Veritas™ Resiliency Platform 10.2 Hardware and Software Compatibility List

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Contents

Chapter 1

Common Compatibility List for Resiliency Platform

This chapter includes the following topics:

Common limitations

Common limitations lists the features that are not supported in one or more environments using Resiliency Platform.

Table 1-1 Common limitations

Feature not supported	Supported feature	Applicable to
VMware fault tolerant virtual machines		VMware environment using third-party replication VMware environment using Resiliency Platform Data Mover replication

Table 1-1 Common limitations *(continued)*

Feature not supported	Supported feature	Applicable to
Shared Raw Device Mapping (RDM)		VMware environment using Resiliency Platform Data Mover replication Independent (RDM) is not supported.
Raw Device Mapping	Hyper-V virtual machines	Hyper-V environment using Resiliency Platform Data Mover replication (In-Guest Replication)
Raw Device Mapping	Resiliency group configured using multiple recovery points	Raw Device Mapping is not supported for resiliency groups configured using multiple recovery points and Netbackup
■ Recovery of VMware virtual machines to AWS cloud using MSDP-C is not supported for EFI (Extensible Firmware Interface) enabled virtual machines.	■ For EFI (Extensible Firmware Interface) enabled virtual machines, 3rd Party replication, NetBackup, and VAIO based replication is supported. ■ For EFI enabled virtual machines on Hyper-V: Only 3rd Party replication is supported. ■ For EFI (Extensible Firmware Interface) enabled VMware: In-guest replication is supported ■ For EFI enabled virtual machines on Hyper-V: Using Veritas Resiliency Platform Data Mover is supported.	■ VMware or Hyper-V environment using Resiliency Platform Data Mover replication (VAIO), or recovery of VMware / Hyper-V environment to all supported clouds using in-guest and NetBackup Data Mover replication.
32-bit operating systems		All environments

Notes:

- Ensure that the virtual machine and its virtual disks reside on datastores of type VMFS or NFS.

Compatibility matrix for virtual appliances

Table 1-2 lists the compatibility matrix for virtual appliances.

Table 1-2 Compatibility matrix for virtual appliances

Virtualization Technology	Versions
VMware	vCenter Server 6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0 ESXi 6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0
Hyper-V	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 Windows Server 2022

Notes:

Resiliency Platform support for VMware vSphere security patches and bugfixes

VMware vSphere security patches and bugfixes can be applied to infrastructure that utilizes the Veritas Resiliency Platform, at the time of release the Resiliency Platform solution validates a base line of major and minor vSphere releases such as ESXi 7.0 update 3, ESXi 8.0 update 1, including respective vCenter versions and relevant patches that are available for vSphere. Subsequent patches may become available from VMware which may be past the release versions of Resiliency Platform and can be applied as recommended by VMware and although not specifically tested post release, Veritas works closely with VMware to ensure that these patches do not break functionality especially with respect to VMware API for IO filers (VAIO).

Compatibility matrix for disaster recovery of virtual machines using multiple types of recovery points

lists the compatibility matrix for disaster recovery of virtual machines using multiple types of recovery points:

Table 1-3 Compatibility matrix for disaster recovery of virtual machines using multiple types of recovery points

NetBackup features	NetBackup supported versions	
	NetBackup 9.0 and below versions	**NetBackup 9.1 and above**
NetBackup Resiliency Blade	Limited support	Supported
NetBackup CDP (Continuous Data Protection)	Not supported	Not supported
NetBackup AIR	Supported	Supported
NetBackup IA (Instant Access)	Supported	Supported

Notes:

[1]. For NetBackup 9.0 and the below versions, the resiliency group configured using Multi-RPO recovery of hosts service objective would be listed in the Resiliency Blade but the information related to protection, recovery readiness, and RPO is not shown appropriately.

[2]. From NetBackup 9.1 information related to resiliency group configured using Multi-RPO recovery of hosts service objective is appropriately displayed.

[3]. You cannot select NetBackup CDP protected virtual machines while creating a resiliency group using any service objective that supports Resiliency Platform Data Mover recovery points.

See “Common limitations” on page 6.

See “Browser compatibility matrix” on page 10.

See “Compatibility matrix for virtual appliances” on page 8.

Support for Hyperconverged Infrastructure on VMware ESXi Hypervisor

Resiliency Platform supports ESXi on Hyperconverged Infrastructure (HCI) such as Nutanix, VxRail and Cisco HyperFlex and others as long as they are supported as listed in the VMware Compatibility Guide.

The HCI must present their storage to vSphere as NFS, VMFS or vSAN as required for VMware VAIO Framework and Resiliency Platform IO Filter. HCI network switches should be presented to vSphere as Standard or Distributed Switches.

Notes:

Resiliency Platform support for VMware vSphere security patches and bugfixes

VMware vSphere security patches and bugfixes can be applied to infrastructure that utilizes the Veritas Resiliency Platform, at the time of release the Resiliency Platform solution validates a base line of major and minor vSphere releases such as ESXi 7.0 update 3, ESXi 8.0 update 1, including respective vCenter versions and relevant patches that are available for vSphere. Subsequent patches may become available from VMware which may be past the release versions of Resiliency Platform and can be applied as recommended by VMware and although not specifically tested post release, Veritas works closely with VMware to ensure that these patches do not break functionality especially with respect to VMware API for IO filers (VAIO).

More Information

Refer VMware VAIO Compatibility Guide.

Browser compatibility matrix

Table 1-4 lists the browser compatibility matrix.

Table 1-4 Browser compatibility matrix

Browser	Versions	Comments
Mozilla Firefox	75.x, or later	**JavaScript:** Enabled **Cookies:** Enabled
Google Chrome	85.x, or later	**JavaScript:** Enabled **Cookies:** Enabled

Note:

When Popup blockers are turned on, make sure that the filter level set to is medium or lower.

Veritas Resiliency Platform components version compatibility

Ensure that Resiliency Manager and Infrastructure Management Server (IMS) are always at same version.

In replication only recover operation is allowed when the Replication Gateways are at lower version than Resiliency Managers and IMS; other operations are not supported.

Chapter 2

Recovery to AWS

This chapter includes the following topics:

Compatibility matrix for disaster recovery of virtual machines to AWS

Table 2-1 lists the compatibility matrix for disaster recovery of virtual machines to AWS.

Table 2-1 Compatibility matrix for disaster recovery of virtual machines to AWS

Virtualization Technology	Versions		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating systems**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			SLES	12.3, 12.4, 12.5, 15, 15.2
			OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, 2022
Hyper-V	Windows Server	2012 R2, 2016, 2019, 2022	OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, 2022

Notes:

- The replication technology for recovery to AWS is Veritas Resiliency Platform Data Mover.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above, the minimum required .Net version is 4.5.
- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- Multipathing on target side virtual machines is not supported.
- VMware RDM disk is supported in virtual and physical mode.
- Using China region for recovery to AWS is supported, but not qualified.
- For selecting ENA flavors for Microsoft Windows and Linux following are the limitations:
  - AMD processor based instance types whose generation end with an 'a'. For example: (t3a.medium) cannot be used for Microsoft Windows workloads.

  - Instance types whose generation ends with 'd'. For example: (m5ad.xlarge) cannot be used for Linux workloads.
- Resiliency Platform supports AWS standard regions, as well as GovCloud regions.

  .
- For a virtual machine which is protected in NetBackup for recovery in Cloud using Cloud Recovery Server, you can either create a resiliency group using NetBackup MSDP-C or Resiliency Platform Data Mover. This feature is available from Resiliency Platform version 10.1.0.1.

See "Common limitations" on page 6.

See "Browser compatibility matrix" on page 10.

See "Compatibility matrix for virtual appliances" on page 8.

Compatibility matrix for disaster recovery of physical machines to AWS

Compatibility matrix for disaster recovery of physical machines to AWS lists the compatibility matrix for disaster recovery of physical machines to AWS.

Table 2-2 Compatibility matrix for disaster recovery of physical machines to AWS

Supported physical machines	
Operating systems	**Versions**
RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
SLES	12.3,12.4, 12.5, 15, 15.2
OEL UEK	7.7
Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- The replication technology for recovery to AWS is Veritas Resiliency Platform Data Mover.
- For Windows workload physical machines, the PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5

to 4.5. For PowerShell version equal to 3.0 and above the min required .Net version is 4.5.

- RHEL hosts (version 7.0 and above) having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- Using China region for recovery to AWS is supported, but not qualified.
- Multipathing on target side virtual machines is not supported.

Compatibility matrix for disaster recovery of virtual machine from AWS region to AWS region

Table 2-3 lists the compatibility matrix for disaster recovery of virtual machines to AWS region to AWS region.

Table 2-3 Compatibility matrix for disaster recovery of virtual machines from AWS region to AWS region

Virtualization Technology	Supported guest operating systems	
AWS Cloud	**Operating systems**	**Versions**
	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6 and 9.0
	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
	SLES	12.3, 12.4, 12.5, 15, 15.2
	OEL UEK	7.7
	Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- The replication technology for recovery to AWS is Veritas Resiliency Platform Data Mover.
- Object Store mode replication is not supported.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above, the minimum required .Net version is 4.5.
- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.

- Using China region for recovery to AWS is supported, but not qualified.
- For selecting ENA flavors for Microsoft Windows and Linux following are the limitations:
  - AMD processor based instance types whose generation end with an 'a'. For example: (t3a.medium) cannot be used for Microsoft Windows workloads.
  - Instance types whose generation ends with 'd'. For example: (m5ad.xlarge) cannot be used for Linux workloads.
- Resiliency Platform supports AWS standard regions, as well as GovCloud regions.

Chapter 3

Recovery to Azure

This chapter includes the following topics:

Compatibility matrix for disaster recovery of virtual machines to Azure

Table 3-1 lists the compatibility matrix for disaster recovery of virtual machines to Azure.

Table 3-1 Compatibility matrix for disaster recovery of virtual machines to Azure

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating system**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			SLES	12.3, 12.4,12.5, 15, 15.2
			OEL	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022
Hyper-V	Windows Server	2012 R2, 2016, 2019, 2022	OEL	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- From version 4.0 onwards, Resiliency Platform supports Azure Ultra disk storage and Azure availability zone.
- The replication technology for recovery to Azure is Veritas Resiliency Platform Data Mover.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the min required .Net version is 4.5.
- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- Multipathing on target side virtual machines is not supported.
- VMware RDM disk is supported in virtual and physical mode.
- For RHEL 7.6 support in Azure, latest kernel version is needed (For example: 3.10.0-957.12.1el7.x86_64).
- Resiliency Platform is supported in Microsoft Azure Government regions.

- For a virtual machine which is protected in NetBackup for recovery in Cloud using Cloud Recovery Server, you can either create a resiliency group using NetBackup MSDP-C or Resiliency Platform Data Mover. This feature is available from Resiliency Platform version 10.1.0.1.

See "Common limitations" on page 6.

See "Browser compatibility matrix" on page 10.

See "Compatibility matrix for virtual appliances" on page 8.

Compatibility matrix for disaster recovery of virtual machine from Azure / Azure Stack to Azure / Azure Stack

Compatibility matrix for disaster recovery of virtual machine from Azure / Azure Stack to Azure / Azure Stack lists the compatibility matrix for disaster recovery of virtual machines from Azure to Azure.

Table 3-2 Compatibility matrix for disaster recovery of virtual machines from Azure / Azure Stack to Azure / Azure Stack

Virtualization Technology	Supported guest operating systems	
Microsoft Azure cloud Microsoft Azure Stack cloud	**Operating systems**	**Versions**
	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
	SLES	12.3, 12.4, 12.5, 15, 15.2
	OEL UEK	7.7
	Windows Serve	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- From version 4.0 onwards, Resiliency Platform supports Azure Ultra disk storage and Azure availability zone.
- The replication technology for recovery to Azure is Veritas Resiliency Platform Data Mover.

- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the min required .Net version is 4.5.
- Virtual machine with **Unmanaged Disks** is not supported for disaster recovery.
- For RHEL 7.6 support in Azure, latest kernel version is needed (For example: 3.10.0-957.12.1el7.x86_64).
- From version 3.6 onwards, Azure Stack is supported with secure communication.
- EFI based protected hosts are not supported on Azure Stack.

See "Common limitations" on page 6.

See "Browser compatibility matrix" on page 10.

See "Compatibility matrix for virtual appliances" on page 8.

Compatibility matrix for disaster recovery of physical machines to Azure

Compatibility matrix for disaster recovery of physical machines to Azure lists the compatibility matrix for disaster recovery of physical machines to Azure.

Table 3-3 Compatibility matrix for disaster recovery of physical machines to Azure

Supported physical machines	
Operating systems	**Versions**
RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
SLES	12.3,12.4, 12.5, 15,15.2
OEL UEK	7.7
Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- The replication technology for recovery to Azure is Veritas Resiliency Platform Data Mover.
- For Windows workload physical machines, the PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5

to 4.5. For PowerShell version equal to 3.0 and above, the minimum required .Net version is 4.5.

- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- Multipathing on target side virtual machines is not supported.

Compatibility matrix for disaster recovery of virtual machines to Azure using NetBackup MSDP-C

Table 3-4 lists the compatibility matrix for disaster recovery of virtual machines to Azure.

Table 3-4 Compatibility matrix for disaster recovery of virtual machines to Azure using MSDP-C

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating system**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			SLES	12.3, 12.4,12.5, 15, 15.2
			OEL	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Table 3-5 NetBackup component compatibility matrix

Component	Sub-component	Version
NetBackup primary server	MSDP-C	10.0, 10.1, and 10.2

Table 3-6 NetBackup Cloud Recovery Server components compatibility matrix

Component	Sub-component	Version
NetBackup Cloud Recovery Sever (CRS)	MSDP-C	10.0, 10.1, and 10.2
	Veritas Alta Recovery Vault	10.0, 10.1, and 10.2

Note:

- NetBackup primary server is supported with secure communication.
- NetBackup MSDP-C is used to recover the virtual machines to Azure.
- Resiliency Platform does not supports Azure Ultra disk storage.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the minimum required .Net version is 4.5.
- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- Multipathing on target side virtual machines is not supported.
- VMware RDM disk is supported in virtual and physical mode.
- For RHEL 7.6 support in Azure, latest kernel version is needed (For example: 3.10.0-957.12.1el7.x86_64).
- Resiliency Platform is supported in Microsoft Azure Government regions.
- Support for configuring NetBackup Cloud Recovery Server (CRS) with Recovery Vault is supported from version 10.1.0.1.

Chapter 4

Recovery to vCloud Director

This chapter includes the following topics:

Compatibility matrix for disaster recovery of virtual machines from on-premises data center to vCloud Director

Table 4-1 lists the compatibility matrix for disaster recovery of virtual machines from on-premises data center to vCloud Director.

Table 4-1 Compatibility matrix for disaster recovery of virtual machines from on-premises data center to vCloud Director

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating systems**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7U3, 7.0	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019
Hyper-V	Windows Server	2012 R2	OEL UEK	7.7
			Windows Server	2012, 2012 R2

Notes:

- vCloud Director version 9.5 is supported.
- The replication technology for recovery to vCloud Director is Veritas Resiliency Platform Data Mover.
- Linux virtual machines are not supported for Hyper-V virtualization technology.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the min required .Net version is 4.5.
- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- VMware Tools or OpenVM Tools (along with DeployPkg for OpenVM Tools version prior to 9.10) need to be installed on the workload virtual machines.
- Rehearse and cleanup rehearsal operations are not supported for recovery to vCloud Director.
- Virtual machines with NIC type E1000E are not supported for the use case of recovering VMware virtual machines to vCloud Director without adding vCenter Server.
- Recover from vCloud Director to production (on-premises) data center is not supported, if virtual machines are configured for protection without adding Hyper-V Server or vCenter Server.

- VMware RDM disk is supported in virtual and physical mode.
- Starting and stopping of resiliency groups is not supported for the use case of recovery of virtual machines to vCloud Director without adding the vCenter server or Hyper-V server.
- Multipathing on target side virtual machines is not supported.
- From version 3.6 onwards, vCloud Director is supported with secure communication.

Compatibility matrix for disaster recovery of virtual machines from vCloud Director to vCloud Director

Table 4-2 lists the compatibility matrix for disaster recovery of virtual machines from vCloud Director to vCloud Director.

Table 4-2 Compatibility matrix for disaster recovery of virtual machines from vCloud Director to vCloud Director

Cloud Technology	Versions	Supported guest operating systems	
vCloud Director	9.5	**Operating system**	**Versions**
		RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3
		CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
		OEL UEK	7.7
		Windows Server	2012, 2012 R2, 2019

Notes:

- The replication technology for recovery to vCloud Director is Veritas Resiliency Platform Data Mover.
- RHEL hosts having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the min required .Net version is 4.5.
- Rehearse and cleanup rehearsal operations are not supported for recovery from vCloud Director to vCloud Director.

- Evacuation plan is not supported for recovery from vCloud Director to vCloud Director.
- Multipathing on target side virtual machines is not supported.
- Standalone virtual machines with vCloud 9.x are not supported with Resiliency Platform.

See "Common limitations" on page 6.

See "Browser compatibility matrix" on page 10.

See "Compatibility matrix for virtual appliances" on page 8.

Compatibility matrix for disaster recovery of physical machines to vCloud Director

Table 2-2 lists the compatibility matrix for disaster recovery of physical machines to vCloud Director.

Table 4-3 Compatibility matrix for disaster recovery of physical machines to vCloud Director

Supported physical machines	
Operating systems	**Versions**
RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3
CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
OEL UEK	7.7
Windows Server	2012, 2012 R2, 2016, 2019

Notes:

- The replication technology for recovery to vCloud Director is Veritas Resiliency Platform Data Mover.
- RHEL hosts having multiple NICs need to have NetworkManager-config-routing-rules package installed on them.
- For Windows workload virtual machines, the PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above, the minimum required .Net version is 4.5.
- Rehearse and cleanup rehearsal operations are not supported for recovery from Physical to vCloud Director.

- Multipathing on target side virtual machines is not supported.

Chapter 5

Recovery to Google Cloud Platform

This chapter includes the following topics:

Compatibility matrix for disaster recovery of virtual machines to Google Cloud Platform

See Table 5-1 on page 29. lists the compatibility matrix for disaster recovery of virtual machines to Google Cloud Platform.

Table 5-1 Compatibility matrix for disaster recovery of virtual machines to Google Cloud Platform

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating systems**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
			CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			SLES	12.3, 12.4,12.5, 15, 15.2
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3	OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022
Hyper-V	Windows Server	2012 R2, 2016, 2019, 2022	OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- RHEL hosts having multiple NICs need to have NetworkManager config-routing-rules package installed on them.
- Multipathing on target side virtual machines is not supported.
- BRTFS file system and AppArmor application type along with SLES12.5 and 15.2. are not supported.

Chapter 6

Recovery to Orange Recovery Engine

This chapter includes the following topics:

Compatibility matrix for disaster recovery of virtual machines to Orange Recovery Engine

See Table 6-1 on page 31. table lists the compatibility matrix for disaster recovery of virtual machines to Orange Recovery Engine.

Table 6-1 Compatibility matrix for disaster recovery of virtual machines to Orange Recovery Engine

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating system**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7U3, 7.0	RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7U3, 7.0	CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			SLES	12.3, 12.4,12.5, 15, 15.2
			OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019

Notes:

- The replication technology for recovery to Orange Recovery Engine is Veritas Resiliency Platform Data Mover.
- `UVP VMTools` software package needs to be installed on Windows virtual machines.
- For PowerShell version equal to 2.0 and above but less than 3.0 the required .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the min required .Net version is 4.5.
- RHEL hosts (version 7.0 and above) having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- SCSI device type for Elastic Volume Service (EVS) is not supported.
- ECS types that are based on Xen hypervisors are not supported.
- Multipathing on target side virtual machine is not supported.

See “Common limitations” on page 6.

See “Browser compatibility matrix” on page 10.

See “Compatibility matrix for virtual appliances” on page 8.

Compatibility matrix for disaster recovery of physical machines to Orange Recovery Engine

Table 2-2 lists the compatibility matrix for disaster recovery of physical machines to Orange Recovery Engine.

Table 6-2 Compatibility matrix for disaster recovery of physical machines to Orange Recovery Engine

Supported physical machines	
Operating systems	**Versions**
RHEL	7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3
CentOS	7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
SLES	12.3, 12.4, 12.5,15, 15.2
OEL UEK	7.7
Windows Server	2012, 2012 R2, 2016, 2019

Notes:

- The replication technology for recovery to Orange Recovery Engine is Veritas Resiliency Platform Data Mover.
- UVP VMTools software package needs to be installed on Windows physical machines.
- For Windows workload physical machines, the PowerShell version equal to 2.0 and above but less than 3.0 the req .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above the min req .Net version is 4.5.
- RHEL hosts (version 7.0 and above) having multiple NICs need to have NetworkManager-config-routing-rules package installed on them.
- SCSI device type for Elastic Volume Service (EVS) is not supported.
- ECS types that are based on Xen hypervisors are not supported.
- Multipathing on target side virtual machines is not supported.

Chapter 7

Recovery of InfoScale applications

This chapter includes the following topics:

- Compatibility matrix for disaster recovery of InfoScale applications

Compatibility matrix for disaster recovery of InfoScale applications

Table 7-1 lists the compatibility matrix for disaster recovery of InfoScale applications.

Table 7-1 Compatibility matrix for disaster recovery of InfoScale applications

Component	Version	Details
Veritas InfoScale Operations Manager Managed Host (MH)	7.2, 7.3, 7.4, and 8.0	Supported on Linux and Windows
Veritas Cluster Server (VCS) [1],[2]	6.0, 6.1, 6.2, 7.0, 7.1, 7.2, 7.3, 7.4, and 8.0	Supported on AIX, Linux, Solaris, and Windows operating systems

Notes:

[1] All VCS supported configurations are supported for both Application and Replication technology.

[2] The GCO failover policy must be manual.

See "Common limitations" on page 6.

See "Browser compatibility matrix" on page 10.

See "Compatibility matrix for virtual appliances" on page 8.

Chapter 8

Recovery using NetBackup

This chapter includes the following topics:

Compatibility matrix for disaster recovery using NetBackup images

Table 8-1 and Table 8-2 lists the compatibility matrix for disaster recovery using NetBackup Images.

Table 8-1 Virtualization technology compatibility matrix

Virtualization Technology	Platforms	
VMware	**Operating systems**	**Versions**
	vCenter Server	6.7 U1, 6.7 U2, 6.7U3, 7.0, 7.0.1, 7.0.2, 7.0.3
	ESXi	6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3

Table 8-2 NetBackup component compatibility matrix

Component	Version
NetBackup primary server [2]	8.1.2, 8.2, 8.3, 9.0, 9.1, 10.0 ,10.1, and 10.2

Table 8-2 NetBackup component compatibility matrix *(continued)*

Component	Version
NetBackup Appliance	Appliance 3.1.2, 3.2, 3.3, 4.0, and 5.1.1
NetBackup Flex Scale	2.1 and 3.0

Notes:

[1] NetBackup primary server is supported with secure communication.

[2] NetBackup primary server 8.1.1 is no longer supported and will go in disconnected state if you have upgraded your environment with Resiliency Platform 10.2. You need to upgrade the NetBackup primary server to 8.1.2 and above to communicate with Resiliency Platform.

[3]. For information on recovery of resiliency groups configured using multiple recovery points for virtual machines configured using NetBackup, see Compatibility matrix for disaster recovery of virtual machines using multiple types of recovery points

See “Common limitations” on page 6.

See “Browser compatibility matrix” on page 10.

See “Compatibility matrix for virtual appliances” on page 8.

Compatibility matrix for disaster recovery of virtual machines using NetBackup Image Sharing

Table 8-3 and Table 8-4 lists the compatibility matrix for disaster recovery using NetBackup Images.

Table 8-3 Virtualization technology compatibility matrix

Virtualization Technology	Version
VMware	vCenter Server 6.7, 6.7 U1, 6.7 U2, 6.7U3, 7.0, 7.0.1, 7.0.2, 7.0.3 ESXi 6.7, 6.7 U1, 6.7 U2, 6.7U3, 7.0, 7.0.1, 7.0.2, 7.0.3

Table 8-4 NetBackup component compatibility matrix

Component	Sub-component	Version	OS supported
NetBackup primary server	CloudCatalyst	8.2 and 8.3	Refer to NetBackup documentation for supported operating systems
	MSDP-C	8.3, 9.0, 9.1, and 10.0, 10.1, and 10.2	

Table 8-5 NetBackup Cloud Recovery Server components compatibility matrix

Components	Sub-component	NetBackup supported version	OS supported
NetBackup Cloud Recovery Sever (CRS)	CloudCatalyst	8.2 and 8.3	Refer to NetBackup documentation for supported operating systems
	MSDP-C	8.3, 9.0, 9.1, 10.0, 10.1, and 10.2	

Notes:

- NetBackup primary server is supported with secure communication.
- Refer to VM Import/Export Requirements and VM Import/Export User Guide for supported operating system.

See “Common limitations” on page 6.

See “Browser compatibility matrix” on page 10.

See “Compatibility matrix for virtual appliances” on page 8.

Chapter 9

Recovery using third-party replication technology

This chapter includes the following topics:

Compatibility matrix for disaster recovery of virtual machines using third-party replication technology

Table 9-1 lists the compatibility matrix for VMware and Hyper-V virtual machines, to be used for disaster recovery using third-party replication technology.

Table 9-2 lists the compatibility matrix for third-party replication technology used with the virtual machines.

Table 9-1 Compatibility matrix for virtual machines

Virtualization Technology	Platforms		Supported guest operating systems	
VMware [14]	**Operating system**	**Versions**	**Operating systems**	**Versions**
	vCenter Server	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0	RHEL	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.6, and 9.0
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0	CentOS	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3
			SLES	12.3, 12.4, 12.5, 15, 15.1, 15.2
			OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022
Hyper-V [12], [13]	Windows Server	2012 R2, 2016, 2019, 2022	OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Table 9-2 Compatibility matrix for third-party replication technology for virtual machines

Replication Technology	Array software / Vendor component API/ CLI Version	Storage Model	VMware	Hyper-V
EMC SRDF [4]	EMC Solution Enabler 9.1.0.3 or lower version EMC Unisphere 9.1	Symmetrix DMX, VMAX, All-Flash 9500 and Power Max 8000	Supported	Supported
NetApp SnapMirror [1], [2], [3]	Cluster mode - 8.2.1, 8.3.2 ONTAP - 9.1, 9.8, 9.9.1P5	Netapp FAS series	Supported	Supported
Hitachi True Copy/Hitachi Universal Replicator	Command Control Interface (CCI) - 01-46-03/02, 01-58-03/02	Hitachi USP, VSP	Supported	Supported

Table 9-2 Compatibility matrix for third-party replication technology for virtual machines *(continued)*

Replication Technology	Array software / Vendor component API/ CLI Version	Storage Model	VMware	Hyper-V
EMC Recover Point [7], [8]	RecoverPoint 4.1, 4.4.1, 5.0, 5.1	VMX/Symmetrix, VNX/Clariion, EMC Unity	Supported	Supported
HPE 3PAR Remote Copy [5], [6]	v3.3.1 (MU2)	N/A	Supported	Supported
IBM SVC [16]	7.1, 7.3, 7.6.1.8 and 8.3.0.1	N/A	Supported	Supported
Hyper- V Replica	N/A	N/A	N/A	Supported
INFINIBOX	5.0, 5.1, 6.0 and 7.2	INFINIDAT INFINIBOX	Supported	Supported

Notes:

[1] Hyper-V is supported with NetApp LUNs but NetApp CIFS is not supported.

[2] The NetApp SnapMirror replication technology is supported with Async mode only.

[3] NFS, FC LUN, and iSCSI storage exported from NetApp arrays are supported.

[4] The EMC SRDF replication technology is supported with Sync and Async modes.

[5] Only non-shared RDM is supported for HPE 3PAR Remote Copy.

[6] The HPE 3PAR Remote Copy replication technology is supported only in periodic mode with the mirror_config policy.

[7] VPLEX storage is not supported for EMC RecoverPoint.

[8] Only continuous remote replication (CRR) is supported for EMC RecoverPoint. Continuous data protection (CDP) and concurrent local and remote (CLR) replication are not supported.

[9] Minimum Powershell version supported on Hyper-V Servers is 3.0.

[10] Microsoft Failover Cluster (MSFoC) environment is supported.

[11] VMware HA is supported.

[12] Combination of storage from multiple array technologies in a single resiliency group is not supported.

[13] Combination of replicated and non-replicated storage to virtual machines is not supported.

[14] Raw device mapping (RDM) mapped replicated LUNs are not supported for Hyper-V virtual machine disaster recovery.

[15] IPv6 network is supported for configuration of 3PAR, RecoverPoint, and NetApp SnapMirror enclosures.

[16] Metro Mirror is not supported.

[17] File systems as replica datasets are not supported with Hyper-V server.

[18] From version 3.6 onwards, secure communication is supported for configuration of 3PAR, RecoverPoint, IBM SVC enclosures.

[19] For RHEL, previous minor versions may work with the current released version of Resiliency Platform but not specifically tested or qualified, as those minor versions are out of ELS with Red Hat. It is recommended to upgrade to ELS supported versions.

See "Common limitations" on page 6.

See "Browser compatibility matrix" on page 10.

See "Compatibility matrix for virtual appliances" on page 8.

Compatibility matrix for disaster recovery of applications using third-party replication technology

Table 9-3 lists the compatibility matrix for third-party replication technology.

Table 9-3 Compatibility matrix for third-party replication technology for applications

Applications	Version	Discovery Host platforms		3rd party replication
		Operating system	Versions	
Oracle RDBMS [1],[2],[3]	11g r2 12C 19c	RHEL	7.7, 8.0, 8.2, and 8.4	Oracle Data Guard

Notes:

[1] Oracle Data Guard supported only using the Data Guard Broker.

[2] Oracle 12c and 19c databases replicated by Data Guard are supported via Discovery Host mode.

[3] Database user authentication is not supported for Oracle applications.

See “Common limitations” on page 6.

See “Browser compatibility matrix” on page 10.

See “Compatibility matrix for virtual appliances” on page 8.

Chapter 10

Recovery on on-premises data center

This chapter includes the following topics:

Compatibility matrix for disaster recovery of VMware virtual machines using Resiliency Platform Data Mover in Hypervisor mode

Table 10-1 lists the compatibility matrix for disaster recovery of VMware virtual machines using Resiliency Platform Data Mover in Hypervisor mode.

Table 10-1 Compatibility matrix for disaster recovery of VMware virtual machines using Resiliency Platform Data Mover in Hypervisor mode

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating systems**	**Versions**
	vCenter	6.7 P03+, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0	RHEL	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, and 8.5, 8.6, and 9.0
	ESXi	6.7 P03+, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0	CentOS	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3
			SLES	12.3, 12.4, 12.5, 15, 15.1, 15.2
			OEL UEK	7.7 and 8.5
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- VMware RDM disk is supported in virtual mode.
- Refer to the VMware Compatibility Guide for information about the VMware approved Resiliency Platform Data Mover replication filter.
- Refer to the VMware Product Interoperability Matrices to ensure that the vCenter server version supports the VMware vSphere Hypervisor version.
- IPv6 network is supported for vCenter server configuration.
- From version 3.6, vCenter server is supported with secure communication.
- Protection of virtual machines residing on NFS version 3.0 datastore is supported.
- If the ESXi hosts are upgraded from 6.x version to 7.x, upgrade the Veritas Replication VIB immediately.
- VMware vVols are not supported.
- For RHEL, previous minor versions may work with the current released version of Resiliency Platform but not specifically tested or qualified, as those minor versions are out of ELS with Red Hat. It is recommended to upgrade to ELS supported versions.

See “Common limitations” on page 6.

See “Browser compatibility matrix” on page 10.

See “Compatibility matrix for virtual appliances” on page 8.

Compatibility matrix for disaster recovery of VMware virtual machines using Resiliency Platform Data Mover in In-guest mode

Table 10-2 lists the compatibility matrix for disaster recovery of VMware virtual machines using Resiliency Platform Data Mover in In-guest mode.

Table 10-2 Compatibility matrix for disaster recovery of VMware virtual machine using Resiliency Platform Data Mover in In-guest mode

Virtualization Technology	Platforms		Supported guest operating systems	
VMware	**Operating systems**	**Versions**	**Operating systems**	**Versions**
	vCenter	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0	RHEL	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0
	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0, 7.0.1, 7.0.2, 7.0.3, 8.0	CentOS	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
			SLES	12.3, 12.4, 12.5, 15, 15.1, 15.2
			OEL UEK	7.7
			Windows Server	2012, 2012 R2, 2016, 2019, and 2022

Notes:

- RHEL hosts (version 7.0 and above) having multiple NICs need to have NetworkManager config-routing-rules package installed on them.
- Multipathing on target side virtual machines is not supported.
- VMware RDM disk is supported in Virtual Mode (Dependent) only.

Compatibility matrix for disaster recovery of physical machines to VMware virtual machines

Table 10-3 Compatibility matrix for disaster recovery of physical machines to VMware virtual machines

Supported Physical machines		Supported VMware Version	
Operating system	**Versions**	**Operating systems**	**Versions**
RHEL	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.0, 8.3, 8.6, and 9.0	vCenter Server	6.7, 6.7 U1, 6.7 U2, 7.0, 7.0.1, 7.0.2
CentOS	6.8, 6.9, 6.10, 7.0, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7	ESXi	6.7, 6.7 U1, 6.7 U2, 6.7U3, 7.0, 7.0.1, 7.0.2
SLES	12.3, 12.4, 12.5, 15, 15.2		
OEL UEK	7.7		
Windows Server	2012, 2012 R2, 2016, 2019, and 2022		

- The replication technology for recovery of physical machines to VMware virtual machines is Veritas Resiliency Platform Data Mover.
- For Windows workload virtual machines, the PowerShell version equal to 2.0 and above but less than 3.0 the req .Net version must be in range of 3.5 to 4.5. For PowerShell version equal to 3.0 and above, the minimum req .Net version is 4.5.
- RHEL hosts (version 7.0 and above) having multiple NICs need to have `NetworkManager-config-routing-rules` package installed on them.
- For RHEL, previous minor versions may work with the current released version of Resiliency Platform but not specifically tested or qualified, as those minor versions are out of ELS with Red Hat. It is recommended to upgrade to ELS supported versions.
- Starting and stopping of resiliency groups is not supported for recovery of physical machines to VMware virtual machines.
- Shared disks are not supported for recovery of physical machines to VMware virtual machines.
- Multiple subnets at source to single subnet at target is not supported.

- 1 GB free disk needs to be added to the physical server required for replication DRL (Replication Block Tracking) disk.
- Multipathing on target side virtual machines is not supported.