6.3 Supported remote replication feature by controller software version

Remote replication features depend on the controller software version. An HP Continuous Access EVA license is required to use these features. When using one of the EVA software user interfaces or command line interfaces, if the selected resource does not support an action, it will not be available in either the user interface or the command line interface. For example, in HP Replication Solutions Manager, if you try to force a full copy on an array that does not support this feature, the *Force Full Copy* action will not work.

The following general rules apply to remote replication between arrays running different controller software versions (XCS and VCS). See Table 3.3, "Controller software version support in remote replication environments," for controller software version compatibility.

— If a feature, such as the maximum number of members of a DR group, is supported differently in the source and destination arrays, the more restrictive value applies to the source-destination DR group pair.

— If a feature is not available in both controller software versions, the feature cannot be used in a source-destination DR group pair.

IMPORTANT: Testing of FC-IP support with HP Continuous Access EVA is ongoing. For the latest information, see *Part 4, SAN extension and bridging* of *HP StorageWorks SAN Design Reference Guide*.

Feature	EVA controller software version							
	VCS 3.1xx	**VCS 4.1xx**	**XCS 6.1xx**	**XCS 6.2xx**	**XCS 0952x000 (EVA4400)**	**XCS 0952x000 (EVA6400/8400)**	**XCS 0953x000 (EVA4400)**	**XCS 0953x000 (EVA6400/8400)**
Asynchronous write mode (enhanced)			•	•	•	•	•	•
Asynchronous write mode (standard)	•	•						
Auto suspend on full copy (set at creation)				•	•	•	•	•
Auto suspend on links down (set at creation)		•	•	•	•	•	•	•
Bandwidth	HP Continuous Access EVA supports a minimum bandwidth of 4 Mb/s. See the *HP StorageWorks Continuous Access EVA Implementation Guide* for more information about selecting the appropriate replication link. Note: HP Replication Solutions Manager exhibits long management delays when managing remote arrays that are connected via low bandwidth links with over 36 ms of one-way latency.							
Boot from SAN	If the operating system supports Boot from SAN, replication of the boot disk is supported.							
Cabling scheme	Cross-cabling optional							
Clustering solutions with HP Continuous Access EVA	HP Continuous Access EVA supports all clustering solutions that are supported on the EVA. To determine the supported clustering solution for an operating system, go to the Single Point of Connectivity Knowledge (SPOCK) website (http://www.hp.com/storage/spock) as described in Table 7.0, EVA host connectivity.							
Create a DR group or add/remove DR group members in enhanced asynchronous mode				•	•	•	•	•
Cross Vraid for remote copy	•	•	•	•	•	•	•	•
Data Replication Protocol (user configurable)							•[1]	•[1]
DR group log file size (controller software default)	2x the combined size of DR group members (cannot be changed)	Smaller of: – 2,047.99 GB maximum virtual disk size – Remaining space in disk group in which the DR group log resides – The sum of the sizes of the members within the DR group[2]			100 GB (Synchronous and Asynchronous)			
DR group log file size (user configurable)[3]	Maximum log file size within these parameters: – 2,047.99 GB maximum virtual disk size – Greater than 136 MB[4, 5] – Less than or equal to the available capacity in the source log disk group. The capacity selected must also be available in the destination log disk group.							
DR group member extend		•	•	•	•	•	•	•
DR group member shrink					•	•	•	•
Failover or delete a DR group during normalization					•	•	•	•

[1]The HP SCSI FC Protocol is supported on controller software versions 0953x000 or later. For more information, see the *HP StorageWorks Continuous Access EVA Implementation Guide*.

[2]The controller software default maximum log size for XCS 6.2xx or later running on the EVA 4000/4100/6x00/8x00 is 100 GB for enhanced asynchronous.

[3]You can only change the size of the log file when the DR group write mode is set to synchronous. The transition from asynchronous logging to synchronous logging must complete before changing the log file size, which is available in XCS 6.1xx or later.

[4]If the size specified is not greater than or equal to the asynchronous minimum log size and you attempt to change to asynchronous mode, the command will fail. For the EVA 4000/4100/6x00/8x00 running XCS 6.1xx or later, the minimum log size is 1,624 MB for enhanced asynchronous mode.

[5]For the EVA4400 running XCS 09000000 or later, the capacity must be greater than 5 GB.