

The background of the page features several bright blue, glowing light streaks that curve across the dark blue background, creating a sense of motion and technology.

**opentext™**

**Data Protector for  
Cloud Workloads 6.2.0  
Support Matrix**

July 2024

# Support Matrix

## Backup Destination Support

### Filesystem

Backup Provider	Supported version	Random Access	Deduplication	Encryption	Pre/post access command execution
Filesystem	n/a	✓	✓ (built-in VDO)	✓	✓
Filesystem (synthetic, XFS)	Linux kernel 4.15+, xfsprogs 4.17+	✓	✓ (built-in VDO)	✗	✓
PowerProtect DD	DD OS 7.x	✓	✓	✓	✓

### Object storage

Backup Provider	Supported version	Random Access	Deduplication	Encryption	Pre/post access command execution
Amazon S3	Current	✗	n/a	✓	✓
S3 compatible	Current	✗	n/a	✓	✓
Cloudian S3	Current	✗	n/a	✓	✓
Alibaba Cloud OSS	Current	✗	n/a	✓	✓
Nutanix Objects	Current	✗	n/a	✓	✓
MS Azure Blob Storage	Current	✗	n/a	✓	✓
OpenStack Swift	API v2	✗	n/a	✗	✓
Scality Ring	6.4+	✗	n/a	Provider dependent	✓

### Enterprise backup providers

Backup Provider	Supported version	Random Access	Deduplication	Encryption	Pre/post access command execution
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Backup Provider	Supported version	Random Access	Deduplication	Encryption	Pre/post access command execution
Micro Focus Data Protector	11+	✗	✓	Provider dependent	✓

## Virtualization Platforms - features and requirements

### Nutanix AHV

	Disk-attachment
Minimum version	5.5+ (Intel-only)
Status	In operation
Last snapshot kept on hypervisor for inc. backups	yes
Hypervisor OS access needed	no
Proxy VM needed	yes

Feature	Disk-attachment
Incremental backup	✓
File-level restore	✓
VM disk exclusion	✓
Snapshot management	✓
Quiesced snapshot	✓
Pre/post snapshot command execution	✓
Backup disks sharable over iSCSI	✓
Name-based policy assignment	✓
Tag-based policy assignment	✓ (when using Prism Central)
Available space for snapshot check	✗ (hypervisor-dependent)
Power-on VM after restore	✓

**Note:** Backup of VMs with vTPM enabled is not supported.

### Red Hat Virtualization

	<b>Disk-attachment</b>	<b>Disk Image Transfer</b>	<b>SSH Transfer</b>	<b>Changed-Block Tracking</b>
Minimum version	4.0+	4.3+	4.3+	4.4+
Status	In operation	In operation	Deprecated (for hosts 4.5.0+)	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no	yes	yes	no
Hypervisor OS access needed	no	no	yes	no
Proxy VM needed	yes	no	no	no
Key caveats	full backup only disk attachment process may be slow	data transfer via Manager (<4.4.3)	access to the hypervisor needed	incremental backup require QCOW2 disk format

<b>Feature</b>	<b>Disk-attachment</b>	<b>Disk Image Transfer</b>	<b>SSH Transfer</b>	<b>Changed-Block Tracking</b>
Incremental backup	✗	✓	✓	✓
File-level restore	✓	✓	✓	✓
VM disk exclusion	✓	✓	✓	✓
Snapshot management	✓	✓	✓	✓
Quiesced snapshot	✓	✓	✓	✓
Pre/post snapshot command execution	✓	✓	✓	✓
Disk backups can be shared over iSCSI	✓	✓ (RAW-only)	✓ (RAW-only)	✓
Name-based policy assignment	✓	✓	✓	✓
Tag-based policy assignment	✓	✓	✓	✓
Available space for snapshot check	✓	✓	✓	✓

Feature	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Power-on VM after restore	✓	✓	✓	✓

## oVirt

	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Minimum version	4.0+	4.3+	4.3+	4.4+
Status	In operation	In operation	Deprecated (for hosts 4.5.0+)	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no	yes	yes	no
Hypervisor OS access needed	no	no	yes	no
Proxy VM needed	yes	no	no	no
Key Caveats	full backup only disk attachment process may be slow	data transfer via Manager (<4.4.3)	access to the hypervisor needed	incremental backup require QCOW2 disk format

Feature	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Incremental backup	✗	✓	✓	✓
File-level restore	✓	✓	✓	✓
VM disk exclusion	✓	✓	✓	✓
Snapshot management	✓	✓	✓	✓
Quiesced snapshot	✓	✓	✓	✓
Pre/post snapshot command execution	✓	✓	✓	✓
Disk backups can be shared over iSCSI	✓	✓ (RAW-only)	✓ (RAW-only)	✓

Feature	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Name-based policy assignment	✓	✓	✓	✓
Tag-based policy assignment	✓	✓	✓	✓
Available space for snapshot check	✓	✓	✓	✓
Power-on VM after restore	✓	✓	✓	✓

## Oracle Linux Virtualization Manager

	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Minimum version	4.3+	4.3+	4.3+	4.4+
Status	In operation	In operation	Deprecated (for hosts 4.5.0+)	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no	yes	yes	no
Hypervisor OS access needed	no	no	yes	no
Proxy VM needed	yes	no	no	no

Key Caveats	full backup only disk attachment process may be slow	data transfer via Manager (<4.4.3)	access to the hypervisor needed	incremental backup require QCOW2 disk format
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Feature	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Incremental backup	✗	✓	✓	✓
File-level restore	✓	✓	✓	✓
VM disk exclusion	✓	✓	✓	✓
Snapshot management	✓	✓	✓	✓

Feature	Disk-attachment	Disk Image Transfer	SSH Transfer	Changed-Block Tracking
Quiesced snapshot	✓	✓	✓	✓
Pre/post snapshot command execution	✓	✓	✓	✓
Disk backups can be shared over iSCSI	✓	✓ (RAW-only)	✓ (RAW-only)	✓
Name-based policy assignment	✓	✓	✓	✓
Tag-based policy assignment	✓	✓	✓	✓
Available space for snapshot check	✓	✓	✓	✓
Power-on VM after restore	✓	✓	✓	✓

## Proxmox VE

	Export storage repository	SSH Transfer
Minimum version	5.2+	5.2+
Status	In operation	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	yes	yes
Hypervisor OS access needed	yes	yes
Proxy VM needed	no	no

Key Caveats	using single image export	only QCOW2 based disks supported
	file-level restore requires additional image extraction	synthetic backup destination is not supported

Feature	Export storage repository	SSH Transfer
Incremental backup	✗	✓
File-level restore	✓	✓
VM disk exclusion	✗	✓
Snapshot management	✓	✓

Feature	Export storage repository	SSH Transfer
Quiesced snapshot	✓	✓
Pre/post snapshot command execution	✓	✓
Backup disks sharable over iSCSI	✗	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✗	✗
Available space for snapshot check	✗ (hypervisor-dependent)	✓
Power-on VM after restore	✓	✓

## KVM/Xen

### SSH Transfer

Minimum version	QEMU 2.1+ (qcow2-based VMs need libvirt with block commit feature), libvirt
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for incremental backups	yes
Hypervisor OS access needed	yes
Proxy VM needed	no
VM storage formats	QCOW2/RAW file, Ceph RBD volume, LVM volume, LVM-thin volume

Feature	SSH Transfer
Incremental backup	✓ (unavailable for LVM disks)
File-level restore	✓
VM disk exclusion	✓
Snapshot management	✗
Quiesced snapshot	✗ (hypervisor-dependent)
Pre/post snapshot command execution	✓
Backup disks sharable over iSCSI	✓



Feature	SSH Transfer
Name-based policy assignment	✓
Tag-based policy assignment	✗
Available space for snapshot check	✗ (hypervisor-dependent)
Power-on VM after restore	✓

## OpenStack

	Disk-attachment	Disk-attachment CBT	SSH Transfer
Minimum version	Queens	Queens	Queens, QEMU 2.1+ (qcow2-based VMs need libvirt with block commit feature)
Status	In operation ( <b>preferred</b> )	In operation ( <b>preferred</b> )	In operation
Last snapshot kept on hypervisor for incremental backups	yes	no	yes
Hypervisor OS access needed	no	no	yes
Proxy VM needed	yes	yes	no
Key Caveats	incremental backups only for Ceph RBD-based VMs, requires access to ceph monitors for incremental backup only	higher CPU overhead during export	only QCOW2 based disks supported and Ceph RBD-based VMs, requires access to ceph monitors

Feature	Disk-attachment	Disk-attachment CBT	SSH Transfer
Incremental backup	✓ (Ceph RBD volumes only)	✓	✓
File-level restore	✓	✓	✓
VM disk exclusion	✓	✓	✓

Feature	Disk-attachment	Disk-attachment CBT	SSH Transfer
Snapshot management*	✓	✓	✓
Quiesced snapshot	✗ (hypervisor-dependent)	✗ (hypervisor-dependent)	✗ (hypervisor-dependent)
Pre/post snapshot command execution	✓	✓	✓
Backup disks sharable over iSCSI	✓	✓	✓ (RAW file/LVM only)
Name-based policy assignment	✓	✓	✓
Tag-based policy assignment	✓	✓	✓
Available space for snapshot check	✗ (hypervisor-dependent)	✗ (hypervisor-dependent)	✗ (hypervisor-dependent)
Power-on VM after restore	✗ (always on)	✗ (always on)	✗ (always on)

**Note:** Revert option for snapshot management is not available

## OpenNebula

	Disk-attachment CBT
Minimum version	6.6.0
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no
Hypervisor OS access needed	no
Proxy VM needed	yes
Key Caveats	higher CPU overhead during export

Feature	Disk-attachment CBT
Incremental backup	✓
File-level restore	✓
VM disk exclusion	✓
Snapshot management	✓
Quiesced snapshot	✗ (hypervisor-dependent)
Pre/post snapshot command execution	✓

Feature	Disk-attachment CBT
Disk backups can be shared over iSCSI	✓
Name-based policy assignment	✓
Tag-based policy assignment	✓
Available space for snapshot check	✗ (hypervisor-dependent)
Power-on VM after restore	✗ (always on)

## Virtuozzo

	SSH Transfer
Minimum version	4.7, QEMU 2.1+ (qcow2-based VMs need libvirt with block commit feature)
Status	In operation
Last snapshot kept on hypervisor for incremental backups	yes
Hypervisor OS access needed	yes
Proxy VM needed	no
Key Caveats	Only QCOW2 based disks supported

Feature	SSH Transfer
Incremental backup	✓
File-level restore	✓
VM disk exclusion	✓
Snapshot management	✗
Quiesced snapshot	✗ (hypervisor-dependent)
Pre/post snapshot command execution	✓
Backup disks sharable over iSCSI	✓ (RAW file/LVM only)
Name-based policy assignment	✓
Tag-based policy assignment	✓
Available space for snapshot check	✗ (hypervisor-dependent)

Feature	SSH Transfer
Power-on VM after restore	✗ (always on)

## Oracle VM

	Export storage repository
Minimum version	3.4+
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	N/A
Hypervisor OS access needed	no
Proxy VM needed	no

Feature	Export storage repository
Incremental backup	✗
File-level restore	✓
VM disk exclusion	✓
Snapshot management	✗
Quiesced snapshot	✗
Pre/post snapshot command execution	✗
Backup disks sharable over iSCSI	✓
Name-based policy assignment	✓
Tag-based policy assignment	✗
Available space for snapshot check	✗ (hypervisor-dependent)
Power-on VM after restore	✗

## Citrix Hypervisor (XenServer)

	Single image (XVA)	Changed-block Tracking
Minimum version	6.5+	6.5+ (incremental backup: 7.3+)
Status	In operation	In operation ( <b>preferred</b> )

	Single image (XVA)	Changed-block Tracking
Last snapshot kept on hypervisor for inc. backups	yes	yes
Hypervisor OS access needed	no	no
Proxy VM needed	no	no
Key Caveats	file-level restore not supported	incremental backups may require Citrix XenServer license

Feature	Single image (XVA)	Changed-block Tracking
Incremental backup	✓	✓
File-level restore	✗	✓
VM disk exclusion	✗	✓
Snapshot management	✓	✓
Quiesced snapshot	✓	✓
Pre/post snapshot command execution	✓	✓
Backup disks sharable over iSCSI	✗	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✓	✓
Available space for snapshot check	✓	✓
Power-on VM after restore	✓	✓

## XCP-ng

	Single image (XVA)	Changed-block Tracking
Minimum version	7.4+	7.4+
Status	In operation	In operation <b>(preferred)</b>
Last snapshot kept on hypervisor for inc. backups	yes	yes
Hypervisor OS access needed	no	no

	Single image (XVA)	Changed-block Tracking
Proxy VM needed	no	no
Key Caveats	file-level restore not supported	

Feature	Single image (XVA)	Changed-block Tracking
Incremental backup	✓ (unavailable when backup destination is of synthetic type)	✓
File-level restore	✗	✓
VM disk exclusion	✗	✓
Snapshot management	✓	✓
Quiesced snapshot	✓	✓
Pre/post snapshot command execution	✓	✓
Backup disks sharable over iSCSI	✗	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✓	✓
Available space for snapshot check	✓	✓
Power-on VM after restore	✓	✓

## Huawei FusionCompute

	Changed Block Tracking
Minimum version	8.0
Status	In operation
Last snapshot kept on hypervisor for inc. backups	yes
Hypervisor OS access needed	no
Proxy VM needed	no

Feature	Changed Block Tracking
Incremental backup	✓
File-level restore	✓
VM disk exclusion	✓
Snapshot management	✓
Quiesced snapshot	✗
Pre/post snapshot command execution	✓
Backup disks sharable over iSCSI	✓
Name-based policy assignment	✓
Tag-based policy assignment	✗
Available space for snapshot check	✗
Power-on VM after restore	✗

## SC//Platform

	Export Storage Domain	Disk-attachment
Minimum version	8.9.x	8.9.x
Status	In operation	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no	yes
Hypervisor OS access needed	no	no
Proxy VM needed	no	yes

Feature	Export Storage Domain	Disk-attachment
Incremental backup	✗	✓
File-level restore	✗	✓
VM disk exclusion	✓	✓
Snapshot management	✓	✓

Feature	Export Storage Domain	Disk-attachment
Quiesced snapshot	✗	✗
Pre/post snapshot command execution	✓	✓
Backup disks sharable over iSCSI	✓	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✓	✓
Available space for snapshot check	✗	✗
Power-on VM after restore	✓	✓

## Containers - features and requirements

### Kubernetes

	Helper pod/Ceph RBD
Minimum version	1.10+
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	Yes
Hypervisor OS access needed	no
Proxy VM needed	no

Feature	Helper pod/Ceph RBD
Incremental backup	✓ (when using Ceph RBD as PV)
File-level restore	✓ (when using Ceph RBD as PV)
VM disk exclusion	✓
Snapshot management	✗
Quiesced snapshot	✓ (optional deployment pause)
Pre/post snapshot command execution	✓ (post export)
Backup disks sharable over iSCSI	✓ (when using Ceph RBD as PV)
Name-based policy assignment	✓
Tag-based policy assignment	✓



Feature	Helper pod/Ceph RBD
Available space for snapshot check	n/a
Power-on VM after restore	✓
StatefulSets support	✓

## Red Hat OpenShift

	Helper pod/Ceph RBD
Minimum version	4+
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	Yes
Hypervisor OS access needed	no
Proxy VM needed	no

Feature	Helper pod/Ceph RBD
Incremental backup	✓ (when using Ceph RBD as PV)
OpenShift Virtualization	✓
File-level restore	✓ (when using Ceph RBD as PV)
VM disk exclusion	✓
Snapshot management	✗
Quiesced snapshot	✓ (optional deployment pause)
Pre/post snapshot command execution	✓ (post export)
Backup disks sharable over iSCSI	✓ (when using Ceph RBD as PV)
Name-based policy assignment	✓
Tag-based policy assignment	✓
Available space for snapshot check	n/a
Power-on VM after restore	✓
StatefulSets support	✓

## Proxmox VE

	Export storage repository
Minimum version	5+
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	No
Hypervisor OS access needed	yes
Proxy VM needed	no

Feature	Export storage repository
Incremental backup	✗
File-level restore	✗
VM disk exclusion	✓
Snapshot management	✓
Quiesced snapshot	✗
Pre/post snapshot command execution	✓
Backup disks sharable over iSCSI	✗
Name-based policy assignment	✓
Tag-based policy assignment	✗
Available space for snapshot check	✗ (hypervisor-dependent)
Power-on VM after restore	✓

## Cloud - features and requirements

### Microsoft 365

Data Protector for Cloud Workloads Server supports backups and restores of Microsoft 365 services.

Below you will find detailed information about what Microsoft 365 services can be protected by Data Protector for Cloud Workloads Server and what restore capabilities it holds:

	Backup	Item level restore	M365 restore	Restore to another account	Restore to a different path	Restore deleted elements	Restore with overwriting	Download
Mailbox	✓	✓	✓	✓	✓	✓	✓	✓
Calendar	✓	✓	✓	✓	✓	✓	✓	✓
Contact	✓	✓	✓	✓	✓	✓	✓	✓
Archive	✓	✓	✓	✓	✓	✓	✓	✓
OneDrive for Business	✓	✓	✓	✓	✓	✓	✓	✓
Sites	✓	✓	✓	✗	✓	✓	✓	✓
Pages	✓	✓	✓	✗	✓	✓	✓	✓
List items	✓	✓	✓	✗	✓	✓	✓	✓
Document Libraries	✓	✓	✓	✗	✓	✓	✓	✓
Teams Channel	✓	✗	✓	✗	✗	✓	✗	✓
Teams 1on1	✓	✗	✓	✗	✗	✓	✗	✓
Teams Files	✓	✓	✓	✗	✓	✓	✓	✓

Please also check [supported templates and limitations](#) in protection of Microsoft 365.

**Note:** Go to the Platform Requirements section to learn about platform requirements for Data Protector for Cloud Workloads Server.

## Amazon EC2

	Disk attachment
Minimum version	n/a
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no
Hypervisor OS access needed	no
Proxy VM needed	yes

Feature	Disk attachment	Disk attachment CBT
Incremental backup	✗	✓
File-level restore	✓	✓
VM disk exclusion	✓	✓
Snapshot management	✓	✓
Quiesced snapshot	✗	✗
Pre/post snapshot command execution	✓	✓
Disk backups can be shared over iSCSI	✓	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✓	✓
Available space for snapshot check	✗	✗
Power-on VM after restore	✓	✓

## GCP GCE

	Disk attachment
Minimum version	n/a
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for inc. backups	no
Hypervisor OS access needed	no
Proxy VM needed	yes

Feature	Disk attachment	Disk attachment CBT
Incremental backup	✗	✓
File-level restore	✓	✓
VM disk exclusion	✓	✓
Snapshot management	✓	✓

Feature	Disk attachment	Disk attachment CBT
Quiesced snapshot	✗	✗
Pre/post snapshot command execution	✓	✓
Backup disks sharable over iSCSI	✓	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✓	✓
Available space for snapshot check	✗	✗
Power-on VM after restore	✗ (always on)	✗ (always on)

## Azure Cloud

	Disk attachment
Minimum version	n/a
Status	In operation ( <b>preferred</b> )
Last snapshot kept on hypervisor for incremental backups	no
Hypervisor OS access needed	no
Proxy VM needed	yes

Feature	Disk attachment	Disk attachment CBT
Incremental backup	✗	✓
File-level restore	✓	✓
VM disk exclusion	✓	✓
Snapshot management	✗	✗
Quiesced snapshot	✗	✗
Pre/post snapshot command execution	✓	✓
Backup disks sharable over iSCSI	✓	✓
Name-based policy assignment	✓	✓
Tag-based policy assignment	✓	✓
Available space for snapshot check	✗	✗

Feature	Disk attachment	Disk attachment CBT
Power-on VM after restore	✗ (always on)	✗ (always on)

## Storage Providers - features and requirements







### Nutanix Files (AFS)

	File shares with CFT
Minimum version	n/a
Status	In operation ( <b>preferred</b> )
Last snapshot kept in provider for incremental backups	n/a
Source type	NFS and SMB shares

Feature	File shares with CFT
Incremental backup	✓
Incremental backup change source	CFT API
File-level restore	✓
Snapshot management	✗
Pre/post snapshot command execution	✓
Backups sharable over iSCSI	✓
Name-based policy assignment	✓







### Ceph RBD

	RBD export/RBD-NBD
Minimum version	Red Hat Ceph Storage 4.0+, Ceph nautilus+
Status	In operation ( <b>preferred</b> )
Last snapshot kept in provider for incremental backups	Yes
Source type	RBD volume

Feature	Base
Incremental backup	
Incremental backup change source	RBD snap-diff
File-level restore	
Snapshot management	
Pre/post snapshot command execution	
Backups sharable over iSCSI	
Name-based policy assignment	

## Nutanix Volume Groups

	Disk-attachment
Minimum version	n/a
Status	In operation ( <b>preferred</b> )
Last snapshot kept in provider for incremental backups	Yes
Source type	Volume group

Feature	Disk-attachment
Incremental backup	
Incremental backup change source	CBT API
File-level restore	
Snapshot management	
Pre/post snapshot command execution	
Backups sharable over iSCSI	
Name-based policy assignment	

## Integration Plugins

Plugin	Minimum version
Red Hat Virtualization UI Plugin	oVirt web admin 4.3

<b>Plugin</b>	<b>Minimum version</b>
oVirt UI Plugin	oVirt web admin 4.3
Oracle Linux Virtualization Manager UI Plugin	oVirt web admin 4.3
OpenStack UI Plugin	Horizon 17.0.0

## Conditions / Exclusion

### **File-level-restore:**

When backing up CentOS 8 with a disk with the GPT partition scheme, you can use file-level restore only on the Data Protector for Cloud Workloads node, which also runs on CentOS 8 operating system.