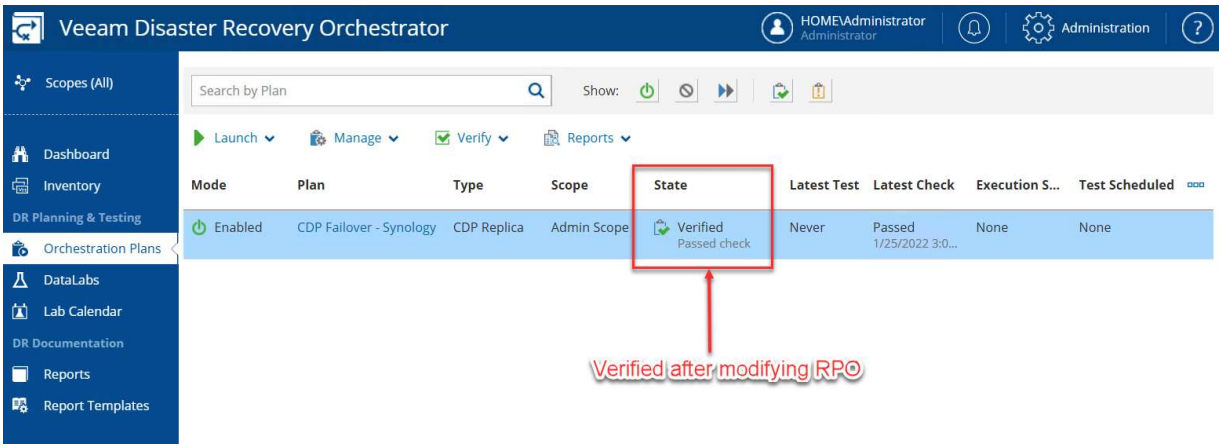

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Choose the report template to be used for Plan reports and documentation
Type any part of name to filter
Available Templates
Veeam Default Template
This is an example template, and should be cloned and customized to your requirements
Veeam Default Template (RU)
Это шаблон, который можно скопировать и изменить в соответствии с вашими требованиями
Veeam Default Template (DE)
Dieses Template ist ein Beispiel und sollte auf Ihre Bedürfnisse angepasst werden
Veeam Default Template (ES)
Esta es una plantilla de ejemplo, y debe ser clonada y personalizada de acuerdo con sus requisitos
Veeam Default Template (FR)
Ceci est un modèle qui doit être cloné et personnalisé selon vos besoins
Veeam Default Template (PT)
Este é um template de exemplo, e deve ser clonado e customizado de acordo com seus requerimentos
Veeam Default Template (CH)
这是一个示例模板，应进行复制并根据您的要求定制
Veeam Default Template (JP)
こちらはサンプル・テンプレートです。コピーして、要件に応じてカスタマイズしてください
Document format:
PDF file
Word document (.DOCX)
Back
Next
Cancel

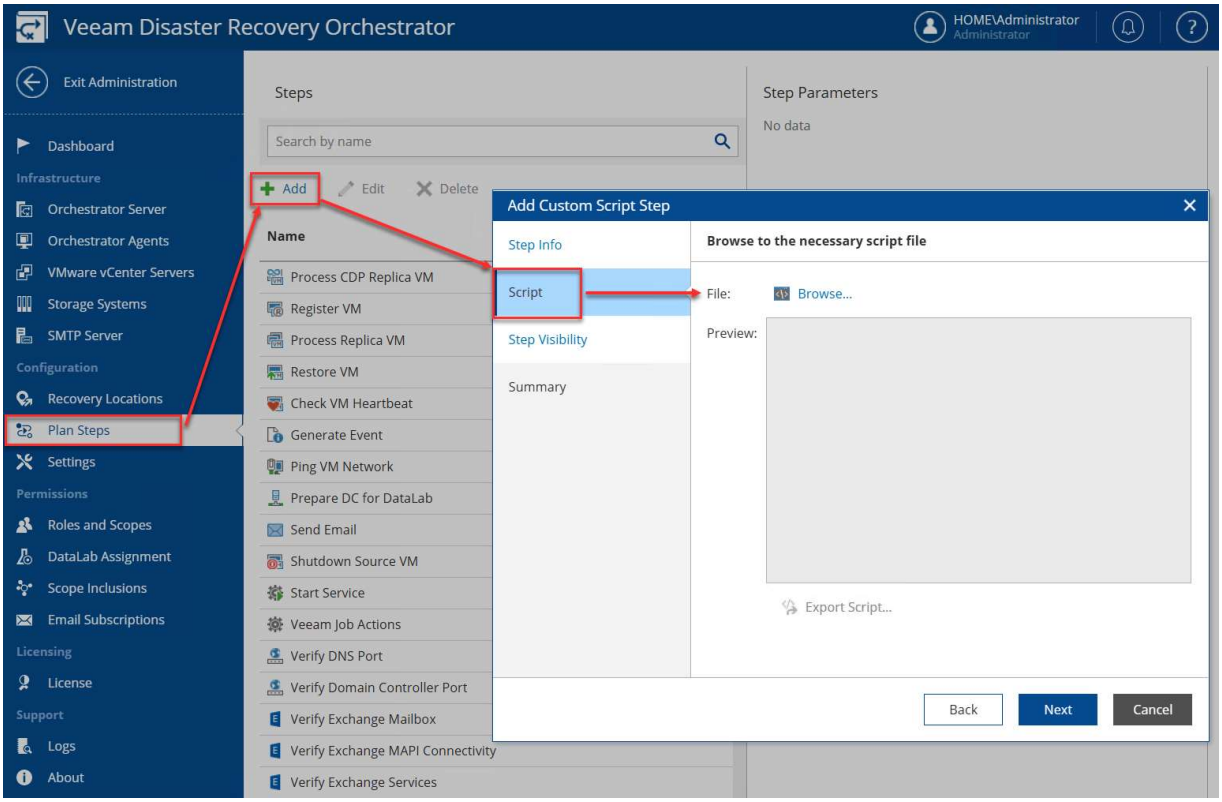

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Choose scheduling options for automatic Plan reporting
Update Plan Definition report daily at:
7:00 AM
Perform Plan Readiness Check daily at:
8:00 AM
Reports will not be generated for plans in the Disabled state.
Back
Next
Cancel

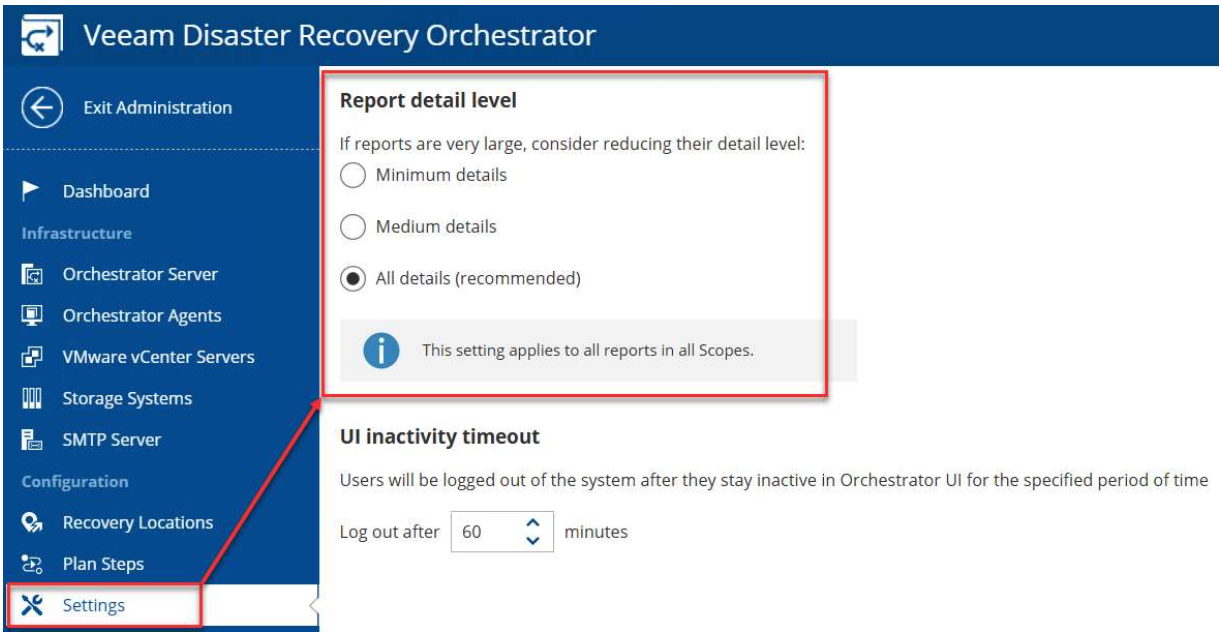

New CDP Replica Plan
Plan Info
Plan Type
VM Groups
VM Recovery Options
VM Steps
RTO & RPO
Report Template
Report Scheduling
Readiness Check
Summary
Readiness Check will verify that the Plan configuration matches the DR environment
Run Readiness Check after Plan creation
Back
Next
Cancel

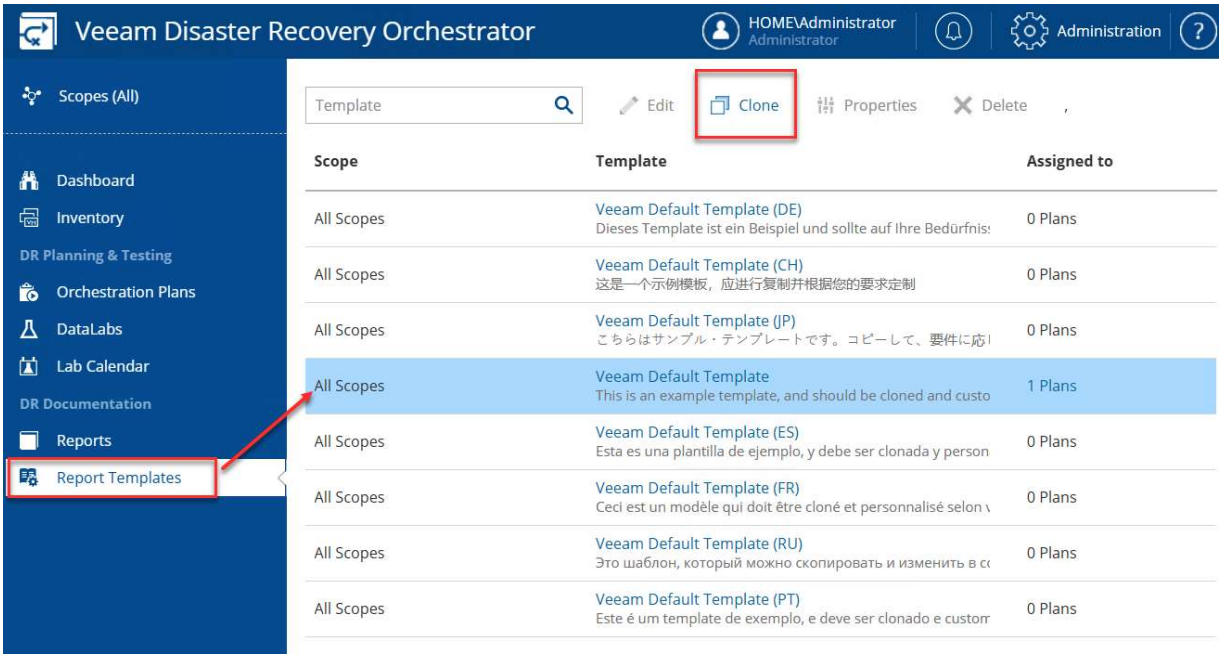

Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Search by Plan
Show:
Launch
Manage
Verify
Reports
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Mode
Plan
Type
Scope
State
Latest Test
Latest Check
Execution S...
Test Scheduled
In-Use
CDP Failover
CDP Replica
Admin Scope
Collecting Data
Never
Passed
1/13/2022 8:0...
None
None
Indicates readiness check running otherwise Disabled

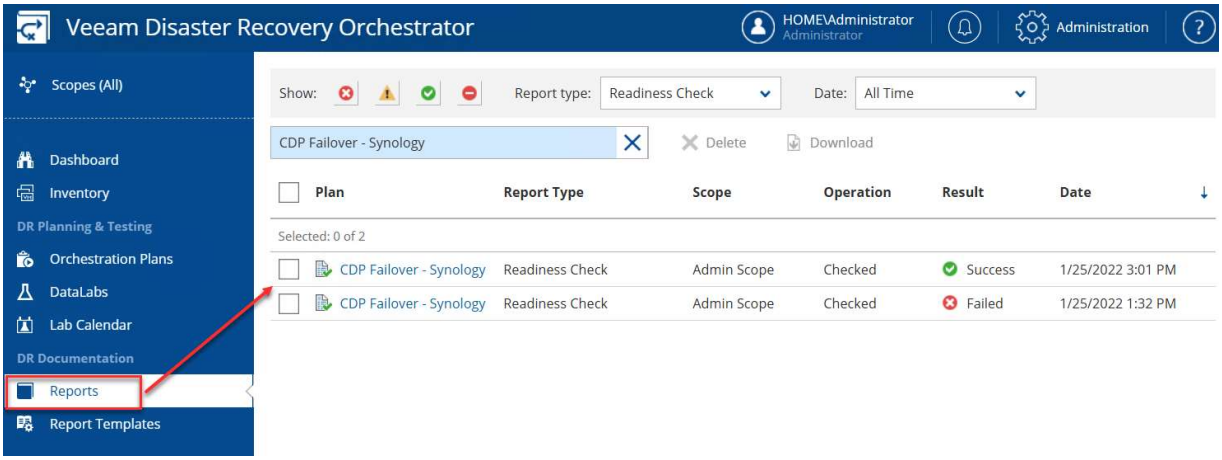

Veeam Disaster Recovery Orchestrator
Scopes (All)
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Search by Plan
Show:
Launch
Manage
Verify
Reports
Mode
Plan
Type
Scope
State
Disabled
CDP Failover - Synology
CDP Replica
Admin Scope
Verified
Passed check
Run
Edit
Reset
Quick Check
Update Definition Report
Launch
Manage
Verify
Reports
Properties
Enable
Disable
New
Clone
Edit
Properties
Reset
Delete

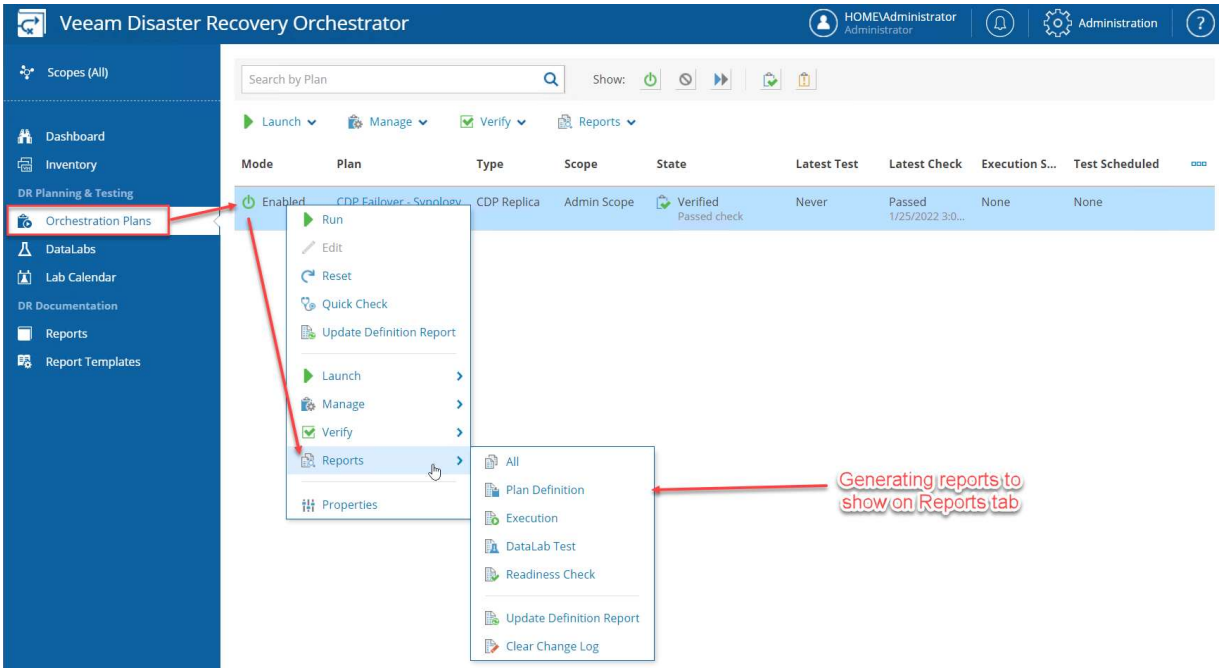

Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Search by Plan
Show:
Launch
Manage
Verify
Reports
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Mode
Plan
Type
Scope
State
Latest Test
Latest Check
Execution S...
Test Scheduled
Enabled
CDP Failover - Synology
CDP Replica
Admin Scope
Verified
Passed check
Never
Passed
1/25/2022 3:0...
None
None
Verified after modifying RPO

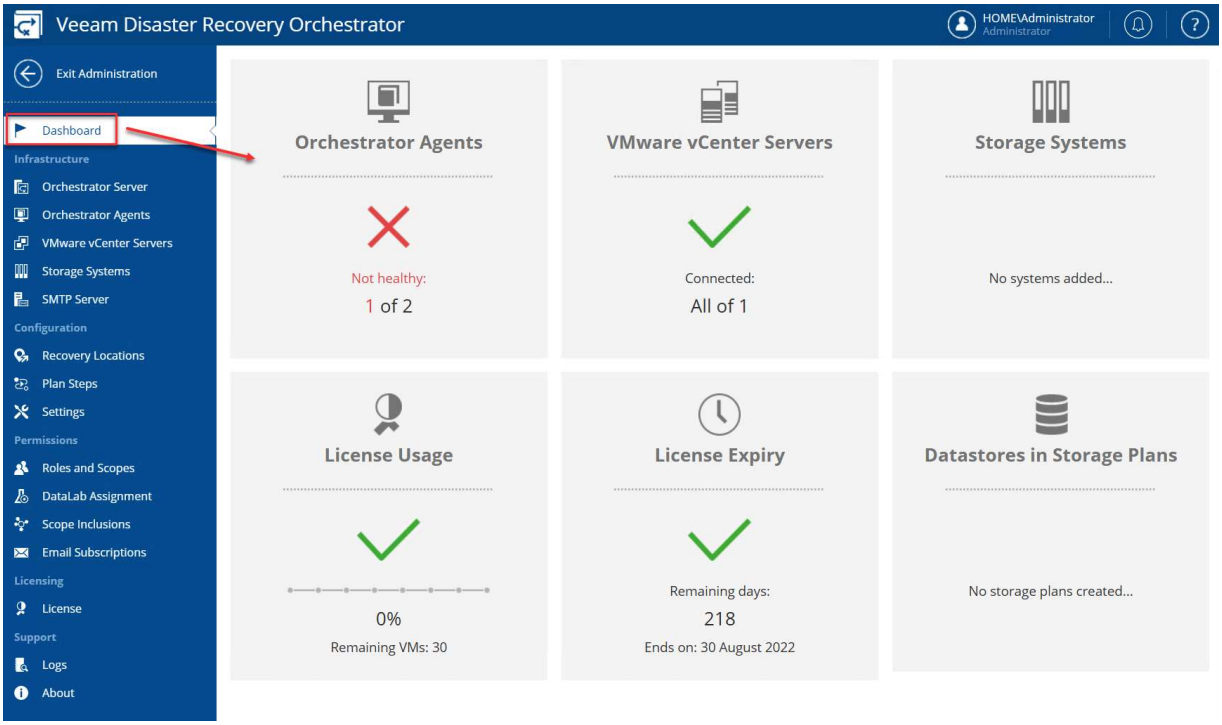

Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Exit Administration
Dashboard
Infrastructure
Orchestrator Server
Orchestrator Agents
VMware vCenter Servers
Storage Systems
SMTP Server
Configuration
Recovery Locations
Plan Steps
Settings
Permissions
Roles and Scopes
DataLab Assignment
Scope Inclusions
Email Subscriptions
Licensing
License
Support
Logs
About
Steps
Search by name
Add
Edit
Delete
Name
Process CDP Replica VM
Register VM
Process Replica VM
Restore VM
Check VM Heartbeat
Generate Event
Ping VM Network
Prepare DC for DataLab
Send Email
Shutdown Source VM
Start Service
Veeam Job Actions
Verify DNS Port
Verify Domain Controller Port
Verify Exchange Mailbox
Verify Exchange MAPI Connectivity
Verify Exchange Services
Step Parameters
No data
Add Custom Script Step
Step Info
Script
Step Visibility
Summary
Browse to the necessary script file
File:
Browse...
Preview:
Export Script...
Back
Next
Cancel

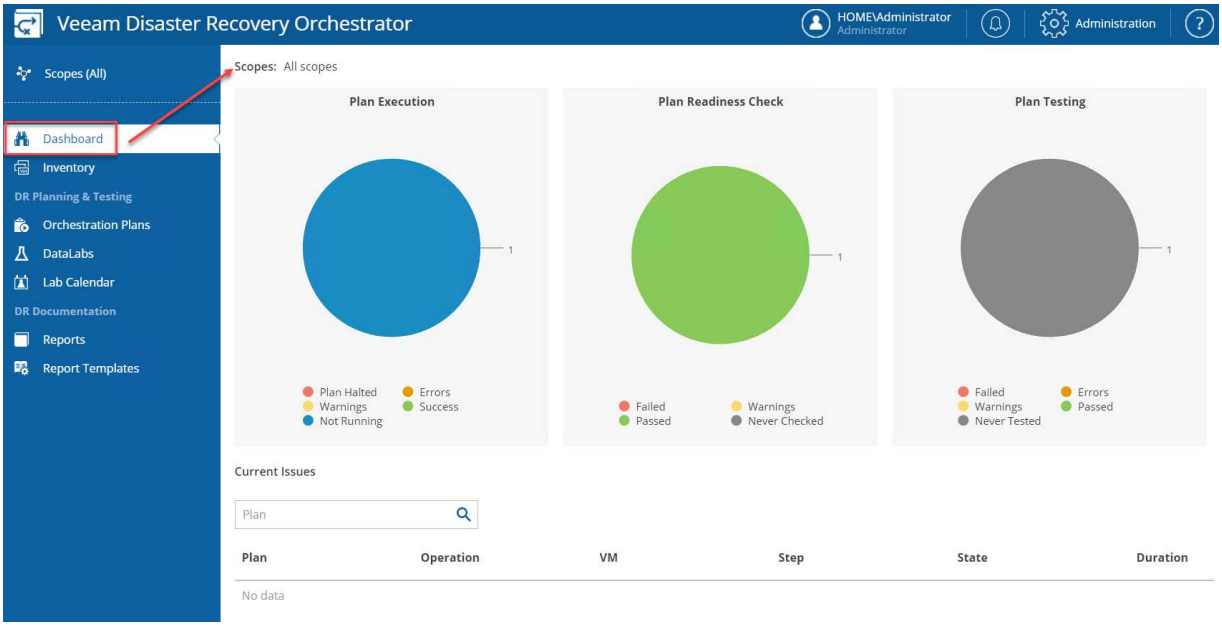

Veeam Disaster Recovery Orchestrator
Exit Administration
Dashboard
Infrastructure
Orchestrator Server
Orchestrator Agents
VMware vCenter Servers
Storage Systems
SMTP Server
Configuration
Recovery Locations
Plan Steps
Settings
Report detail level
If reports are very large, consider reducing their detail level:
Minimum details
Medium details
All details (recommended)
This setting applies to all reports in all Scopes.
UI inactivity timeout
Users will be logged out of the system after they stay inactive in Orchestrator UI for the specified period of time
Log out after
60
minutes


Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Template
Edit
Clone
Properties
Delete
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Scope
Template
Assigned to
All Scopes
Veeam Default Template (DE)
Dieses Template ist ein Beispiel und sollte auf Ihre Bedürfnis
0 Plans
All Scopes
Veeam Default Template (CH)
这是一个示例模板，应进行复制并根据您的要求定制
0 Plans
All Scopes
Veeam Default Template (JP)
こちらはサンプル・テンプレートです。コピーして、要件に応
0 Plans
All Scopes
Veeam Default Template
This is an example template, and should be cloned and custo
1 Plans
All Scopes
Veeam Default Template (ES)
Esta es una plantilla de ejemplo, y debe ser clonada y person
0 Plans
All Scopes
Veeam Default Template (FR)
Ceci est un modèle qui doit être cloné et personnalisé selon
0 Plans
All Scopes
Veeam Default Template (RU)
Это шаблон, который можно скопировать и изменить в с
0 Plans
All Scopes
Veeam Default Template (PT)
Este é um template de exemplo, e deve ser clonado e custom
0 Plans


Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Show:
Report type:
Readiness Check
Date:
All Time
CDP Failover - Synology
Delete
Download
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Plan
Report Type
Scope
Operation
Result
Date
Selected: 0 of 2
CDP Failover - Synology
Readiness Check
Admin Scope
Checked
Success
1/25/2022 3:01 PM
CDP Failover - Synology
Readiness Check
Admin Scope
Checked
Failed
1/25/2022 1:32 PM


Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Search by Plan
Show:
Launch
Manage
Verify
Reports
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Mode
Plan
Type
Scope
State
Latest Test
Latest Check
Execution S...
Test Scheduled
Enabled
CDP Replica
Admin Scope
Verified
Passed check
Never
Passed
None
None
Run
Edit
Reset
Quick Check
Update Definition Report
Launch
Manage
Verify
Reports
Properties
All
Plan Definition
Execution
DataLab Test
Readiness Check
Update Definition Report
Clear Change Log
Generating reports to show on Reports tab


Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Exit Administration
Dashboard
Infrastructure
Orchestrator Server
Orchestrator Agents
VMware vCenter Servers
Storage Systems
SMTP Server
Configuration
Recovery Locations
Plan Steps
Settings
Permissions
Roles and Scopes
DataLab Assignment
Scope Inclusions
Email Subscriptions
Licensing
License
Support
Logs
About
Orchestrator Agents
Not healthy:
1 of 2
VMware vCenter Servers
Connected:
All of 1
Storage Systems
No systems added...
License Usage
0%
Remaining VMs: 30
License Expiry
Remaining days:
218
Ends on: 30 August 2022
Datastores in Storage Plans
No storage plans created...


Veeam Disaster Recovery Orchestrator
HOME\Administrator
Administrator
Administration
Scopes (All)
Dashboard
Inventory
DR Planning & Testing
Orchestration Plans
DataLabs
Lab Calendar
DR Documentation
Reports
Report Templates
Scopes: All scopes
Plan Execution
Plan Halted
Errors
Warnings
Success
Not Running
Plan Readiness Check
Failed
Warnings
Passed
Never Checked
Plan Testing
Failed
Errors
Warnings
Passed
Never Tested
Current Issues
Plan
Plan
Operation
VM
Step
State
Duration
No data