



Data Protector 10.80 Virtualization Support Matrix

Version: 3.0

Date: November 2020

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Introduction

Note: The combinations of Data Protector components with operating systems and/or application versions are supported by Data Protector if the associated operating system and/or application versions are supported by respective vendors.

All guest operating systems supported by the respective vendors are supported with Data Protector if they are listed as supported on physical hosts in the *Data Protector 10.80 Platform and Integration Support Matrix*.

For information about specific Windows versions supported by Data Protector please refer to the Platform and Integration Support Matrix.

Quiescent state of MS File Systems and Applications within a VMware virtual machine is handled and supported by VMware Tools

Updates/changes to individual fields within the Matrix will be highlighted in RED.

What's New

What's New

1. Removed the Table 5 "Supported Microsoft applications for quiescence enabled backups"
2. Support of Microsoft Hyper-V Server 2019

The following table lists various Data Protector components supported inside the guest operating systems:

Table 1: Supported components inside virtual machines

Supported components inside virtual machines	
Virtualization application	Supported Data Protector components
VMware ¹	<ul style="list-style-type: none"> • Cell Manager/Installation Server • Manager of Managers • Disk Agent • Media Agent² • Graphical User Interface • Online Extension Agents³ • StoreOnce Software Deduplication • HPE P9000 XP SSEA Agent⁴ • HPE 3PAR SMI-S Agent⁵ • VSS Agent⁶
Microsoft Hyper-V ⁷	<ul style="list-style-type: none"> • Cell Manager/Installation Server • Manager of Managers • Disk Agent • Media Agent • Graphical User Interface • Online Extension Agents³ • StoreOnce Software Deduplication • HPE P9000 XP SSEA Agent⁴ • VSS Agent⁷
HPE Integrity Virtual Machines (IVM)	<ul style="list-style-type: none"> • Cell Manager/Installation Server • Disk Agent • Media Agent⁸ • Manager of Managers • Online Extension Agents³ • HPE P9000 XP SSEA Agent⁴
Solaris Zones	<ul style="list-style-type: none"> • Disk Agent (Global and Local Zones) • Media Agent (Global Zone) • Oracle Online Agent (Global and Local Zones)
Oracle VM	<ul style="list-style-type: none"> • Cell Manager/Installation Server • Manager of Managers • Disk Agent • Media Agent • Graphical User Interface • Online Extension Agents³ • StoreOnce Software Deduplication • HPE P9000 XP SSEA Agent⁴ • VSS Agent⁶ • Oracle Online Agent
Red Hat, KVM	<ul style="list-style-type: none"> • Cell Manager/Installation Server • Manager of Managers • Disk Agent • Media Agent • Online Extension Agents³ • StoreOnce Software Deduplication • HPE P9000 XP, SSEA Agent⁴

¹ Includes support for Virtual Infrastructure and vSphere components like vMotion, HA, DRS.

² Supported for HPE StoreOnce Backup Systems with iSCSI and Catalyst, file devices, HPE StoreOnce Backup System using Catalyst, HPE StoreOnce Software, and file libraries only.

³ Valid for all applications that are listed as supported in Data Protector 10.80 Platform and Integration Support Matrix and are supported by respective vendors inside a virtual machine

⁴ Includes application integrations listed in the Data Protector 10.80 HPE Storage Support Matrix for HPE P9000 XP Disk Array Family

⁵ Includes application integrations listed in the Data Protector 10.80 HPE Storage Support Matrix for HPE 3PAR Disk Array Family Using SMI-S Agent. For more information on instant recovery, see Data Protector Zero Downtime Backup Integration Guide.

⁶ In case of VSS backups, the application host can be a virtual host, but the backup host for FC based arrays (3PAR, XP, etc) must be a physical server. For details of the supported VSS configurations, see the Data Protector 10.80 VSS Integration Support Matrix

⁷ Individual disk restores are only supported for Windows Hyper-V Server 2012 or later.

⁸ Support includes attached AVIO Devices.

Table 2: Data Protector Virtual Environment Agent platform support (VDDK)

Supported platforms for Data Protector and VMware VDDK component ^{1,2,3,8}		
Data Protector versions	VMware VDDK component	Supported backup / mount proxy operating systems
10.00	• VDDK 6.0 U2	Windows Server 2008 R2 (x64) Windows Server 2012, 2012 R2 (x64) RHEL 6.6 ⁴ , 7.0 (x64) ^{5,6,7} SLES 11.3, 12 (x64) ^{5,6,7}
10.01,10.02,10.03,10.04 and 10.10	• VDDK 6.5 U1	Windows Server 2008 R2 (x64) Windows Server 2012, 2012 R2 (x64) Windows Server 2016 (x64) RHEL 6.7, 6.8, 7.2, 7.3 (x64) ^{5,6,7} SLES 11.4, 12.1 (x64) ^{5,6,7}
10.20, 10.30, 10.40, 10.50	• VDDK 6.7 U1	Windows Server 2008 R2 (x64) Windows Server 2012, 2012 R2 (x64) Windows Server 2016 CentOS 7.4 (x64) ^{5,6,7} RHEL 6.7, 6.8, 6.9, 7.2, 7.3 (x64) ^{5,6,7} SLES 11.4, 12.1, 15 (x64) ^{5,6,7}
10.60, 10.70, 10.80	• VDDK 6.7 U3	Windows Server 2008 R2 (x64) Windows Server 2012, 2012 R2 (x64) Windows Server 2016 CentOS 7.4 (x64) ^{5,6,7} RHEL 6.7, 6.8, 6.9, 7.2, 7.3, 7.6 (x64) ^{5,6,7} SLES 11.4, 12.1, 12.4, 15 (x64) ^{5,6,7}

- 1 Data Protector supports guest operating systems that are supported by the respective operating system vendor and are supported as a guest operating system by VMware.
- 2 GPT disks are supported for Backup and Restore.
- 3 Data Protector does not support backup of SATA disks.
- 4 RHEL 6.6 does not support Power On and Live Migrate operation.
- 5 Supported partition type for GRE: Linux partition (ID 83), Linux LVM partition (ID 8E).
- 6 Linux mount proxies do not support granular recovery of ownership, ACLs, file attributes, and alternate data streams for files and folders in the Windows guest virtual machines.

File System	Mount Proxy Operating System				
	RHEL 6.6,6.7,6.8,6.9	RHEL 7,7.1,7.2,7.3, 7.6	SLES 11.4	SLES 12,12.1,12.4,15	CentOS 7.4
ext2	✓	✓	✓	✓	✓
ext3	✓	✓	✓	✓	✓
ext4	✓	✓	-	✓	✓
reiserfs	-	-	✓	✓	-
xfs	✓	✓	✓	✓	✓
ntfs ⁶	✓	✓	✓	✓	✓

- 8 The supported operating systems are based on guidance from VMware

Table 3: VMware vCenter support

VMware vCenter support for Data Protector 10.80 ^{1,2,3,4,5,6}
VMware vCenter Server 6.0, 6.0 U1, 6.0 U2, 6.0 U3, 6.5, 6.5 U1, 6.5 U2, 6.5 U3, 6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0 ⁷
VMware Virtual Server Appliance 6.0, 6.0 U1, 6.0 U2, 6.0 U3, 6.5, 6.5 U1, 6.5 U2, 6.5 U3, 6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0 ⁷

- 1 Data Protector supports only the above mentioned VMware vCenter versions.
The ESXi Servers supported by these VMware vCenter versions are supported as Data Protector Application clients.
- 2 For the respective ESX Server support, refer to the VMware Product Interoperability Matrix using the following link:
https://partnerweb.vmware.com/comp_guide2/sim/interop_matrix.php.
- 3 Data Protector does not support free ESXi licenses.
- 4 Raw Disk Mappings is supported with VADP based backups in virtual mode but not supported in physical mode.
- 5 VMware VVol (Virtual Volumes) are supported for VMs that are hosted on 3PAR VVol only.
- 6 Data Protector supports the backup of encrypted VMs (non-ZDB mode only). Such VMs will be restored in an unencrypted manner. Advanced operations such as Granular Recovery, Power On and Live Migrate are currently not supported. Encrypted VMs backup is not supported with vCenter 6.7, 6.7 U1, 6.7 U2. 6.7 U3, 7.0
- 7 VMware VVol (Virtual Volumes) is not supported.

Table 4: Data Protector Virtual Environment Agent platform support

Data Protector Virtual Environment Agent platform support ^{1,2}		
Data Protector components	Platforms	Supported backup / mount proxy operating systems
Virtual Environment Agent (vStorage API support for Data Protection)	• VMware vCloud Director 5.5.0	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64)
Virtual Environment Agent	• H3C CAS 5.0(E0522, E0526 and E0550 ³)	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) RHEL 6, 7 (x64) Cent OS 6, 7 (x64) SLES 11, 12 (x64)

- 1 Data Protector supports guest operating systems that are supported by the respective operating system vendor and are supported as a guest operating system by VMware.
2 GPT disks are supported for Backup and Restore.
3 Only Cent OS 7.5 (x64) is supported as a Backup Proxy host for Cached method.

Table5: Granular Recovery Extension for VMware vSphere

Granular Recovery Extension (GRE) for VMware vSphere ^{1, 2}		
Data Protector component	VMware component	Supported VMware versions
Granular Recovery Extension for VMware vSphere Client (HTML5)	VMware vCenter Server	6.5 U2, 6.5 U3, 6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0
Granular Recovery Extension for VMware vSphere Client (HTML5)	VMware Server Appliance (VSA)	6.5 U2, 6.5 U3, 6.7, 6.7 U1, 6.7 U2, 6.7 U3, 7.0

- 1 For Cached GRE using Smart Cache, mount proxy and backup server should be the same host (for NAS devices).
2 Granular recovery of data is supported for VMs hosted on vSAN datastores. vSAN versions 6.6.1 and 6.7 are supported for this operation

Data Protector supports the following virtualization application-specific features, which enable VSS snapshots for instant recovery without an agent inside the VMs.

Table 6: Microsoft Hyper-V Virtualization application integration support

Virtualization application integration support		
Virtualization application	Data Protector component	Supported application components
Microsoft Hyper-V Server 2008, 2008 R2 ¹ , 2012 ¹ , 2012 R2 ¹ , 2016 ¹ , 2019 ¹	Microsoft Volume Shadow Copy Integration	VSS based snapshots of VMs
Microsoft Hyper-V Server 2008, 2008 R2 ¹	Virtual Environment Agent	VSS based snapshots of VMs (cluster aware)
Microsoft Hyper-V Server 2012 ^{1,3} , 2012 R2 ^{1,3}	Virtual Environment Agent	VSS based snapshots of VMs (cluster aware)
Microsoft Hyper-V Server 2016 ^{1,3}	Virtual Environment Agent	VSS based snapshots of VMs (cluster aware)
Microsoft Hyper-V Server 2019 ^{1,2,3}	Virtual Environment Agent	VSS based snapshots of VMs (cluster aware)

- 1 Instant recovery for Hyper-V VSS snapshots is done using the SMIS-A agent.
2 Restore to target storage path not supported due to known Microsoft Limitation
3 [Scale-Out File Server with cluster storage volume recommended by Microsoft for SMB on Hyper V Cluster](#)

Table 7: Supported configurations – HPE SimpliVity Storage

Supported configurations – HPE SimpliVity Storage ¹				
Integration	Backup	Restore	Power On and Live Migrate	GRE
VMware 6.5, 6.5 U1	Supported	Supported	Supported	Supported

1. Supported HPE SimpliVity Storage version is 3.7.0 and above

Table 8: Supported configurations – H3C CAS

Supported configurations				
Integration	Backup	Restore	Power On and Live Migrate	GRE
H3C CAS 5.0 ^{1,2}	Supported	Supported	Not Supported	Not Supported

1. Supported CAS Server versions are E0522, E0526 and E0550
2. E0550 supports only the Cached method. E0522 and E0526 supports only Non-Cached method

Table 9: Supported configurations – Red Hat KVM

Supported configurations ¹				
Integration	Backup	Restore	Power On and Live Migrate	GRE
KVM 1.4.x	Supported	Supported	Not Supported	Not Supported

1. This is a scripted solution which processes data using Filesystem Backup and Restore.

Table 10: Supported configurations – Nutanix vCenter

Supported configurations				
Integration	Backup	Restore	Power On and Live Migrate	GRE
Nutanix 5.10.1 LTS	Supported	Supported	Not Supported	Not Supported

Table 11: Supported configurations – Nutanix AHV

Supported configurations ^{1,3}				
Integration	Backup	Restore	Power On and Live Migrate	GRE
Nutanix 5.10.3 LTS	Supported	Supported	Not Supported	Supported ²

1. This is a scripted solution (File-level, Image-level) which processes data using Filesystem/Raw-Image Backup and Restore.
2. This is supported for virtual machines backed up using the File-level scripted solution
3. Cell manager and backup proxy host must be Linux