



hp OpenView storage data protector 6.1 EMC split-mirror backup integration

Version: Draft-4

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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 and HP-UX 11.31
 HP-UX (Itanium) : HP-UX 11.23 and HP-UX 11.31
 Windows : Windows 2000

The operating system doesn't need to be identical on both Application and Backup Hosts. However, it must be either HP-UX (PA-RISC) on both or Windows on both.

The EMC Symmetrix Integrated Cached Disk Array system (ICDA) must run the Enterprise Backup Solutions Enabler from EMC. Following is the list of Supported versions:

1. HP-UX (PA-RISC) : Version 5.5 and above.
2. Windows : Version 5.3 and above.

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 software will be tested and certified if needed.

EMC DMX arrays are also supported.

For the following matrices, only those combinations of Applications & 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 and 11.31 | single host TimeFinder¹ | dual host TimeFinder² | SRDF³ | SRDF/TF⁴ (combined) |
| Raw disk and raw logical volume (disk image) ⁵ | Supported | Supported | Supported | Supported |
| VxFS, HFS file system offline ⁶ | Supported ⁷ | Supported | Supported | Supported |
| Oracle 8.1.7 RMAN offline ⁸ or online ⁹ | Not supported | 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 3.1G ¹⁰ + brbackup 4.0x ¹¹ | Not supported | Supported | Supported | Supported |
| SAP R/3 4.0x + brbackup 4.0x ¹¹ | Not supported | Supported | Supported | Supported |
| SAP R/3 4.5x + brbackup 4.5x ¹¹ | Not supported | Supported | Supported | Supported |
| SAP R/3 4.6x + brbackup 4.6x ¹¹ offline ⁸ 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 host. (There is no backup host.)
- 2 BCV mirror is created inside one ICDA. Application host is connected to the original disk. Backup host is connected to the BCV.
- 3 Two ICDA's are connected with SRDF links. Application host is connected to the primary ICDA (R1 disk). Backup host is connected to secondary ICDA (R2 disk).
- 4 Two ICDA's (R1 and R2) are connected with SRDF links. Application host is connected to the R1 disk. Backup host is connected to the BCV mirror of the R2 disk.
- 5 The appropriate disk image is backed up. It is the user's responsibility 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 host 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 host and backed up on the backup host.
- 9 During the split, the database is put into hot mode on the application host and backed up on the backup host. Archive logs are backed up in the standard way on the application host.
- 10 This includes all later sub-versions. For example, 3.1G includes 3.11.
- 11 The integration is done using the 'Backint' functionality.

supported configurations – HP-UX (Itanium)

| Integrations on HP-UX 11.23 and 11.31 | 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 | 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 |

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- 4 Two ICDA's (R1 and R2) are connected with SRDF links. Application host is connected to the R1 disk. Backup host is connected to the BCV mirror of the R2 disk.
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- 8 During the split, the database is shut down on the application host and backed up on the backup host.
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- 10 The integration is done using the 'Backint' functionality.

Data Protector 6.1 also supports the **EMC Geospan** product for High Availability Clustering using the Microsoft Cluster Server. EMC Geospan needs dual host TimeFinder and the supported Geospan setups are listed in the table below. Additionally the table below also represents the ZDB support for EMC Symmetrix on Windows in addition to the ones supported by Geospan:

| supported configurations – Windows | | | | |
|---|-------------------------------------|-----------------------------------|-------------------|---------------------------------|
| integrations on Windows 2000 | 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 8.1.7 RMAN offline ⁸ or online ⁹ | Not supported | Supported | Not Supported | Not Supported |
| Oracle 9i RMAN offline ⁸ or online ⁹ | Not supported | Supported | Not Supported | Not Supported |
| MS SQL Server 2000 | Not supported | Supported | Not Supported | Not Supported |

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- 3 Two ICDA's are connected with SRDF links. Application host is connected to the primary ICDA (R1 disk). Backup host is connected to secondary ICDA (R2 disk).
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| supported volume managers | |
|---------------------------|---|
| Operating System | Volume Manager |
| HP-UX | <ul style="list-style-type: none"> • LVM • VxVM |
| Windows | <ul style="list-style-type: none"> • Disk Manager |