

Version: 3.7

HP Data Protector A.06.1x Zero downtime (split-mirror) backup support matrix for EMC arrays

Date: March 2012

The EMC split-mirror backup integration is supported on the following operating systems:

HP-UX (PA-RISC)	:	HP-UX 11.11, HP-UX 11.23, HP-UX 11.31
HP-UX (Itanium)	:	HP-UX 11.23, HP-UX 11.31
Windows	:	Windows 2000, Windows Server 2003

Operating systems on application and backup systems do not need to be identical. However, they must be either HP-UX (PA-RISC) on both or Windows on both.

The EMC Symmetrix integrated cached disk array system (ICDA) must run Enterprise Backup Solutions Enabler from EMC. The following is a list of Supported versions:

- 1. HP-UX (PA-RISC) : Version 5.5 or newer.
- 2. Windows : Version 5.3 or newer.

All versions of TimeFinder and/or SRDF and microcode supported by the above versions of the EMC software are supported. New versions of the microcode or the Enterprise Backup Solution Enabler software will be tested and certified if needed.

In addition, EMC DMX arrays are supported.

For the following matrices, only those combinations of applications and operating systems are supported that are supported by the respective vendors.

Supported configurations – HP-UX (PA-RISC)				
Integrations on HP-UX 11.11, 11.23, 11.31	Single host TimeFinder ¹	Dual host TimeFinder ²	SRDF ³	SRDF/TF ⁴ (combined)
Raw disk and raw logical volume (disk image) $^{\rm 5}$	supported	supported	supported	supported
VxFS, HFS file system offline ⁶	supported ⁷	supported	supported	supported
Oracle 9i RMAN offline ⁸ or online ⁹	not supported	supported	supported	supported
Oracle 10g RMAN offline ⁸ or online ⁹	not supported	supported	supported	supported
Oracle 11g RMAN offline ⁸ or online 9	not supported	supported	supported	supported
SAP R/3 $4.6x + brbackup 4.6x^{11} \text{ offline}^8 \text{ or online}^9$	not supported	supported	supported	supported
SAP R/3 Enterprise 4.7 offline ⁸ or online ⁹	not supported	supported	supported	supported
Brtools 6.20 offline ⁸ or online ⁹	not supported	supported	supported	supported
Brtools 6.40 offline ⁸ or online ⁹	not supported	supported	supported	supported
Brtools 7.0 offline ⁸ or online ⁹	not supported	supported	supported	supported

¹ BCV mirror is created inside one ICDA. BCV mirror is being backed up on the application system. (there is no backup system.)

² BCV mirror is created inside one ICDA. Application system is connected to the original disk. Backup system is connected to the BCV.

³ Two ICDAs are connected with SRDF links. Application system is connected to the primary ICDA (R1 disk). Backup system is connected to secondary ICDA (R2 disk).

⁴ Two ICDAs (R1 and R2) are connected with SRDF links. Application system is connected to the R1 disk. Backup system is connected to the BCV mirror of the R2 disk.

⁵ The appropriate disk image is backed up. It is responsibility of the user to shut down the application and unmount the file

system.

- ⁶ Same as note 5 (disk image), except that it is more convenient to specify and Data Protector unmounts the file system on the application system before the split.
- ⁷ The directory needs to have a special name: _bcv.
- ⁸ During the split, the database is shut down on the application system and backed up on the backup system.
- ⁹ During the split, the database is put into hot mode on the application system and backed up on the backup system. Archive logs are backed up in the standard way on the application system.
- ¹⁰ This includes all newer revisions. For example, 3.1G includes 3.11.
- $^{11}\,$ The integration is implemented using the "backint" functionality.

Supported configurations – HP-UX (Itanium)				
Integration on HP-UX 11.23, 11.31	Single host TimeFinder ¹	Dual host TimeFinder ²	SRDF ³	SRDF/TF ⁴ (combined)
Raw disk and raw logical volume (disk image) $^{\scriptscriptstyle 5}$	supported	supported	supported	supported
VxFS File system offline ⁶	supported ⁷	supported	supported	supported
Oracle10g	supported	supported	supported	supported
Oracle11g	supported	supported	supported	supported
SAP Brtools 7.0 offline 8 or online $^{9, 10}$	not supported	supported	supported	supported

- ¹ BCV mirror is created inside one ICDA. BCV mirror is being backed up on the application system. (there is no backup system.)
- ² BCV mirror is created inside one ICDA. Application system is connected to the original disk. Backup host is connected to the BCV.
- ³ Two ICDAs are connected with SRDF links. Application system is connected to the primary ICDA (R1 disk). Backup system is connected to secondary ICDA (R2 disk).
- ⁴ Two ICDAs (R1 and R2) are connected with SRDF links. Application system is connected to the R1 disk. Backup system is connected to the BCV mirror of the R2 disk.
- ⁵ The appropriate disk image is backed up. It is responsibility of the user to shut down the application and unmount the file system.
- ⁶ Same as note 5 (disk image), except that it is more convenient to specify and Data Protector unmounts the file system on the application system before the split.
- ⁷ The directory needs to have a special name: _bcv.
- ⁸ During the split, the database is shut down on the application system and backed up on the backup system.
- 9 During the split, the database is put into hot mode on the application system and backed up on the backup system. Archive logs are backed up in the standard way on the application system.
- ¹⁰ The integration is done using the "backint" functionality.

Data Protector A.06.1x also supports the EMC Geospan product for high-availability clustering using the Microsoft Cluster Server. EMC Geospan needs dual-host TimeFinder. The supported EMC Geospan setups are listed in the table below. Additionally, the table below contains ZDB support options for EMC Symmetrix on Windows in addition to the ones supported by EMC Geospan.

Supported configurations – Windows				
Integrations on Windows 2000 and Windows Server 2003	Single host TimeFinder ¹	Dual host TimeFinder ²	SRDF ³	SRDF/TF ⁴ (combined)
Raw disk and raw logical volume (disk image) 5	supported	supported	not supported	not supported
NTFS file system offline ⁶	supported ⁷	supported	not supported	not supported
Oracle 9i RMAN offline ⁸ or online ⁹	not supported	supported	not supported	not supported
Microsoft SQL Server 2000	not supported	supported	not supported	not supported

¹ BCV mirror is created inside one ICDA. BCV mirror is being backed up on the application system. (there is no backup system.)

² BCV mirror is created inside one ICDA. Application system is connected to the original disk. Backup system is connected to the BCV.

³ Two ICDAs are connected with SRDF links. Application system is connected to the primary ICDA (R1 disk). Backup host is connected to secondary ICDA (R2 disk).

⁴ Two ICDAs (R1 and R2) are connected with SRDF links. Application system is connected to the R1 disk. Backup system is connected to the BCV mirror of the R2 disk.

- ⁵ The appropriate disk image is backed up. It is responsibility of the user to shut down the application and unmount the file system.
- ⁶ Same as note 5 (disk image), except that it is more convenient to specify and Data Protector unmounts the file system on the application system before the split.
- ⁷ The directory needs to have a special name: _bcv.
- ⁸ During the split, the database is shut down on the application system and backed up on the backup system.
- ⁹ During the split, the database is put into hot mode on the application system and backed up on the backup system. Archive logs are backed up in the standard way on the application system.

Supported volume managers			
Operating system	Volume manager		
HP-UX	• LVM		
	• VxVM		
Windows	• Disk manager		