



hp OpenView storage data protector 5.5 Zero Downtime (Split-mirror) backup & Instant Recovery Support matrix for HP StorageWorks Disk Array XP

Version: 4.9

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Following are the Operating System support details:

supported operating systems			
Operating System	Versions	Application Host	Backup Host
HP-UX	11.0 (PA-RISC)	PA-RISC	PA-RISC
	11.11 (PA-RISC)		
	11.23 (PA-RISC)		
	11.31 (PA-RISC)	Itanium	Itanium
	11.23 (Itanium)		
Windows	2000 (32-bit)	IA-32	IA-32
	2003 (32-bit)		
	2003 (64-bit Itanium)	64-bit X64	Itanium
	2003 (64-bit X64)		
Solaris	7, 8, 9 (SPARC)	SPARC	SPARC

Following are the details of Firmware Support:

supported microcode & RaidManager HORCM versions				
XP Type	Minimum Microcode version required	Minimum RAID Manager library version required ¹		
		HP-UX	Solaris	Windows
XP48	01.13.37	01.06.03	01.06.03	01.06.03
XP128	21.01.24-00/00	01.06.03	01.06.03	01.06.03
XP256	52.48.60	01.06.03	01.06.03	01.06.03
XP512	01.13.37	01.06.03	01.06.03	01.06.03
XP1024	21.01.24-00/00	01.06.03	01.06.03	01.06.03
XP10000	50-05-06-00/00	01.11.03	01.11.03	01.11.03
XP12000 ²	50-01-40-00/00	01.09.04	01.09.04	01.09.04

¹ There is a known issue of SSEA agent going into loop with Raid Manager Library 1.09.04. It is recommended that the RM Library is upgraded to 1.10.02 and apply following patches to avoid the issue.

- PHSS_35365 - HP-UX 11.x (PA) Cell Manager / Installation Server
- PHSS_35366 - HP-UX 11.23 (IPF) Cell Manager / Installation Server
- DPSOL_00244 - Solaris 2.x Cell Manager / Installation Server

² To utilize this feature the following patches are required:

- PHSS_35365 - HP-UX 11.x (PA) Cell Manager / Installation Server
- PHSS_35366 - HP-UX 11.23 (IPF) Cell Manager / Installation Server
- DPSOL_00244 - Solaris 2.x Cell Manager / Installation Server

All versions of Business Copy XP and/or Continuous Access XP that are supported by RaidManager Library are supported. New versions of the microcode or the RaidManager Library will be tested and certified if needed.

Abbreviations used in the Matrix:

1. ZDB : Zero Downtime Backup
2. IR : Instant Recovery

For HP-UX 11.31 (PA-RISC), currently Oracle and SAP are not supported as the support for these has not been released by the vendors. These will be certified when the support is available.

supported configurations				
integrations on hp-ux 11.0, 11.11 and 11.23, 11.31 (PA-RISC)	single-host BC ¹	dual-host BC	CA ²	CA&BC (combined)
Raw disk ¹¹	ZDB with IR	ZDB with IR	ZDB	ZDB
Raw logical volume	ZDB with IR	ZDB with IR	ZDB	ZDB
File system offline ^{3, 11}	ZDB with IR	ZDB with IR	ZDB	ZDB
Oracle 8.0.4, 8.0.5, RMAN offline or online	Not Supported	ZDB	ZDB	ZDB
Oracle 8.1.x RMAN offline or online	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
Oracle 9i RMAN offline or online ⁶	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
Oracle 10g RMAN offline or online ⁹	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
SAP R/3 3.1G ^{4, 8} + brbackup 4.0x	Not Supported	ZDB with IR	ZDB	ZDB
SAP R/3 4.0x ^{5, 8} + brbackup 4.0x	Not Supported	ZDB with IR	ZDB	ZDB
SAP R/3 4.5x ^{5, 8} + brbackup 4.5x	Not Supported	ZDB with IR	ZDB	ZDB
SAP R/3 4.6x ^{5, 8} + brbackup 4.6x offline or online	Not Supported	ZDB with IR	ZDB	ZDB
SAP R/3 4.7 ⁸ + Brtools 6.40 offline or online	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.10 & 6.20 offline or online ⁸	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.40 offline or online ⁸	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 7.0 offline or online ^{8,10}	Not Supported	ZDB with IR	ZDB	ZDB

¹ In all cases, BC stands for Business Copy XP.

- 2 In all cases, CA stands for Continuous Access XP.
- 3 The file system will be unmounted on the application host before the split. Only HFS & VxFS filesystems are supported
- 4 This includes all later sub-versions. For example, 3.1G includes 3.1I.
- 5 This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- 6 Oracle 9i / 10g includes all released versions of 9i e.g. 9.0.x, 9.2.x and 10.0.x, 10.1.x etc.
- 7 Only with Proxy-Copy methodology
- 8 The integration is done using the 'Backint' functionality.
- 9 Only the functionality supported in Oracle 9i is currently supported. New features released in Oracle 10g will be supported at a later date. Restore from Data Protector GUI is not supported.
- 10 To utilize this feature the following patches are required:
 PHSS_35162 - HP-UX 11.x (PA) Cell Manager / Installation Server
 PHSS_35163 - HP-UX 11.23 (IPF) Cell Manager / Installation Server
 PHSS_37746 - HP-UX 22.31 (IPF) Cell Manager / Installation Server
 DPSOL_00232 - Solaris 2.x Cell Manager / Installation Server

supported configurations				
integrations on hp-ux 11.23 (Itanium) ¹	single-host BC ²	dual-host BC	CA ³	CA&BC (combined)
Raw disk	ZDB with IR	ZDB with IR	ZDB	ZDB
Raw logical volume	ZDB with IR	ZDB with IR	ZDB	ZDB
File system offline ⁴	ZDB with IR	ZDB with IR	ZDB	ZDB
Oracle 9i RMAN offline or online	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
Oracle 10g RMAN offline or online ⁸	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
SAP R/3 4.6x ^{5,6} + brbackup 4.6x offline or online	Not Supported	ZDB with IR	ZDB	ZDB
SAP R/3 4.7 ⁵ + Brtools 6.40 offline or online	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.20 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.40 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 7.0 offline or online ^{5,9}	Not Supported	ZDB with IR	ZDB	ZDB

¹ To utilize this feature following patches are required:
 PHSS_35365 - HP-UX (PA-RISC) Cell Manager / Installation Server
 PHSS_35366 - HP-UX (IA-64) Cell Manager / Installation Server
 DPSOL_00244 - Solaris Cell Manager / Installation Server

- 2 In all cases, BC stands for Business Copy XP.
- 3 In all cases, CA stands for Continuous Access XP.
- 4 The file system will be unmounted on the application host before the split. Only HFS & VxFS filesystems are supported
- 5 The integration is done using the 'Backint' functionality.
- 6 This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- 7 Only with Proxy-Copy methodology
- 8 Only the functionality supported in Oracle 9i is currently supported. New features released in Oracle 10g will be supported at a later date. Restore from Data Protector GUI is not yet supported.
- 9 To utilize this feature the following patches are required:
 PHSS_35162 - HP-UX 11.x (PA) Cell Manager / Installation Server
 PHSS_35163 - HP-UX 11.23 (IPF) Cell Manager / Installation Server
 DPSOL_00232 - Solaris 2.x Cell Manager / Installation Server

supported configurations				
integrations on windows 2000 and 2003 (32-bit)	single-host BC ¹	dual-host BC	CA ²	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	ZDB	ZDB
NTFS file system	ZDB with IR	ZDB with IR	ZDB	ZDB ³
MS Exchange2000 ⁷	Not Supported	ZDB with IR	ZDB	ZDB ³
MS Exchange2003 ⁸ (Using normal DP ZDB)	Not Supported	ZDB with IR	ZDB	ZDB ³
MS SQL2000	Not Supported	ZDB with IR	ZDB	ZDB ³
Oracle 8.1.x RMAN offline or online	ZDB with IR ⁹	ZDB with IR	ZDB	ZDB ³
Oracle 9i RMAN offline or online ⁶	ZDB with IR ⁹	ZDB with IR	ZDB	ZDB ³
Oracle 10g RMAN offline or online ⁶	ZDB with IR ⁹	ZDB with IR	ZDB	ZDB ³
Oracle 11g RMAN offline or online ⁶	ZDB with IR ⁹	ZDB with IR	ZDB	ZDB ³
SAP R/3 4.0x ^{4, 5} + brbackup 4.0x	Not Supported	ZDB with IR	ZDB	ZDB ³
SAP R/3 4.5x ^{4, 5} + brbackup 4.5x	Not Supported	ZDB with IR	ZDB	ZDB ³
SAP R/3 4.6x ^{4, 5} + brbackup 4.6x offline or online	Not Supported	ZDB with IR	ZDB	ZDB ³
SAP R/3 4.7 ⁵ + Brtools 6.40 offline or online	Not Supported	ZDB with IR	ZDB	ZDB ³
SAP BRTOOLS 6.10 & 6.20 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB ³

SAP BRTOOLS 6.40 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB ³
SAP BRTOOLS 7.0 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB ³

- 1 In all cases, BC stands for Business Copy XP.
- 2 In all cases, CA stands for Continuous Access XP.
- 3 If secondary volume for CA & primary volume for BC is not connected to the backup server
- 4 This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- 5 The integration is done using the 'Backint' functionality.
- 6 Oracle 9i/10g/11g includes all released versions of 9i e.g. 9.0.x, 9.2.x and 10.0.x, 10.1.x etc.
- 7 Supported only for Windows 2000
- 8 Supported only for Windows 2003 (32-bit)
- 9 Only with Proxy-Copy methodology

supported configurations				
integrations on Windows 2003 (Itanium) ¹	single-host BC ²	dual-host BC	CA ³	CA/BC (combined)
Raw disk	ZDB with IR	ZDB with IR	ZDB	ZDB
NTFS file system	ZDB with IR	ZDB with IR	ZDB	ZDB ⁴
MS SQL2000 ¹⁰	Not Supported	ZDB with IR	ZDB	ZDB ⁴
MS SQL2005 ¹⁰	Not Supported	ZDB with IR	ZDB	ZDB ⁴
Oracle 9i RMAN offline or online ^{6, 9}	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
Oracle 10g RMAN offline or online ^{6, 8, 9}	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
SAP R/3 4.7 ⁵ + Brtools 6.40 offline or online	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.40 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 7.0 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB

- 1 To utilize this feature following patch is required: DPWIN_00134.
- 2 In all cases, BC stands for Business Copy XP.
- 3 In all cases, CA stands for Continuous Access XP.
- 4 If secondary volume for CA & primary volume for BC is not connected to the backup server
- 5 The integration is done using the 'Backint' functionality.

- 6 Oracle 9i / 10g includes all released versions of 9i e.g. 9.0.x, 9.2.x and 10.0.x, 10.1.x etc.
- 7 Only with Proxy-Copy methodology
- 8 Only the functionality supported in Oracle 9i is supported. ZDB using Oracle ASM is not supported.
- 9 To utilize this feature following patch is needed: DPWIN_00261
- 10 To utilize this feature following patch is needed: DPWIN_00336

supported configurations				
integrations on Windows 2003 (x64) ¹	single-host BC ²	dual-host BC	CA ³	CA/BC (combined)
Raw disk ⁸	ZDB with IR	ZDB with IR	ZDB	ZDB
NTFS file system	ZDB with IR	ZDB with IR	ZDB	ZDB ⁴
MS SQL2005 ⁵	Not Supported	ZDB with IR	ZDB	ZDB ⁴
Oracle 10g RMAN offline or online ⁷	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 7.0 offline or online ⁶	Not Supported	ZDB with IR	ZDB	ZDB

- 1 To utilize this feature following patch is required: DPWIN_00237
- 2 In all cases, BC stands for Business Copy XP.
- 3 In all cases, CA stands for Continuous Access XP.
- 4 If secondary volume for CA & primary volume for BC is not connected to the backup server
- 5 To utilize this feature following site specific patch is required: DPWIN_00336
- 6 The integration is done using the 'Backint' functionality.
- 7 To utilize this feature following site specific patch is required: DPWIN_00333

supported configurations				
integrations on Sun Solaris 7, 8 and 9	single-host BC¹	dual-host BC	CA ²	CA/BC (combined)
Raw Disk	ZDB with IR	ZDB with IR	ZDB	ZDB
Raw Logical Volume	ZDB with IR	ZDB with IR	ZDB	ZDB
File System Offline ³	ZDB with IR	ZDB with IR	ZDB	ZDB
Oracle 8.1.x RMAN offline or online	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
Oracle 9i RMAN offline or online ⁶	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
Oracle 10g RMAN offline or online ^{6, 8}	ZDB with IR ⁷	ZDB with IR	ZDB	ZDB
SAP R/3 4.6x ^{4, 5} + brbackup 4.6x offline or online	Not Supported	ZDB with IR	ZDB	ZDB

SAP R/3 4.7 ⁵ + Brtools 6.40 offline or online	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.10 & 6.20 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 6.40 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB
SAP BRTOOLS 7.0 offline or online ⁵	Not Supported	ZDB with IR	ZDB	ZDB

- 1 In all cases, BC stands for Business Copy XP.
- 2 In all cases, CA stands for Continuous Access XP.
- 3 The file system will be unmounted on the application host before the split. Only UFS and VxFS filesystems are supported.
- 4 This includes all sub-versions. For example, 4.6x includes 4.6B, 4.6C, 4.6D etc.
- 5 The integration is done using the 'Backint' functionality.
- 6 Oracle 9i / 10g includes all released versions of 9i e.g. 9.0.x, 9.2.x and 10.0.x, 10.1.x etc.
- 7 Only with Proxy-Copy methodology
- 8 Only the functionality supported in Oracle 9i is supported. ZDB using Oracle ASM is not supported. Restore with Data Protector GUI is not possible.

Supported Volume Managers			
Volume Manager	Operating System		
	HP-UX	Windows	Solaris
Logical Volume Manager (LVM)	Supported	Not Applicable	Not Applicable
Veritas Volume Manager (VxVM)	Supported ²	Not Supported	Supported
Disk Manager	Not Applicable	Supported ¹	Not Applicable

- 1 Dynamic Disks are not supported
- 2 To utilize this feature following patch are required:
PHSS_37572/ PHSS_37573/DPSOL_00323

Following is a list of Alternate Path/Multipathing solutions that are supported:

Supported Alternate Path solutions			
Alternate Path solutions	Operating System		
	HP-UX	Windows	Solaris
HP StorageWorks AutoPath	Supported	Supported	Not Supported
Sun Alternate Pathing Driver	Not Applicable	Not Applicable	Supported
VxVM Dynamic Multipathing	Supported	Not Supported	Supported
HP-UX LVM Alternate Links	Supported	Not Applicable	Not Applicable