

hp OpenView storage data protector 6.0 Instant Recovery & Zero Downtime Backup Support Matrix for HP StorageWorks Enterprise Virtual Array using SMI-S agent

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The main feature of HP StorageWorks Enterprise Virtual Array is the ability to create snapshots of data stored on the disk arrays. These snapshots can be used to back up the data using a different server (backup system), and thus reduce the backup load from the production server (application system), allowing the production applications to run uninterrupted. The largest benefit of the snapshot integration is that the backup window is reduced, lowering the load on the production server.

From the operating system level, HP-UX 11.11, HP-UX 11.23 (PA-RISC), Windows 2000, Windows 2003 (32-bit) and Solaris 8, 9 are supported for the backup and the application host. The operating system version doesn't need to be identical on both hosts, however the platform must either be PA-RISC on both or IA-32 on both or Sparc on both Application and Backup hosts.

Data Protector 6.0 supports the vsnap, snapclone and standard snapshots provided by EVA array. The EVA types supported are EVA 3000, EVA 4000, EVA 5000, EVA 6000 and EVA 8000.

supported agent functionalities		
Agent Functionality	Zero Downtime Backup	Instant Recovery
Snapshot / vsnap	Supported	Not Supported
Snapclone	Supported	Supported

Abbreviations used:

1. CV : Command View 2. VCS : Virtual Control Software

supported Virtual Control Sc	supported Virtual Control Software / SMIS provider versions				
SMIS provider Version	CV 3.x / VCS 3.0.2x	CV 4.0 / VCS 3.0.2x	CV 4.0 / XCS 5.0.20		
3.2.0.8	Supported	Not Applicable	Not Applicable		
3.3.2.5	Supported	Not Applicable	Not Applicable		
4.0.1	Not Applicable	Supported	Supported		

For details on supported CV ports and their updating, please refer to the "Setting the Login Information for CV EVA" section in the HP OpenView Storage Data Protector Zero Downtime Backup Administrator's Guide.

Following is the list of Application Integrations supported on the various supported platforms:

supported configurations – PA-RISC				
integrations on hp-ux 11.11 and <mark>11.23</mark>	single-host BC	dual-host BC	CA	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	NA	ZDB
Raw logical volume	ZDB with IR	ZDB with IR	NA	ZDB

File system offline	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 8.1.x RMAN offline or online	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 9i RMAN offline or online 1	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 10g RMAN offline or online $^{\rm 1}$	ZDB with IR	ZDB with IR	NA	ZDB
SAP R/3 $4.6x + brbackup 4.6x$ offline or online $2, 3$	Not Supported	ZDB with IR	NA	ZDB
SAP R/3 $4.7x$ + Brtools 6.40 offline or online 3	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.10 & 6.20 offline or online ³	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.40 offline or online ³	Not Supported	ZDB with IR	NA	ZDB

- Oracle 9i/10g includes all released versions of 9i/10g e. g. 9.0.x, 9.2.x and 10.x etc.
- This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- 3 The integration is done using the 'Backint' functionality.

supported configurations – Itanium				
integrations on hp-ux 11.23	single-host BC	dual-host BC	CA	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	NA	ZDB
Raw logical volume	ZDB with IR	ZDB with IR	NA	ZDB
File system offline	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 9i RMAN offline or online 1	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 10g RMAN offline or online 1	ZDB with IR	ZDB with IR	NA	ZDB
SAP R/3 $4.6x + brbackup 4.6x$ offline or online $^{2, 3}$	Not Supported	ZDB with IR	NA	ZDB
SAP R/3 4.7x + Brtools 6.40 offline or online ³	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.10 & 6.20 offline or online ³	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.40 offline or online ³	Not Supported	ZDB with IR	NA	ZDB

- Oracle 9i/10g includes all released versions of 9i/10g e. g. 9.0.x, 9.2.x and 10.x etc.
- This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- The integration is done using the 'Backint' functionality.

supported configurations – 32-bit Windows				
integrations on Windows 2000 and Windows 2003	single-host BC	dual-host BC	CA	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	NA	ZDB
NTFS file system	ZDB with IR	ZDB with IR	NA	ZDB
Microsoft Exchange2000	Not Supported	ZDB with IR	NA	ZDB
Microsoft SQL2000	Not Supported	ZDB with IR	NA	ZDB
Oracle 9i RMAN offline or online 1	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 10g RMAN offline or online ¹	ZDB with IR	ZDB with IR	NA	ZDB
SAP R/3 $4.7x + Brtools 6.40$ offline or online ³	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.20 offline or online ²	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.40 offline or online ³	Not Supported	ZDB with IR	NA	ZDB

- Oracle 9i/10g includes all released versions of 9i/10g e. g. 9.0.x, 9.2.x and 10.x etc.
- The integration is done using the 'Backint' functionality.

supported configurations – 64-bit Wind	lows			
integrations on Windows 2003	single-host BC	dual-host BC	CA	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	NA	ZDB
NTFS file system	ZDB with IR	ZDB with IR	NA	ZDB
Microsoft Exchange2000	Not Supported	ZDB with IR	NA	ZDB
Microsoft SQL2000	Not Supported	ZDB with IR	NA	ZDB
Oracle 9i RMAN offline or online 1	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 10g RMAN offline or online ¹	ZDB with IR	ZDB with IR	NA	ZDB
SAP R/3 4.7 & Brtools 6.40 offline or online ²	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.20 offline or online ²	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.40 offline or online ²	Not Supported	ZDB with IR	NA	ZDB

- Oracle 9i/10g includes all released versions of 9i/10g e. g. 9.0.x, 9.2.x and 10.x etc.
- The integration is done using the 'Backint' functionality.

supported configurations - Solaris				
integrations on Solaris 8, <mark>9</mark>	single-host BC	dual-host BC	CA	CA/BC (combined)
Raw Disk	ZDB with IR	ZDB with IR	NA	ZDB
Raw Logical Volume	ZDB with IR	ZDB with IR	NA	ZDB
File System Offline	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 8.1.x RMAN offline or online	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 9i RMAN offline or online ¹	ZDB with IR	ZDB with IR	NA	ZDB
Oracle 10g RMAN offline or online ¹	ZDB with IR	ZDB with IR	NA	ZDB
SAP R/3 4.6x & brbackup 4.6x offline or online ^{2, 3}	Not Supported	ZDB with IR	NA	ZDB
SAP R/3 4.7 & Brtools 6.40 offline or online ³	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.10 & 6.20 offline or online ³	Not Supported	ZDB with IR	NA	ZDB
SAP Brtools 6.40 offline or online ³	Not Supported	ZDB with IR	NA	ZDB

- Oracle 9i covers all released versions of 9i e. g. 9.0.x, 9.2.x etc.
- This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- The integration is done using the 'Backint' functionality.

supported volume managers	;		
Operating System		Volume Manager	
Operating System	LVM	V×VM	Disk Manager
HP-UX	Supported	Not Supported	Not Applicable
Sun Solaris	Not Applicable	Not Supported	Not Applicable
Windows 2000	Not Applicable	Not Supported	Supported ¹

Dynamic Disks are not supported

supported secure path versions	
Operating System	Secure Path
HP-UX	\$\$
Sun Solaris	ŚŚ
Windows	\$\$

Supported Backup Topologies

The HP StorageWorks Enterprise Virtual Array integration can be used in different backup topology scenarios, without any user interference or special configuration:

- One application system, one disk array, one backup system
- One application system, multiple disk arrays, one backup system
- Multiple application systems, one or multiple disk arrays, one backup system
- Single system (filesystem, disk image and Oracle backup only)

The supported high-availability configurations are:

- 1. Clustered Application hosts, stand-alone backup host.
- 2. Clustered Application hosts and clustered backup hosts
- 3. Stand-alone Application hosts and clustered backup hosts

Note: For details on supported versions of the Clustering Software, please refer to the "Platform & Integration Matrix" for Data Protector 6.0.