



hp OpenView storage data protector 6.0 Instant Recovery & Zero Downtime Backup Support Matrix for HP StorageWorks Enterprise Virtual Array using EVA Agent

Version: Draft 5

Date: December 15, 2005

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 later to back up the data using a different server (backup system), and thus remove the backup load from the production server (application system), and allow the production applications to run uninterrupted. The largest benefit of the snapshot integration is the removal of the backup window, and much lower load on the production server.

From the operating system level, HP-UX 11.11, **HP-UX 11.23 (PA-RISC)**, Windows2000, Windows2003 (32-bit), Solaris 8 and **Solaris 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.

Instant Recovery is supported with snapclone only.

Abbreviations used:

- | | | | |
|--------|----------------------------|-------|--------------------|
| 1. ZDB | : Zero Downtime Backup | 2. IR | : Instant Recovery |
| 3. NA | : Not Applicable | 4. CV | : Command View |
| 5. VCS | : Virtual Control Software | | |

supported Virtual Control Software versions					
EVA type	Agent Functionality	VCS/CV version			
		CV3.0/ VCS2.x	CV3.0/ VCS3.0	CV3.1/ VCS3.0.1.x	CV3.3/ VCS3.0.2.x
EVA 5000	snap/vsnap ¹	Supported	Supported	Supported	Supported
	Snapclone ²	Not Supported	Supported	Supported	Supported
EVA 3000	snap/vsnap ¹	Not Supported	Supported	Supported	Supported
	Snapclone ²	Not Supported	Supported	Supported	Supported

¹ Supports only ZDB

² Supports Both ZDB and Instant Recovery

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				
integrations on hp-ux 11.11 and 11.23 (PA-RISC)	single-host BC	dual-host BC	CA	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	NA	NA
Raw logical volume	ZDB with IR	ZDB with IR	NA	NA
File system offline	ZDB with IR	ZDB with IR	NA	NA

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

1 Oracle 9i / 10g covers all released versions of 9i and 10g e. g. 9.0.x, 9.2.x, 10.1.x etc.

2 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				
integrations on Windows 2000	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	NA
Microsoft SQL2000	Not Supported	ZDB with IR	NA	NA
Oracle 9i RMAN offline or online ¹	ZDB with IR	ZDB with IR	NA	NA
Oracle 10g RMAN offline or online ¹	ZDB with IR	ZDB with IR	NA	NA
SAP R/3 Kernel 4.7 + Brtools 6.40 offline or online ²	Not Supported	ZDB with IR	NA	NA
SAP BRTOOLS 6.20 offline or online ²	Not Supported	ZDB with IR	NA	NA
SAP BRTOOLS 6.40 offline or online ²	Not Supported	ZDB with IR	NA	NA

1 Oracle 9i/10g covers all released versions of 9i /10g e. g. 9.0.x, 9.2.x and 10.1.x etc.

2 The integration is done using the 'Backint' functionality.

supported configurations				
integrations on Windows 2003 (32-bit)	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 Exchange2003 ³ (using VSS)	ZDB	ZDB ²	NA	NA
Microsoft Exchange2003 (using normal DP ZDB)	Not Supported	ZDB with IR	NA	NA
Microsoft SQL2000	Not Supported	ZDB with IR	NA	NA
Oracle 9i RMAN offline or online ⁴	ZDB with IR	ZDB with IR	NA	NA
Oracle 10g RMAN offline or online ⁴	ZDB with IR	ZDB with IR	NA	NA
SAP R/3 Kernel 4.7 + Brtools 6.40 offline or online ¹	Not Supported	ZDB with IR	NA	NA
SAP BRTOOLS 6.20 offline or online ¹	Not Supported	ZDB with IR	NA	NA
SAP BRTOOLS 6.40 offline or online ¹	Not Supported	ZDB with IR	NA	NA

- 1 The integration is done using the 'Backint' functionality
- 2 Supported with transportable snapshots. For details on the VSS writer and provider, please refer to the "HP OpenView Storage Data Protector 6.0 VSS Support Matrix"
- 3 Supported using VSS. For details on the VSS writer and provider, please refer to the "HP OpenView Storage Data Protector 6.0 VSS Support Matrix"
- 4 Oracle 9i / 10g covers all released versions of 9i and 10g e. g. 9.0.x, 9.2.x, 10.1.x etc.

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

- 1 Oracle 9i / 10g covers all released versions of 9i and 10g e. g. 9.0.x, 9.2.x, 10.1.x etc.
- 2 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 volume managers			
Operating System	LVM	Volume Manager VxVM	Disk Manager
HP-UX	Supported ¹	Not Supported	Not Applicable
Sun Solaris	Not Applicable	Not Supported	Not Applicable
Windows 2000	Not Applicable	Not Supported	Supported ²

- 1 LVM Mirroring is not supported
- 2 Dynamic Disks are not supported

supported secure path versions	
Operating System	Secure Path
HP-UX	??
Sun Solaris	??
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.