



## Data Protector 9.0x Platform and Integration Support Matrix

Version: 5.4

Date: October 2018

For the following Data Protector components, only those combinations of Data Protector components, applications, and operating systems are supported for which the corresponding application versions and operating system versions are supported by the respective vendors.

The supported operating system "Windows Server 2003" includes support for all editions of Windows Server 2003 and Windows Server 2003 R2 including Windows Unified Data Storage Server where applicable.

The supported operating system "Windows Server 2008" and "Windows Server 2008 R2" include support for all editions of "Windows Server 2008" and "Windows Server 2008 R2" including Windows Unified Data Storage Server, where applicable.

The supported operating system "Windows Server 2012" and "Windows Server 2012 R2" includes support for all editions of "Windows Server 2012" and "Windows Server 2012 R2" including Windows Unified Data Storage Server, where applicable.

The supported operating system "Windows Server 2016" includes support for all editions of "Windows Server 2016" including "Windows Server 2016 Datacenter", "Windows Server 2016 Standard" and "Windows Server 2016 Essentials", where applicable.

Support for SUSE Linux Enterprise Server 11 does not include support for Novell Open Enterprise Server 11.

Data Protector components running in combination with application versions and operating system versions, which are not supported by their respective vendors, the support from Micro Focus is limited to a reasonable-endeavors basis. At any time, Micro Focus can decide to remove those combinations from the support matrix.

Acronyms used within the matrix are as follows:

SUSE Linux Enterprise Server - SLES

Red Hat Enterprise Linux – RHEL

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

### What's New

1. Support of Oracle 12c R1/R2 on Windows Server 2016

Table 1: Supported Operating Systems

Supported operating systems	
Data Protector component	Supported operating systems
Cell Manager	<ul style="list-style-type: none"> <li>Windows Server 2008 (64-bit) (x64)</li> <li>Windows Server 2008 R2 (64-bit) (x64)</li> <li>Windows Server 2012 (64-bit) (x64)</li> <li>Windows Server 2012 R2 (64-bit) (x64)</li> <li>Windows Server 2016 (x64)</li> <li>HP-UX (Itanium) 11.31<sup>2, 3</sup></li> <li>RHEL<sup>4</sup> 5.x, 6.x, 7.x (x64)</li> <li>CentOS 6.x, 7.x (x64)</li> <li>Oracle Linux (OL) 6.x, 7.x (x64)</li> <li>SLES 11, 12<sup>21</sup> (x64)</li> </ul>
Installation Server	<ul style="list-style-type: none"> <li>Windows Server 2008 (64-bit) (x64)</li> <li>Windows Server 2008 R2 (64-bit) (x64)</li> <li>Windows Server 2012 (64-bit) (x64)</li> <li>Windows Server 2012 R2 (64-bit) (x64)</li> <li>Windows Server 2016 (x64)</li> <li>HP-UX (Itanium) 11.31<sup>2, 3</sup></li> <li>RHEL<sup>4</sup> 5.x, 6.x, and 7.x (x64)</li> <li>CentOS 6.x, 7.x (x64)</li> <li>Oracle Linux (OL) 6.x, 7.x (x64)</li> <li>SLES 11, 12 (x64)</li> </ul>
Manager-of-Managers (MoM)	<ul style="list-style-type: none"> <li>Windows Server 2008 (64-bit) (x64)</li> <li>Windows Server 2008 R2 (64-bit) (x64)</li> <li>Windows Server 2012 (64-bit) (x64)</li> <li>Windows Server 2012 R2 (64-bit) (x64)</li> <li>Windows Server 2016 (x64)</li> <li>CentOS 6.x, 7.x (x64)</li> <li>Oracle Linux (OL) 6.x, 7.x (x64)</li> <li>HP-UX (Itanium) 6 11.31<sup>2, 3</sup></li> <li>RHEL<sup>4</sup> 5.x, 6.x, and 7.x (x64)</li> <li>SLES 11, 12 (x64)</li> </ul>
Backup device server (Media Agent), including robotic control	<ul style="list-style-type: none"> <li>Windows 7 (32-bit)</li> <li>Windows 7 (64-bit) (x64)</li> <li>Windows 8 (64-bit) (x64)</li> <li>Windows 8.1 (64-bit) (x64)</li> <li>Windows 10 (64-bit) (x64)</li> <li>Windows Server 2003 (32-bit)</li> <li>Windows Server 2003 (64-bit) (Itanium, x64)</li> <li>Windows Server 2008 (32-bit)</li> <li>Windows Server 2008 (64-bit) (Itanium, x64)</li> <li>Windows Server 2008 R2 (64-bit) (Itanium, x64)</li> <li>Windows Server 2008 Core (32 bit, 64-bit) (Itanium, x64)</li> <li>Windows Server 2008 R2 Core (64-bit) (x64)</li> <li>Windows Server 2012 (64-bit) (x64)</li> <li>Windows Server 2012 R2 (64-bit) (x64)</li> <li>Windows Server 2012 Core (x64)</li> <li>Windows Server 2012 R2 Core (x64)</li> <li>Windows Server 2016 (x64)</li> <li>Novell Open Enterprise Server 2.0 for Linux (32-bit and 64-bit)</li> <li>Novell Open Enterprise Server 11.x for Linux (64-bit)</li> <li>Novell Open Enterprise Server 2015 for Linux (64-bit)</li> <li>HP-UX (PA-RISC) 11.11<sup>2, 3</sup>, 11.23<sup>2, 3</sup>, 11.31<sup>2, 3</sup></li> <li>HP-UX (Itanium) 11.23<sup>2, 3</sup>, 11.31<sup>2, 3</sup></li> <li>OpenVMS, 8.3<sup>1</sup>, 8.4<sup>1</sup> (Alpha)</li> <li>OpenVMS 8.3<sup>1</sup>, 8.3-1H1<sup>1</sup>, 8.4<sup>1</sup> (Itanium)</li> <li>Sun Solaris (SPARC) 9, 10, 11</li> <li>Sun Solaris 10, 11 (x86 and x64)</li> </ul>

## Supported operating systems

### Data Protector component

#### Supported operating systems

- Linux (32-bit): RHEL <sup>4</sup> 5.x and 6.x  
SLES 9, 10, 11  
Oracle Linux, 5.x and 6.x  
CentOS 5.x and 6.x
- Linux (64-bit): RHEL <sup>4</sup> 5.x (Itanium, x64), 6.x, 7.x (x64)  
SLES 9, 10, 11 (Itanium, x64)  
SLES 12 (x64)  
Oracle Linux (OL) 5.x, 6.x, and 7.x (x64)  
Debian Linux 6.0 (x64)  
CentOS 5.x, 6.x, and 7.x (x64)  
Scientific Linux 6.x (x64)

### Backup device server (Media Agent), without robotic control

#### All of the above and the following:

- IBM AIX 6.x, 7.1

### Backup agents (Disk Agents)

- Windows XP Home Edition<sup>1</sup>
- Windows XP Professional (32 bit)
- Windows XP Professional (64-bit) (x64)
- Windows Vista (32-bit)<sup>9</sup>
- Windows 7 (32-bit)
- Windows Vista (64-bit) (x64)<sup>9</sup>
- Windows 7 (64-bit) (x64)
- Windows 8 (32-bit)
- Windows 8 (64-bit) (x64)
- Windows 8.1 (64-bit) (x64)
- Windows 10 (32-bit)
- Windows 10 (64-bit) (x64)
- Windows Server 2003 (32-bit)<sup>9</sup>
- Windows Server 2003 (64-bit) (Itanium, x64)<sup>9</sup>
- Windows Server 2008 (32-bit)<sup>9</sup>
- Windows Server 2008 (64-bit) (Itanium, x64)<sup>9</sup>
- Windows Server 2008 R2 (64-bit)(x64, Itanium)
- Windows Server 2008 Core (32bit)<sup>9</sup>
- Windows Server 2008 Core (64-bit) (Itanium, x64)<sup>9</sup>
- Windows Server 2008 R2 Core (64-bit) (x64)
- Windows Small Business Server 2011 (64-bit) (x64)
- Windows Server 2012 (64-bit) (x64)
- Windows Server 2012 R2 (64-bit) (x64)
- Windows Server 2012 Core (x64)
- Windows Server 2012 R2 Core (x64)
- Windows Server 2016 (x64)
- Novell Open Enterprise Server 2.0 for Linux (32-bit and 64-bit)
- Novell Open Enterprise Server 11.x for Linux (64-bit)
- Novell Open Enterprise Server 2015 for Linux (64-bit)
- HP-UX (PA-RISC) 11.11<sup>2, 3</sup>, 11.23<sup>2, 3</sup>, 11.31<sup>2, 3</sup>
- HP-UX (Itanium) 11.23<sup>2, 3</sup>, 11.31<sup>2, 3</sup>
- Sun Solaris (SPARC) 9, 10, 11<sup>8</sup>
- Sun Solaris (x86, x64) 10, 11<sup>8</sup>
- IBM AIX 6.x, 7.1<sup>6</sup>
- SCO OpenServer 6.0.0
- OpenVMS 8.3<sup>1</sup>, 8.4<sup>1</sup> (Alpha)
- OpenVMS 8.3<sup>1</sup>, 8.3-1H1<sup>1</sup>, 8.4<sup>1</sup> (Itanium)
- Mac OS X Server 10.6.x, 10.11.x (64-bit) (x64)
- Linux (32-bit): RHEL <sup>4</sup> 5.x and 6.x  
SLES 9, 10, 11  
Oracle Linux (OL) 5.x and 6.x  
CentOS 5.x and 6.x

## Supported operating systems

### Data Protector component

### Supported operating systems

- Linux (64-bit): RHEL <sup>4</sup> 5.x (Itanium, x64), 6.x, and 7.x (x64)  
 SLES 9, 10, 11<sup>19</sup> (Itanium, x64)  
 SLES 12 (x64)  
 SLES 11, 12 for SAP Applications (x64)  
 Oracle Linux (OL) 5.x, 6.x, and 7.x (x64)  
 Debian Linux 6.0 and 7.0 (x64)  
 CentOS 5.x (x64), 6.x, and 7.x (x64)  
 Ubuntu 12.x, 13.x, 14.x, 15.x and 16.x (x64)  
 Scientific Linux 6.x (x64)
- additional UNIX platforms via NFS (on UNIX systems)
  - additional platforms via shared disks (CIFS/SMB 1, 2, or 3 on Windows systems)

### Backup Agents (disk agents) for file system and raw disk backup using AES encryption (FIPS mode)

- Windows XP Professional (32-bit)
- Windows Vista (32-bit)
- Windows Vista (64-bit) (x64)
- Windows 8 (32-bit)
- Windows 8 (64-bit) (x64)
- Windows 8.1 (64-bit) (x64)
- Windows 10 (32-bit)
- Windows 10 (64-bit) (x64)
- Windows Server 2003 (32-bit)
- Windows Server 2003 (64-bit) (Itanium, x64)
- Windows Server 2008 (32-bit)
- Windows Server 2008 (64-bit) (Itanium, x64)
- Windows Server 2008 R2 (64-bit) (Itanium, x64)
- Windows Server 2012 (64-bit) (x64)
- Windows Server 2012 R2 (64-bit) (x64)
- Windows Server 2012 Core (x64)
- Windows Server 2012 R2 Core (x64)
- Windows Server 2016 (x64)
- HP-UX (PA-RISC) 11.11<sup>2,3</sup>, 11.23<sup>2,3</sup>, 11.31<sup>2,3</sup>
- HP-UX (Itanium) 11.23<sup>2,3</sup>, 11.31<sup>2,3</sup>
- Sun Solaris (SPARC) 9, 10, 11<sup>8</sup>
- Linux (32-bit): RHEL <sup>4</sup> 5.x and 6.x  
 SLES 10, 11  
 Oracle Linux (OL) 5.x and 6.x  
 CentOS 5.x and 6.x
- Linux (64-bit): RHEL <sup>4</sup> 5.x (Itanium, x64)  
 RHEL <sup>4</sup> 6.x, 7.x (x64)  
 SLES 9, 10, 11<sup>19</sup> (Itanium, x64)  
 SLES 12 (x64)  
 Oracle Linux (OL) 5.x, 6.x, and 7.x  
 CentOS 5.x, 6.x, and 7.x  
 Scientific Linux 6.x (x64)

### Backup device server (Media Agent), including robotic control using LTO drive based encryption (AES-GCM)

- Windows 8 (x64)
- Windows 10 (x64)
- Windows Server 2003 (32-bit)
- Windows Server 2003 (64-bit) (Itanium, x64)
- Windows Server 2008 (32-bit)
- Windows Server 2008 (64-bit) (Itanium, x64)
- Windows Server 2008 R2 (64-bit) (Itanium, x64)
- Windows Server 2012 (64-bit) (x64)
- Windows Server 2012 R2 (64-bit) (x64)
- HP-UX (PA-RISC) 11.11<sup>2,3</sup>, 11.23<sup>2,3</sup>, 11.31<sup>2,3</sup>
- HP-UX (Itanium) 11.23<sup>2,3</sup>, 11.31<sup>2,3</sup>
- Linux (32-bit): RHEL <sup>4</sup> 5.x and 6.x  
 SLES 10, 11  
 Oracle Linux (OL) 5.x and 6.x

## Supported operating systems

Data Protector component	Supported operating systems
	<ul style="list-style-type: none"> <li>CentOS 5.x and 6.x</li> <li>Linux (64-bit): RHEL <sup>4</sup> 5.x (Itanium, x64) RHEL <sup>4</sup> 6.x, 7.x (x64) SLES 10, 11 (Itanium, x64) SLES 12 (x64) Oracle Linux (OL) 5.x, 6.x, 7.x (x64) CentOS 5.x, 6.x, and 7.x (x64)</li> </ul>
Data Protector StoreOnce B2D Software Store	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2 (64-bit)(x64)</li> <li>Linux (64-bit): RHEL <sup>4</sup> 5.x, 6.x, 7.x (x64) SLES 10, 11, 12 (x64) Oracle Linux (OL) 6.x, 7.x (x64) CentOS 6.x, 7.x (x64)</li> </ul>
StoreOnce Application Source and Backup Server Deduplication using Catalyst <sup>7, 17</sup>	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2 (64-bit) (x64), Windows Server 2016 (x64)</li> <li>HP-UX (Itanium) 11.23 <sup>3, 5</sup>, 11.31 <sup>3, 5</sup></li> <li>Solaris (SPARC) 10, 11 (64-bit)</li> <li>AIX 6.1, 7.1 (64-bit)<sup>16</sup></li> <li>Linux (64-bit) RHEL <sup>4</sup> 5.x, 6.x, 7.x (x64) SLES 10, 11, 12 (x64) Oracle Linux (OL) 6.x, 7.x (x64) CentOS 6.x, 7.x (x64)</li> </ul>
EMC Data Domain Boost Application Source and Backup Server Deduplication <sup>10</sup>	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2<sup>20</sup> (64-bit) (x64)</li> <li>HP-UX (Itanium) 11.31<sup>20</sup></li> <li>AIX 7.1 (64-bit)<sup>11</sup></li> <li>Solaris (SPARC) 10, 11 (64-bit)<sup>12</sup></li> <li>Linux (64-bit): RHEL 5.x, 6.x and 7.x (x64) SLES 10, 11, and 12 (x64) Oracle Linux (OL) 6.x, 7.x (x64) CentOS 6.x, 7.x (x64)</li> </ul>
Smart Cache Backup Server <sup>13, 14, 18</sup>	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2 (64-bit)(x64)</li> <li>Linux (64-bit): RHEL 5.x, 6.x and 7.x (x64) SLES 10, 11 (x64) Oracle Linux (OL) 6.x and 7.x (x64) CentOS 6.x, 7.x (x64)</li> </ul>
Cloud (Helion) Device <sup>15</sup>	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2 (64-bit) (x64)</li> <li>Linux (64-bit): RHEL 5.x and 6.x (x64) SLES 10.x, 11 (x64) Oracle Linux (OL) 6.x (x64) CentOS 6.x (x64)</li> </ul>
Cloud (Azure) Device <sup>15</sup>	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2 (64-bit) (x64)</li> <li>Linux (64-bit): RHEL 5.x and 6.x (x64) SLES 10.x, 11 (x64) Oracle Linux (OL) 6.x (x64) CentOS 6.x (x64)</li> </ul>
H3C Application Source and Backup Server Deduplication using Catalyst <sup>22, 23</sup>	<ul style="list-style-type: none"> <li>Windows Server 2008, 2008 R2, 2012, 2012 R2 (64-bit) (x64), Windows Server 2016 (x64)</li> <li>HP-UX (Itanium) 11.23 <sup>3</sup>, 11.31 <sup>3</sup></li> <li>Solaris (SPARC) 10, 11 (64-bit)</li> <li>AIX 6.1, 7.1 (64-bit)<sup>24</sup></li> <li>Linux (64-bit) RHEL <sup>4</sup> 5.x, 6.x, 7.x (x64) SLES 10, 11, 12 (x64)</li> <li>Oracle Linux (OL) 6.x, 7.x (x64) CentOS 6.x, 7.x (x64)</li> </ul>

<sup>1</sup> Push installation not possible, need to be installed locally.

<sup>2</sup> NIS+ is supported in a DNS environment.

<sup>3</sup> HP-UX 11.11 on PA-RISC 1.1 (32bit) is not supported.  
HP-UX 11.23 is HP-UX 11i version 2.0.  
HP-UX 11.31 is HP-UX 11i version 3.0.

<sup>4</sup> Includes support for Red Hat Enterprise Linux Advanced Workstation and Enterprise Server if applicable.

<sup>5</sup> Backup to the Data Protector StoreOnce Software store is not supported.

- 6 Includes support for Veritas Cross-Platform Data Sharing (CDS) disk.
- 7 Supports StoreOnce software version 3.18.x and earlier (including CloudBank support from 3.18). For information on the StoreOnce Backup systems and features supported by this StoreOnce software version, see the *BURA Compatibility Matrix* available at [www.hpe.com/storage/BURACompatibility](http://www.hpe.com/storage/BURACompatibility).
- 8 System Extended Attributes are not supported.
- 9 Requires installation of Windows patch KB2748349.
- 10 Supported for DDOS versions 5.4, 5.5, 5.6, 5.7 and 6.0.
- 11 Data Domain Boost devices configured on AIX using the Fiber Channel (FC) protocol supports only one Data Protector connection per SAN path or Data Domain end point. Due to this, AIX gateways using the Fiber Channel interface automatically get their 'Max. Number of Parallel connections per Gateway' parameter set to 1. Operations such as consolidation and replication need multiple connections per operation and will not succeed with this configuration. If additional SAN paths are added, then the AIX server's gateway settings should be modified to allow these operations to succeed.
- 12 The Fiber Channel (FC) protocol is not supported for DDOS versions 5.4, 5.5, 5.6 and 5.7. FC protocol is supported on Solaris 11 (SPARC) for DDOS version 6.0 only.
- 13 Supports all NAS and SAN devices using CFS and NFS shares, and SAN devices using the local FS mount.
- 14 A Smart Cache device is not supported on a virtual node in a clustered environment.
- 15 Object copy to the Cloud device ("Microsoft Azure blob storage" and "HPE Helion object stores") is supported. Direct backup to Cloud device is not supported.
- 16 Support for StoreOnce Catalyst version 3.18.x and earlier over Fiber Channel (FC) with AIX platform requires to have dedicated ports for every StoreOnce node. For more information, see StoreOnce documentation.
- 17 StoreOnce system hosted Catalyst stores version 3.18.x supports replication over Fiber Channel (FC).
- 18 Device on Microsoft Azure StoreSimple is supported via SmartCache device.
- 19 SLES 11.x (x64) High Availability Extension is supported
- 20 DD OS 6.0 and 6.1 is supported only for CIFS, NAS and VTL. LTO-5 is not supported with DD OS 6.1.
- 21 SLES 12 and SLES 12 SP1 are supported.
- 22 Supports H3C software version 3.16.x, 3.15.x and 3.14.x. For information on the H3C Backup systems and features supported by this H3C software version, see the *BURA Compatibility Matrix* available at [www.hpe.com/storage/BURACompatibility](http://www.hpe.com/storage/BURACompatibility).
- 23 H3C system hosted Catalyst stores version 3.16.x supports replication over Fiber Channel (FC).
- 24 Support for H3C Catalyst version 3.16.x, 3.15.x and 3.14.x over Fiber Channel (FC) with AIX platform requires to have dedicated ports for every H3C node. For more information, see H3C documentation.

*Table 2: Supported CLI Platforms and Localization*

Supported CLI platforms and localization	
Operating system	Supported local languages <sup>1</sup>
Windows	<ul style="list-style-type: none"> <li>• English</li> <li>• French</li> <li>• Japanese</li> <li>• Simplified Chinese</li> </ul>
HP-UX	<ul style="list-style-type: none"> <li>• English</li> <li>• French</li> <li>• Japanese</li> <li>• Simplified Chinese</li> </ul>
Solaris	<ul style="list-style-type: none"> <li>• English</li> </ul>
Linux	<ul style="list-style-type: none"> <li>• English</li> <li>• French</li> <li>• Japanese</li> <li>• Simplified Chinese</li> </ul>
IBM AIX	<ul style="list-style-type: none"> <li>• English</li> </ul>
Novell Open Enterprise Server	<ul style="list-style-type: none"> <li>• English</li> </ul>
SCO OpenServer	<ul style="list-style-type: none"> <li>• English</li> </ul>
OpenVMS	<ul style="list-style-type: none"> <li>• English</li> </ul>
VMware ESX	<ul style="list-style-type: none"> <li>• English</li> </ul>
Mac OS X Server	<ul style="list-style-type: none"> <li>• English</li> </ul>

<sup>1</sup> Localized messages available with DP 8.12. GUI screens and messages introduced with DP 9.0 will be displayed in English only.

*Table 3: Graphical User Interface Support*

Graphical user interface support <sup>1,2</sup>	
GUI component	Supported operating system
Native Windows graphical user interface	<ul style="list-style-type: none"> <li>Windows Vista (32-bit)</li> <li>Windows Vista (64-bit) (x64)</li> <li>Windows 7 (32-bit)</li> <li>Windows 7 (64-bit) (x64)</li> <li>Windows 8 (32-bit)</li> <li>Windows 8 (64-bit) (x64)</li> <li>Windows 10 (32-bit)</li> <li>Windows 10 (64-bit) (x64)</li> <li>Windows Server 2008 (32-bit)</li> <li>Windows Server 2008, Windows Server 2008 R2 (64-bit) (Itanium, x64)</li> <li>Windows Server 2012 (64-bit) (x64)</li> <li>Windows Server 2012 R2 (64-bit) (x64)</li> <li>Windows Server 2016 (x64)<sup>3</sup></li> </ul>

1 Graphical user interface is supported for following languages:

- English
- French
- Japanese
- Simplified Chinese

2 Localized messages available with DP 8.12. GUI screens and messages introduced with DP 9.0 will be displayed in English only.

3 Only English language is supported.

*Table 4: Platform Restrictions for Supported Operating Systems*

Platform restrictions for supported operating systems		
Operating system	Supported processor platforms	
HP-UX	PA-RISC 2.0 Itanium	(HP-UX 11.11, 11.23, 11.31) (HP-UX 11.23, 11.31)
Windows	x86, x86_64 Itanium, x86_64	(for 32-bit Windows) (for 64-bit Windows)
Linux	x86, x86_64 Itanium, x86_64	(for 32-bit Linux) (for 64-bit Linux)
Sun Solaris	SPARC x86, x86_64	(for Solaris 10 Disk Agent and Media Agent only)
OpenVMS	Alpha, Itanium	
Mac OS X	x86_64	(Mac OS X 10.6.x, 10.11.x)

The following table includes combinations of only those applications and operating systems that are supported by the respective vendors. Software-based encryption is supported for all integrations except ZDB<sup>7</sup>.

*Table 5: Supported online database and application integrations*

Supported online database and application integrations		
Databases/Applications	Supported versions	Operating System with versions
Autonomy Connector Framework Server (IDOL)	<ul style="list-style-type: none"> <li>Autonomy Connector Framework Server 7.6 and newer</li> </ul>	Windows Server 2003 (32-bit) Windows Server 2008 R2 (64-bit) Windows Server 2012 (64-bit) (x64)
Oracle (32-bit) (including Oracle Data Guard/Standby Database support)	<ul style="list-style-type: none"> <li>Oracle 11g/ Recovery Manager<sup>1</sup></li> <li>Oracle 11g R2/ Recovery Manager<sup>1</sup></li> </ul>	Windows Server 2003 (32-bit) Windows Server 2008 (32-bit) RHEL <sup>2</sup> 5.x (32-bit) SLES 10, 11 (32-bit) Oracle Linux (OL) 5.x (32-bit) RHEL <sup>2</sup> 5.x (32-bit) SLES 10, 11 (32-bit) Oracle Linux (OL) 5.x (32-bit)

## Supported online database and application integrations

Databases/Applications	Supported versions	Operating System with versions
		Windows Server 2003, 2008 (32-bit)
Oracle (64-bit)	<ul style="list-style-type: none"> <li>Oracle 10g R2/ Recovery Manager</li> </ul>	HP-UX 11.31 (64-bit) (Itanium) Solaris (SPARC) 10 (64-bit) Windows Server 2008 R2 (SP1) (64-bit) RHEL <sup>2</sup> 5.x (x64) SLES 11 (x64) AIX 6.1 (64-bit) Solaris 10 (x64)
Oracle (64-bit) (Including Oracle Data Guard/Standby Database support)	<ul style="list-style-type: none"> <li>Oracle 10g R2</li> <li>Oracle 11g/ Recovery Manager<sup>1</sup></li> <li>Oracle 11g R2/ Recovery Manager<sup>1</sup></li> <li>Oracle 12c R1/ Recovery Manager<sup>17</sup></li> <li>Oracle 12c R2/ Recovery Manager<sup>17</sup></li> </ul>	Windows Server 2008 R2 (64-bit) (x64) Solaris (SPARC) 10 RHEL 5.x SLES 11 HP-UX 11.23, 11.31 (64-bit) (Itanium, PA-RISC) Solaris (SPARC) 9, 10, 11 (64-bit) Windows Server 2003 (64-bit) (Itanium, x64) Windows Server 2008 (64-bit) (x64) Windows Server 2008 R2 (64-bit) (x64) AIX, 6.x (64-bit) RHEL <sup>2</sup> 5.x, 6.0, 6.1, 6.2, 6.3 (x64) SLES 10, 11 (x64) Oracle Linux (OL) 5.x, 6.0, 6.1, 6.2, 6.3 (64-bit) (x64) HP-UX 11.31 (64-bit) (Itanium, PA-RISC) RHEL <sup>2</sup> 5.x, 6.x, 7.x (x64) SLES 10, 11 (x64) Oracle Linux (OL) 5.x, 6.x, 7.x (x64) CentOS 6.x (64-bit)(x64) Windows Server 2003 (x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) AIX 6.x, 7.1 (64-bit) Solaris (SPARC) 10, 11 (64-bit) Solaris 10, 11 (x64) HP-UX 11.31 (64-bit) (Itanium) Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2016 (x64) RHEL 6.x, 7.x (x64) (with or without HPE ServiceGuard) SLES 11, 12 (x64) Oracle Linux (OL) 6.x, 7.x (64-bit)(x64) CentOS 6.x, 7.x (x64) AIX 6.1, 7.1 (64-bit) Solaris (SPARC) 10, 11 (64-bit) Solaris 10, 11 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2016 (x64) RHEL 6.x, 7.x (x64) (with or without HPE ServiceGuard) SLES 12 (x64) Oracle Linux (OL) 7.x (64-bit)(x64) CentOS 6.x, 7.x (x64) AIX 7.1 (64-bit) Solaris (SPARC) 11 (64-bit) Solaris 11 (x64)
Informix (64-bit)	<ul style="list-style-type: none"> <li>Informix IDS 11.5</li> </ul>	HP-UX 11.11 HP-UX 11.23, 11.31 (Itanium, PA-RISC)



## Supported online database and application integrations

Databases/Applications	Supported versions	Operating System with versions
	<ul style="list-style-type: none"> <li>Informix IDS 11.7</li> <li>Informix IDS 12.1</li> </ul>	Solaris (SPARC) 9, 10 AIX, 6.x, 7.1 RHEL <sup>2</sup> 5.x, 6.x (x64) SLES 10, 11 (x64) Windows Server 2003 (x64) HP-UX 11.31(Itanium, PA-RISC) Solaris (SPARC) 10, 11 RHEL <sup>2</sup> 6.x (x64) SLES 11 (x64) Windows Server 2008 R2 (x64) AIX 6.1, 7.1 (64-bit) HP-UX 11.31 (64-bit)(Itanium) RHEL <sup>2</sup> 6.x, 7.x (x64) SLES 11, 12 (x64) Solaris (SPARC) 11 (64-bit) AIX 7.1 (64-bit)
Sybase (64-bit)	<ul style="list-style-type: none"> <li>Sybase Adaptive Server Enterprise 15.x</li> <li>Sybase Adaptive Server Enterprise 15.7</li> <li>Sybase Adaptive Server Enterprise 16</li> </ul>	HP-UX 11.23, 11.31 (Itanium, PA-RISC) Solaris (SPARC) 9, 10 RHEL <sup>2</sup> 5.x (x64) AIX, 6.x HP-UX 11.31 (Itanium) RHEL <sup>2</sup> 6.x (x64) SLES 11, 12 (x64) Solaris (SPARC) 10, 11 AIX 6.1, 7.1 Windows Server 2003 R2 Windows Server 2008 R2 (x64) Windows Server 2012 R2 (x64) RHEL <sup>2</sup> 6.x, 7.x (x64) HP-UX 11.31 (Itanium) SLES 11, 12 (x64) SLES 11 for SAP Applications (64-bit) Solaris (SPARC) 10, 11 Windows Server 2012 (x64) Windows Server 2012 R2 (x64) AIX 6.1, 7.1
Microsoft SQL Server (32-bit)	<ul style="list-style-type: none"> <li>Microsoft SQL Server 2005<sup>7</sup></li> <li>Microsoft SQL Server 2008<sup>7,13</sup></li> <li>Microsoft SQL Server 2008 R2<sup>7,11,13</sup></li> <li>Microsoft SQL Server 2012<sup>7,13</sup></li> <li>Microsoft SQL Server 2014<sup>7,13</sup></li> </ul>	Windows Server 2003 Windows Server 2008 Windows Server 2003 Windows Server 2008 Windows Server 2003 Windows Server 2008 Windows Server 2008 Windows Server 2012 R2
Microsoft SQL Server (64-bit)	<ul style="list-style-type: none"> <li>Microsoft SQL Server 2005<sup>7</sup></li> <li>Microsoft SQL Server 2008<sup>7,13</sup></li> <li>Microsoft SQL Server 2008 R2<sup>7,11,13</sup></li> <li>Microsoft SQL Server 2012<sup>7,13</sup></li> </ul>	Windows Server 2003 (Itanium, x64) Windows Server 2008 (Itanium, x64) Windows Server 2003 (Itanium, x64) Windows Server 2008 (Itanium, x64) Windows Server 2008 R2 (Itanium, x64) Windows Server 2003 (Itanium, x64) Windows Server 2008 (Itanium, x64) Windows Server 2008 R2 (Itanium, x64) Windows Server 2012 Windows Server 2012 R2 (x64) Windows Small Business Server 2011 (x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64)

## Supported online database and application integrations

Databases/Applications	Supported versions	Operating System with versions
	<ul style="list-style-type: none"> <li>Microsoft SQL Server 2014<sup>7,13</sup></li> <li>Microsoft SQL Server 2016<sup>7,13,20</sup></li> </ul>	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2016 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2016 (x64)
Microsoft SharePoint <sup>14</sup>	<ul style="list-style-type: none"> <li>Microsoft Office SharePoint Server 2007<sup>3</sup></li> <li>Microsoft SharePoint Server 2010<sup>3</sup></li> <li>Microsoft SharePoint Server 2013<sup>3</sup></li> <li>Windows SharePoint Services 3.0</li> <li>Microsoft SharePoint Foundation 2010</li> <li>Microsoft SharePoint Foundation 2013<sup>3</sup></li> </ul>	Windows Server 2003 (32-bit) Windows Server 2003 (64-bit) (x64) Windows Server 2008 (32-bit) Windows Server 2008 (64-bit) (x64) Windows Server 2008 (64-bit) (x64) Windows Server 2008 R2 (64-bit) (x64) <sup>8</sup> Windows Server 2008 R2 (SP1) (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2003 (32-bit) Windows Server 2003 (64-bit) (x64) Windows Server 2008 (32-bit) Windows Server 2008 (64-bit) (x64) Windows Server 2008 (64-bit) (x64) Windows Server 2008 R2 (64-bit) (x64) Windows Server 2008 R2 (SP1) (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64)
Microsoft Exchange Server (including single mailbox and single folder restore)	<ul style="list-style-type: none"> <li>Microsoft Exchange Server 2007</li> <li>Microsoft Exchange Server 2007 SP3</li> </ul>	Windows Server 2003 (64-bit) (x64) Windows Server 2008 (64-bit) (x64) Windows Server 2003 (64-bit) (x64) Windows Server 2008 R2 (64-bit) (x64)
Microsoft Exchange Server (including single mailbox and folder and DAG <sup>19</sup> backup / restore)	<ul style="list-style-type: none"> <li>Microsoft Exchange Server 2010</li> <li>Microsoft Exchange (x64) Server 2010</li> <li>Microsoft Exchange Server 2013<sup>9,12</sup></li> <li>Microsoft Exchange Server 2013 SP1<sup>9,12</sup></li> <li>Microsoft Exchange Server 2016<sup>9,12</sup></li> </ul>	Windows Server 2008 (64-bit) (x64) <sup>9</sup> Windows Server 2008 R2 (64-bit) (x64) <sup>9</sup> Windows Server 2012 <sup>9</sup> Windows Small Business Server 2011 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) Windows Server 2016 (x64)
Microsoft Data Protection Manager (DPM)	<ul style="list-style-type: none"> <li>Data Protection Manager 2007</li> <li>Data Protection Manager 2010</li> </ul>	Windows Server 2003 (x64) Windows Server 2003 (x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64)
IBM DB2 (32-bit)	<ul style="list-style-type: none"> <li>IBM DB2 9.1</li> <li>IBM DB2 9.5</li> <li>IBM DB2 9.7</li> </ul>	RHEL <sup>2</sup> 5.x (32-bit) SLES 9, 10, 11 (32-bit) Windows Server 2003 (32-bit) AIX 6.x (32-bit) RHEL <sup>2</sup> 5.x (32-bit) SLES 10, 11 (32-bit) Windows Server 2003 (32-bit) Windows Server 2008 (32-bit) AIX 6.x (32-bit, 64-bit) RHEL <sup>2</sup> 5.x, 6.0 (32-bit)

## Supported online database and application integrations

Databases/Applications	Supported versions	Operating System with versions
		SLES 10, 11 (32-bit) Windows Server 2003 (32-bit) Windows Server 2008 (32-bit) AIX 6.x (32-bit)
IBM DB2 (64-bit)	• IBM DB2 9.1	HP-UX 11.11 HP-UX 11.23, 11.31 (Itanium, PA-RISC) AIX 6.x SLES 9, 10, 11 (x64) Windows Server 2003 (x64)
	• IBM DB2 9.5	HP-UX 11.23, 11.31 (Itanium) AIX 6.x (64-bit) RHEL <sup>2</sup> 5.x (x64) SLES 10, 11 (x64) Windows Server 2003 (x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64)
	• IBM DB2 9.7	HP-UX 11.23, 11.31 (Itanium) AIX 6.x, 7.1 (64-bit) RHEL <sup>2</sup> 5.x, 6.0, 6.3 (x64) SLES 10, 11 (x64) SLES 11 for SAP Applications (x64) Windows Server 2003 (x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64)
	• IBM DB2 10.1	HP-UX 11.31 (Itanium) AIX 7.1 (64-bit) RHEL 6.0, 6.1, 6.2, 6.3, 6.4 (64-bit) (x64) SLES 10, 11 (x64) Windows Server 2008 R2 (64-bit)(x64)
	• IBM DB2 10.5	HP-UX 11.31 (Itanium) AIX 7.1 (64-bit) RHEL 6.x, 7.x (x64) SLES 10, 11, 12 (x64) SLES 11, 12 for SAP Applications (x64) Windows Server 2008 R2 (64-bit)(x64) Windows Server 2012 (64-bit) (x64) Windows Server 2012 R2 (64-bit) (x64)
Lotus Notes, Lotus Domino (32-bit) (including single mailbox backup and restore)	• Lotus Domino/Notes 8.5.x	Windows Server 2003 (32-bit) Windows Server 2008 (64-bit) (x64) Windows Server 2008 R2 (64-bit) (x64) AIX 6.x (64-bit) Solaris 10 (SPARC) RHEL <sup>2</sup> 5.x (32-bit) RHEL <sup>2</sup> 5.x, 6.0, 6.1, 6.2 (x64) SLES 10 (x64)
Lotus Notes, Lotus Domino (64-bit) (including single mailbox backup and restore)	• Lotus Domino/Notes 8.5.x	Windows Server 2003 (64-bit)(x64) Windows Server 2008 (64-bit) (x64) Windows Server 2008 R2 (64-bit) (x64) AIX 6.x, 7.1 (64-bit) Solaris 10, 11 (SPARC)
	• IBM Notes and Domino 9.0.x	Windows Server 2012 (64-bit) (x64) Windows Server 2012 R2 (64-bit) (x64) AIX 6.x, 7.1 (64-bit) RHEL 6.x (x64) SLES 11 (x64)
SAP MaxDB (32-bit) (online integration based on 'Backint for SAP MaxDB')	• SAP MaxDB version 7.6	Windows Server 2003 (32-bit) SLES 9, 10 (32-bit) RHEL <sup>2</sup> 4.x, 5.x (32-bit)
	• SAP MaxDB version 7.7	Windows Server 2003 (32-bit) SLES 9, 10 (32-bit) RHEL <sup>2</sup> 4.x, 5.x (32-bit)

## Supported online database and application integrations

Databases/Applications	Supported versions	Operating System with versions
SAP MaxDB (64-bit) (online integration based on 'Backint for SAP MaxDB')	• SAP MaxDB version 7.8	Windows Server 2008 (32bit)
	• SAP MaxDB version 7.6	HP-UX 11.11 HP-UX 11.23, 11.31 (PA-RISC, Itanium) Windows Server 2003 (Itanium, x64) SLES 9, 10 (Itanium, x64) RHEL <sup>2</sup> 5.x (Itanium, x64) AIX 6.1 (x64)
	• SAP MaxDB version 7.7	HP-UX 11.11 HP-UX 11.23, 11.31 (PA-RISC, Itanium) Windows Server 2003 (Itanium, x64) Windows Server 2008 (Itanium, x64) SLES 9, 10, 11 (Itanium, x64) RHEL <sup>2</sup> 5.x (x64) AIX 6.1, 7.1
	• SAP MaxDB version 7.8	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) RHEL 6.0, 6.1, 6.2, 6.3 (x64) SLES 11 (x64) HP-UX 11.31 (Itanium) AIX 6.1, 7.1 (64bit)
	• SAP MaxDB version 7.9	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) RHEL 6.x (x64) SLES 11 (x64) HP-UX 11.31 (Itanium) AIX 6.1, 7.1 (64-bit)
SAP NetWeaver <sup>4</sup> (32-bit)	• SAP BR*Tools 7.2, using backint or RMAN mode	RHEL <sup>2</sup> 5.x, 6.0, 6.1, 6.2 SLES 11
SAP NetWeaver <sup>4</sup> (64-bit)	• SAP BR*Tools 7.2, using backint or RMAN mode <sup>6</sup>	HP-UX 11.31 (Itanium, PA-RISC) Windows Server 2003 (Itanium, x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Solaris (SPARC) 9, 10, 11 AIX 6.x, 7.1 RHEL <sup>2</sup> 5.x (Itanium, x64) RHEL <sup>2</sup> 6.x (x64) SLES 11 (Itanium, x64) Oracle Linux (OL) 6.x (x64)
	• SAP BR*Tools 7.4, using backint or RMAN mode	SLES 11, 12 (x64) SLES 11, 12 for SAP Applications (x64) RHEL 6.x, 7.0 (x64) Oracle Linux 6.5 (x64) Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) HP-UX 11.31 (Itanium) Solaris (SPARC) 11 AIX 6.1, 7.1
SAP HANA (64-bit)	SAP HANA 1.0 <sup>18</sup> (SPS 12 or earlier)	SLES <sup>15</sup> 11, 12 (64-bit) (x64) SLES <sup>15</sup> 11, 12 for SAP Applications (x64) RHEL <sup>2</sup> 6.5, 6.6, 6.7, 7.2 (x64)
	SAP HANA 2.0 <sup>18</sup>	SLES 12 (x64), 12 for SAP Applications (x64) RHEL <sup>2</sup> 7.x (x64)

## Supported online database and application integrations

Databases/Applications	Supported versions	Operating System with versions
MySQL (64-bit)	<ul style="list-style-type: none"> <li>MySQL version 5.5 MEB 3.10, 3.11, 3.12</li> </ul>	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) SLES 11, 12 (x64) RHEL <sup>2</sup> 5.x, 6.x, 7.x (x64)
	<ul style="list-style-type: none"> <li>MySQL version 5.6 MEB 3.10, 3.11, 3.12</li> </ul>	Windows Server 2008 (x64) Windows Server 2008 R2 (x64) Windows Server 2012 (x64) Windows Server 2012 R2 (x64) SLES 11, 12 (x64) RHEL <sup>2</sup> 5.x, 6.x, 7.x (x64)
	<ul style="list-style-type: none"> <li>MySQL version 5.7 MEB 4.0</li> </ul>	Windows Server 2008 R2 (x64) Windows Server 2012 R2 (x64) SLES 11, 12 (x64) RHEL <sup>2</sup> 6.x, 7.x (x64)
PostgreSQL (64-bit)	<ul style="list-style-type: none"> <li>PostgreSQL version 9.2</li> </ul>	Windows Server 2008 R2 (x64) RHEL <sup>2</sup> 5.x, 6.x (x64) SLES 11 (x64)
	<ul style="list-style-type: none"> <li>PostgreSQL version 9.3</li> </ul>	Windows Server 2008 R2 (x64) Windows Server 2012 R2 (x64) RHEL <sup>2</sup> 6.x (x64) SLES 11 (x64)
	<ul style="list-style-type: none"> <li>PostgreSQL version 9.4</li> </ul>	Windows Server 2008 R2 (x64) Windows Server 2012 R2 (x64) RHEL <sup>2</sup> 6.x, 7.x (x64) SLES 11, 12 (x64)
	<ul style="list-style-type: none"> <li>PostgreSQL version 9.5</li> </ul>	Windows Server 2008 R2 (x64) Windows Server 2012 R2 (x64) RHEL <sup>2</sup> 6.x, 7.x (x64) SLES 12 (x64)
Baan IV <sup>5</sup>	<ul style="list-style-type: none"> <li>Baan IV on Oracle, Informix, Microsoft SQL Server and Sybase (see versions above)</li> </ul>	

<sup>1</sup> Oracle 11g covers all released versions of Oracle 11g and 11g R2: i.e. 11x.x.

<sup>2</sup> Includes support for Red Hat Enterprise Linux Advanced Workstation and Enterprise Server also.

<sup>3</sup> SharePoint Granular Recovery Extension is also supported.

<sup>4</sup> Data Protector uses the official SAP backup and restore API (BR\*Tools), which is available only in conjunction with Oracle database. Therefore, Data Protector support only depends on the SAP BR\*Tools version (as supported by SAP in combination with various SAP kernels) and not on the SAP kernel version.

<sup>5</sup> Baan users with Oracle, Informix, Microsoft SQL Server or Sybase databases can back up their application data by following the instructions for integrating Data Protector with their database in the *Data Protector Integration Guide*.

<sup>6</sup> BR\*Tools 7.20 is the recommended version of the tools for Oracle 11g. To be able to use BR\*Tools under Oracle 11g on Unix platforms (except for AIX), you must set up the following soft link in \$ORACLE\_HOME/lib:

```
> ln -s libnzz11.so libnzz10.so
```

<sup>7</sup> For MS SQL integration fast direct mode backup, Data Protector client based AES encryption is not supported.

<sup>8</sup> Microsoft FAST Search Server 2010 for SharePoint is supported.

<sup>9</sup> Microsoft Exchange Server Granular Recovery Extension is also supported. GRE is not supported on Windows 2016.

<sup>11</sup> Support is also available for Microsoft SQL Server 2008 R2 Express edition. Please refer to Microsoft websites for supported Operating Systems/Platforms.

<sup>12</sup> Backup and restore of single mailbox, folder, and DAG are supported only through MS Exchange Granular Recovery Extension.

<sup>13</sup> Data Protector can backup and restore SQL Server databases encrypted with Transparent Data Encryption. IMPORTANT NOTE: It is the user's responsibility that the exact combination of encryption keys / certificates are used for backup and for restore.

If encryption keys / certificates change between the time of backup and restore, the Data Protector restore will not work, unless all needed keys / certificates were copied and restored manually as described in <http://msdn.microsoft.com/en-us/library/bb964742.aspx> and supported through Microsoft. This process is complex and could be error prone. The key /

certificate handling process is manual and not integrated into Data Protector and is therefore not supported by HPE in case it is not correctly applied by the user.

- 14 Microsoft SQL Server 2008 is supported for Microsoft SharePoint 2010, and Microsoft SQL Server 2012 (StandAlone and Always On Availability Group) is supported for Microsoft SharePoint 2013.
- 15 Btrfs File System is supported only with SLES 11 SP3 and later.
- 16 Not applicable for Oracle 10g R2 support.
- 17 Backup & Recovery of Container and Pluggable Databases (CDB & PDB) are supported.
- 18 Single/Multiple Container and Multitenant Database Container are supported.
- 19 Microsoft Exchange Server DAG configured without a Cluster Administrator Access Point is supported with Round Robin DNS mapping of DAG name to all the node IPs.
- 20 Microsoft SQL Server 2016 with Availability Group configuration is not supported.

*Table 6: Other supported applications*

Other supported applications	
Application agents	Supported databases and integrations
Storage Optimizer 5.x	<ul style="list-style-type: none"> <li>• Windows Server 2008 and higher</li> </ul>
All HSM software based on the Windows NTFS offline feature	<ul style="list-style-type: none"> <li>• Windows Server 2003 and higher</li> </ul>

**Cluster support:** Table 7 shows the cluster support for the Cell Manager component. All other agents are supported in a clustered environment on a particular platform, unless specifically called out in the table.

*Table 7: Supported clusters*

Supported clusters <sup>6,7</sup>		
Cluster software	Supported cluster software version	
HPE MC/ServiceGuard (including Veritas CFS)	<ul style="list-style-type: none"> <li>• HPE MC/ServiceGuard 11.1x (Itanium)</li> <li>• HPE MC/ServiceGuard 11.2x<sup>1</sup></li> <li>• HPE MC/ServiceGuard 12.00.x for Linux</li> <li>• HPE MC/ServiceGuard 11.2x<sup>2,5</sup> for Linux</li> <li>• HPE MC/ServiceGuard 11.2x<sup>2,5</sup> for Linux</li> </ul>	<p>HP-UX 11.11, 11.23, 11.31 (PA-RISC, Itanium)</p> <p>HP-UX 11.31 (PA-RISC, Itanium)</p> <p>RHEL 6.x (x64)</p> <p>SLES 11 (x64)</p> <p>RHEL 5.x, 6.x, 7.x (x64)</p> <p>SLES 9, 10, 11</p>
Microsoft Cluster Server	<ul style="list-style-type: none"> <li>• Microsoft Cluster Server<sup>4</sup></li> <li>• Microsoft Failover Cluster<sup>4</sup></li> </ul>	<p>Windows Server 2003 (32-bit)</p> <p>Windows Server 2003 (64-bit) (Itanium)</p> <p>Windows Server 2003 (64-bit) (x64)</p> <p>Windows Server 2008 (32-bit)</p> <p>Windows Server 2008 (64-bit) (Itanium)</p> <p>Windows Server 2008 (64-bit) (x64)</p> <p>Windows Server 2008 R2 (64-bit) (x64)</p> <p>Windows Server 2012 (64-bit) (x64)</p> <p>Windows Server 2012 R2 (64-bit) (x64)</p> <p>Windows Server 2016 (64-bit) (x64)</p>
Veritas Cluster Server	<ul style="list-style-type: none"> <li>• Veritas Cluster Server 5.0 (Cell Manager, Disk Agent, Oracle)</li> <li>• Veritas Cluster Server 5.1 (Disk Agent and Cell Manager)</li> <li>• Veritas Cluster Server 6.2 (Disk Agent and Cell Manager)</li> </ul>	<p>Solaris 10 (SPARC)</p> <p>HP-UX 11.23 (Itanium, PA-RISC)</p> <p>HP-UX 11.31 (Itanium)</p> <p>Windows 2008 (32bit)</p> <p>Windows 2008 R2 (64bit)(x64)</p> <p>HP-UX 11.31 (Itanium)</p> <p>RHEL 5.x, 6.0, 6.3 (x64)</p> <p>SLES 11 (x64)</p> <p>RHEL 6.6 (x64)</p>

EFS Clustered Gateway	<ul style="list-style-type: none"> <li>EFS Clustered Gateway (Disk Agent, Media Agent)</li> </ul>	SLES 9,10 Windows Server 2003
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- 1 For HPE MC/ServiceGuard 11.20, cluster wide device special files (cDSFs) are supported.
- 2 Procedures for installing and configuring Data Protector on MC/ServiceGuard with Linux are available in the *Data Protector Help*. Zero Downtime Backup with SMIS Agent is not supported.
- 3 Details for installing and configuring Data Protector in OpenVMS cluster environment are available in *Data Protector Installation Guide*.
- 4 Includes support for Cell Manager on 'Majority Node Cluster'.
- 5 With HPE MC/ServiceGuard A.11.20.20 on Linux the CONFIGURATION backup needs to be excluded from the backup specification. BMDR is not supported.
- 6 Data Protector supports clustering provided through native operating system as long as OS support is listed in this document for the specific Data Protector component
- 7 StoreOnceSoftware Agent is not supported in cluster environment

*Table 8: Supported application clusters*

Supported application clusters	
Software clusters and clustered applications	Supported versions and operating systems
Novell GroupWise	<ul style="list-style-type: none"> <li>Novell GroupWise 7.0.x</li> <li>Novell GroupWise 8.0</li> </ul> Novell OES 2.0 for Linux 32-bit and 64-bit Novell OES 2.0 for Linux 32-bit and 64-bit Novell OES 11 for Linux 64-bit
Oracle 11g RAC (including OCFS and CRS wherever applicable)	<ul style="list-style-type: none"> <li>RHEL 5.x, 6.5 (x64) (using Redhat Cluster Suite)</li> <li>SLES 9, 10, 11</li> <li>HP-UX 11.23, HP-UX 11.31 (with or without MC/ServiceGuard)</li> <li>Windows Server 2003 (using Microsoft Cluster Server)</li> <li>Windows Server 2003 (using Veritas Cluster Server)</li> <li>Windows Server 2008 (using Microsoft Failover Cluster)</li> <li>Windows Server 2008 R2 (using Microsoft Failover Cluster)</li> <li>Windows Server 2008 (using Veritas Cluster Server)</li> <li>Windows Server 2008 R2 (using Veritas Cluster Server)</li> <li>Solaris (SPARC) 9, 10</li> <li>AIX 6.x</li> <li>Oracle Linux (OL) 5.x, 6.5 (64-bit)</li> </ul>
Oracle 11g R2 RAC (including OCFS and CRS wherever applicable)	<ul style="list-style-type: none"> <li>HP-UX 11.31 (with or without MC/ServiceGuard)</li> <li>RHEL 5.x, 6.x (x64) (using Redhat Cluster Suite)</li> <li>SLES 10, 11 (32bit) (x86), (64bit) (x64)</li> <li>Oracle Linux (OL) 5.x, 6.x (64-bit)</li> <li>AIX 6.x, 7.1 (64-bit)</li> <li>Windows Server 2003 (using Microsoft Cluster Server)</li> <li>Windows Server 2008 (using Microsoft Failover Cluster)</li> <li>Windows Server 2008 R2 (using Microsoft Failover Cluster)</li> <li>Windows Server 2012 (64-bit)</li> <li>Windows Server 2012 R2 (64-bit)</li> <li>Solaris (SPARC) 10, 11.1 (64-bit)</li> </ul>
Oracle 12c R1 RAC (including OCFS and CRS wherever applicable)	<ul style="list-style-type: none"> <li>Windows Server 2012 (using Microsoft Failover Cluster)</li> <li>Windows Server 2012 R2 (x64)</li> <li>Oracle Linux (OL) 6.x, 7.x (x64)</li> <li>RHEL 6.x, 7.x (x64) (using Redhat Cluster Suite and with or without MC/ServiceGuard)</li> <li>SLES 11 (64-bit) (x64)</li> <li>HP-UX 11.31 (Itanium) (with or without MC/ServiceGuard)</li> <li>Solaris (SPARC) 10,11</li> <li>AIX 7.1 (64-bit)</li> </ul>
Oracle 12c R2 RAC (including OCFS and CRS wherever applicable) <sup>3</sup>	<ul style="list-style-type: none"> <li>RHEL 6.x, 7.x (x64) (using Redhat Cluster Suite and with or without MC/ServiceGuard)</li> </ul>
Lotus Domino 8.5 Cluster	<ul style="list-style-type: none"> <li>Windows 2008 (32-bit)</li> </ul>
IBM DB2 Partitioned Database <sup>1</sup>	<ul style="list-style-type: none"> <li>HP-UX 11.23, 11.31 (Itanium)</li> <li>AIX 6.x, 7.1 (64-bit)</li> <li>RHEL<sup>2</sup> 5.x (x64)</li> <li>SLES 10, 11 (x64)</li> </ul>



- Windows Server 2003 (x64)
- Windows Server 2008 (x64)
- Windows Server 2008 R2 (x64)

- 1 DB2 partitioned databases support is currently limited to single host partitions.
- 2 Includes support for Red Hat Enterprise Linux Advanced Workstation and Enterprise Server also.
- 3 Backup & Recovery of Container and Pluggable Databases (CDB & PDB) are supported.

*Table 9: Supported file systems*

Supported file systems	
Operating system	File systems
Windows XP Professional, Windows Server 2003 <sup>1</sup>	<ul style="list-style-type: none"> <li>• NTFS 3.1 (including disk image backup of MBR disks only)</li> <li>• FAT16, FAT32</li> <li>• CIFS</li> </ul>
Windows Vista / Windows Server 2008	<ul style="list-style-type: none"> <li>• NTFS 3.1 (including disk image backup)</li> <li>• FAT16, FAT32</li> <li>• CIFS</li> </ul>
Windows 7 / Windows Server 2008 R2	<ul style="list-style-type: none"> <li>• NTFS 3.1 (including disk image backup)</li> <li>• FAT16, FAT32</li> <li>• CIFS</li> </ul>
Windows 8/ Windows 10 / Windows Server 2012 / Windows Server 2012 R2 / Windows Server 2016	<ul style="list-style-type: none"> <li>• NTFS 3.1 (including disk image backup)</li> <li>• FAT32</li> <li>• CIFS</li> <li>• REFS</li> </ul>
Novell Open Enterprise Server	<ul style="list-style-type: none"> <li>• NSS</li> </ul>
HP-UX <sup>1</sup>	<ul style="list-style-type: none"> <li>• HFS (including rawdisk backup)</li> <li>• NFS</li> <li>• LOFS<sup>2</sup> (loopback file system)</li> <li>• VxFS (including rawdisk backup)</li> <li>• DCE DFS</li> <li>• EVFS (HP-UX 11.23 only as rawdisk backup)</li> <li>• NetApp Filer NFS</li> </ul>
Solaris <sup>1</sup>	<ul style="list-style-type: none"> <li>• UFS</li> <li>• NFS</li> <li>• PC FS (MS DOS compatible file system)</li> <li>• HSFS</li> <li>• VxFS</li> <li>• Tmp FS</li> <li>• LOFS<sup>2</sup> (Loopback file system)</li> <li>• ZFS</li> </ul>
IBM AIX <sup>1</sup>	<ul style="list-style-type: none"> <li>• JFS (journaling file system)</li> <li>• JFS2</li> <li>• GPFS</li> <li>• VxFS</li> </ul>
SCO OpenServer <sup>1</sup>	<ul style="list-style-type: none"> <li>• HTFS (High Throughput file system)</li> <li>• DTFS</li> <li>• S51K</li> <li>• S52K</li> </ul>
Linux (Redhat, SUSE, Debian, Oracle Enterprise Linux, CentOS) <sup>1</sup>	<ul style="list-style-type: none"> <li>• ext, ext2, ext3, ext4</li> <li>• minix</li> <li>• xiafs</li> <li>• ReiserFS<sup>4</sup></li> <li>• VxFS</li> <li>• XFS<sup>3</sup></li> <li>• VFAT</li> <li>• SFS/LustreFS</li> <li>• NFS</li> <li>• GFS</li> <li>• GFS2</li> </ul>



Supported file systems	
Operating system	File systems
	<ul style="list-style-type: none"> <li>• OCFS2<sup>4</sup></li> <li>• GPFS</li> <li>• ACFS</li> <li>• IBRIX (Extended attribute)</li> <li>• NetApp Filer NFS</li> <li>• Btrfs</li> </ul>
OpenVMS	<ul style="list-style-type: none"> <li>• ODS-2</li> <li>• ODS-5</li> </ul>
Mac OS X Server	<ul style="list-style-type: none"> <li>• HFS+</li> </ul>

- 1 Raw disk backup is supported.
- 2 Raw disk backup is not supported.
- 3 XFS is not supported on RHEL, CentOS, and OL. However, it is supported on RHEL 7.x.
- 4 SLES 12 is not supported.

*Table 10: ACL support*

ACL support <sup>1</sup>	
Operating system	File system
Windows XP Professional	NTFS
Windows Server 2003	NTFS
Windows Vista	NTFS
Windows Server 2008	NTFS
Windows 7	NTFS
Windows Server 2008 R2	NTFS
Windows 8	NTFS
Windows 10	NTFS
Windows Server 2012	NTFS
Windows Server 2016	NTFS
HP-UX	HFS
HP-UX	VxFS <sup>2</sup>
OpenVMS	ODS-2, ODS-5
Solaris	UFS, VxFS (3.5), ZFS
Linux	XFS (SLES 9) ReiserFS (SLES 9) ext3 ext4 SFS/LustreFS
Mac OS X Server	HFS+

- 1 The basic and extended ACL limits are based on the kernel or file system limits in the respective operating systems.
- 2 For HP-UX 11i v1 (11.11) maximum supported ACLs are 16.  
For HP-UX 11i v2 and 11i v3 maximum supported ACLs are 1024.