StorageWorks by Compaq

Addendum for
Enterprise Virtual Array 2C2D Configuration

This addendum only applies to the following document:

StorageWorks by Compaq Enterprise Virtual Array Hardware Configuration Guide
AA-RS28A-TE (July 2002)

IMPORTANT: If the changes within this addendum are not incorporated into the specified document and then used, potential problems might arise from using obsolete information.

Page Additions

Insert the following sections into the specified pages of the *StorageWorks by Compaq Enterprise Virtual Array Hardware Configuration Guide.*

- 2C2D Features after page 1-6

- 2C2D Configuration after page 2-27

NOTE: Consider securing these sheets into the document by using tape on the inside edge.

Addendum for Enterprise Virtual Array 2C2D Configuration

NOTE: Add the 2C2D Features section after page 1-6 in the *StorageWorks by Compaq Enterprise Virtual Array Hardware Configuration Guide.*

2C2D Features

The following features are included in the 2C2D configuration:

- One 41U storage rack

- Two HSV110 controllers

- Two 14-drive bay FC drive enclosures

- Eight internal Fibre Channel cables

- Seven 2-port enclosure address bus junction boxes

- Eight AC strips

- Two 0U PDUs

NOTE: Disks must be ordered separately.

The 2C2D configuration can contain a maximum of 1.0 TB (28 36.4-GB disks) or 2.0 TB (28 72.8-GB disks) of storage capacity.

You can expand the storage capacity of the 2C2D configuration by adding drive enclosures and FC loop switches to the rack.

Figure 1–1 shows the front and rear views of the 2C2D configuration.
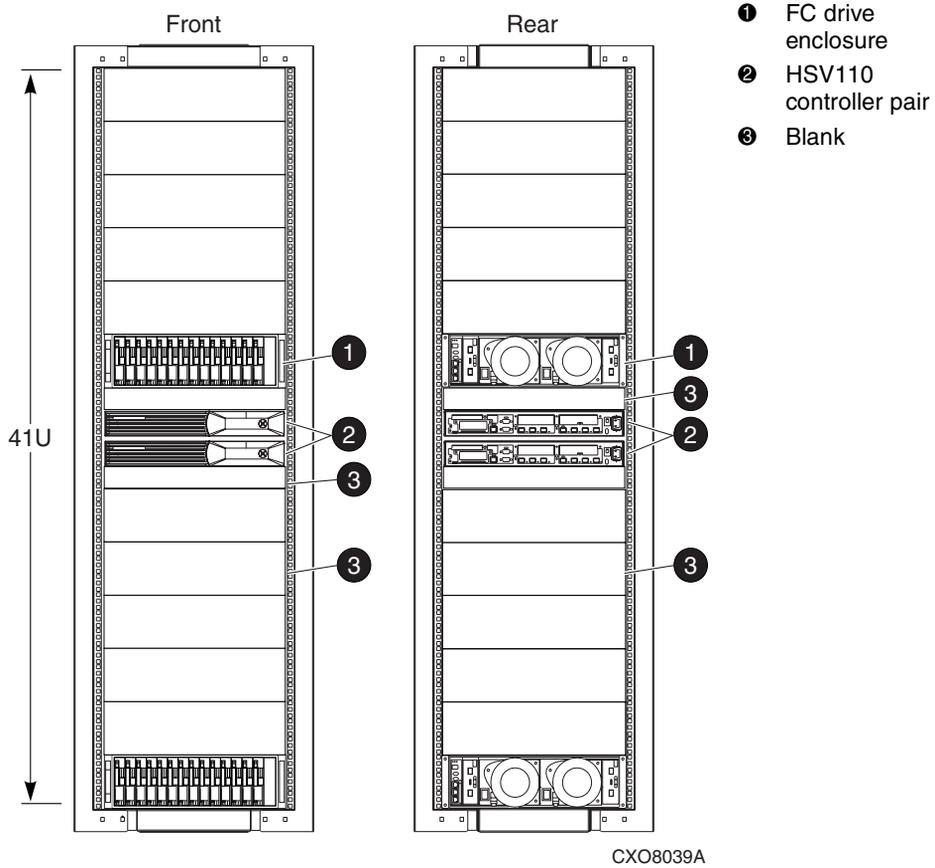

❶ FC drive enclosure
❷ HSV110 controller pair
❸ Blank

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Figure 1–1: 2C2D configuration—front and rear views

NOTE: Add the 2C2D Configuration section after page 2-27 in the *StorageWorks by Compaq Enterprise Virtual Array Hardware Configuration Guide.*
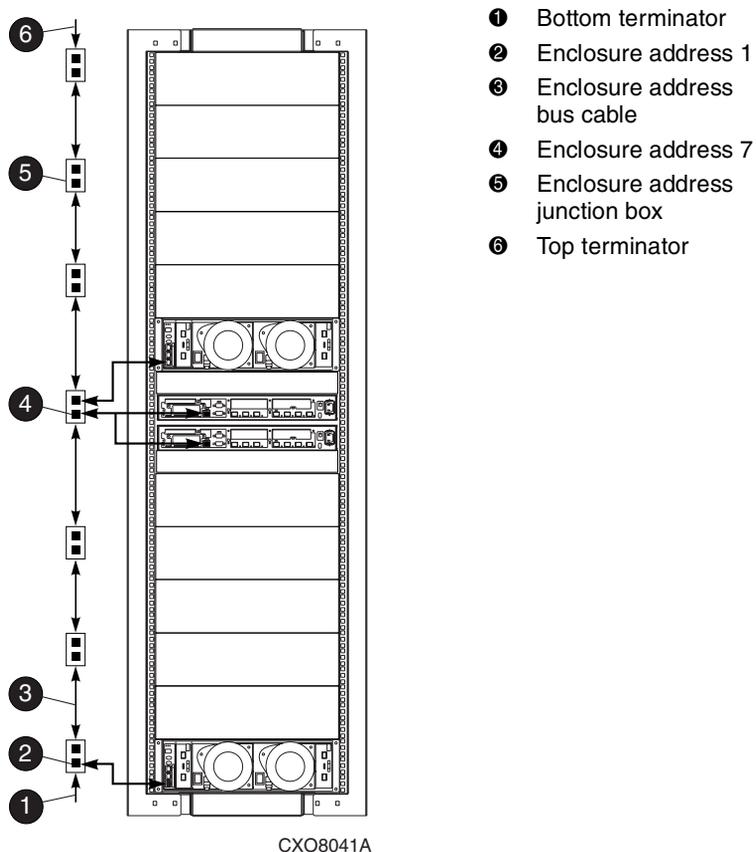
2C2D Configuration

The 2C2D configuration is a single-rack configuration that provides a maximum of 1.0 TB (28 36.4-GB disks) or 2.0 TB (28 72.8-GB disks) of storage capacity. This configuration can contain a maximum of 28 disks. You can expand the capacity of the 2C2D configuration by adding more drive enclosures and FC loop switches.

The 2C2D configuration is available in the 41U rack.

Enclosure Address Bus Configuration

The 2C2D configuration contains seven enclosure address bus junction boxes at 6U increments in the left rear rail of the rack. Each FC drive enclosure should be connected to an enclosure address bus junction box. The FC drive enclosures connect to each enclosure address bus junction box in pairs. The controller pair connects to the enclosure address bus junction boxes with a Y cable. Figure 1–2 shows the enclosure address bus cable configuration for the 2C2D configuration.

❶	Bottom terminator
❷	Enclosure address 1
❸	Enclosure address bus cable
❹	Enclosure address 7
❺	Enclosure address junction box
❻	Top terminator

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Figure 1–2: 2C2D configuration—enclosure address bus cables

Fibre Channel Loop Configurations

The 2C2D configuration contains four Fibre Channel loops. A Fibre Channel loop is formed when the FC drive enclosures and the HSV110 controller pair are connected by Fibre Channel cables. The 2C2D configuration does not use FC loop switches or expansion panels. Instead, each I/O port on an FC drive enclosure is connected directly to an HSV110 controller with a Fibre Channel cable.

Refer to Table 2-1 for the locations of the Fibre Channel loops in a storage rack.
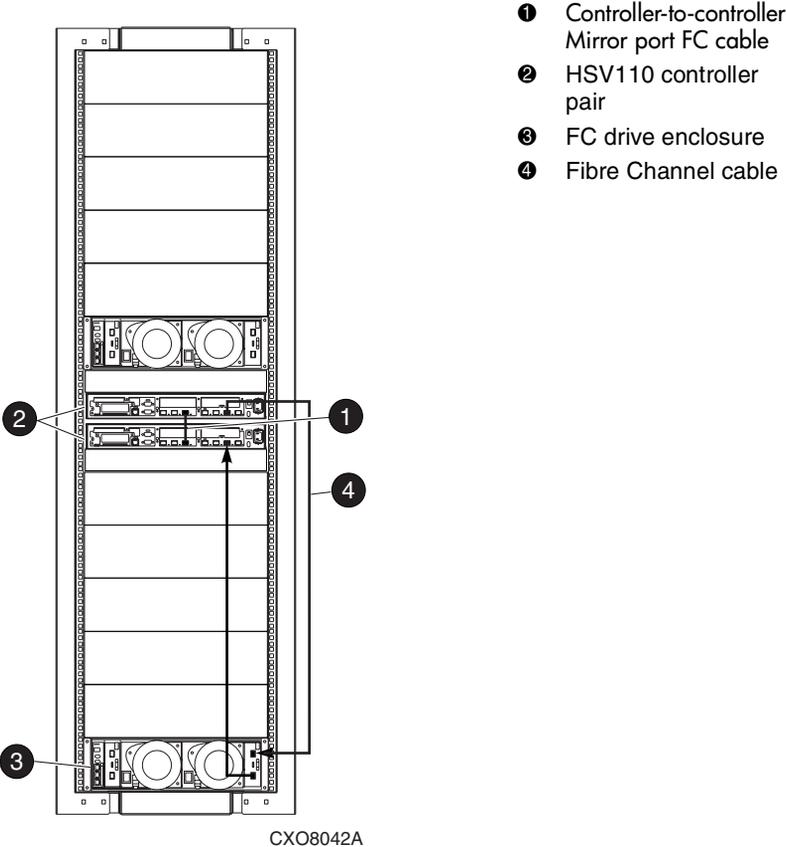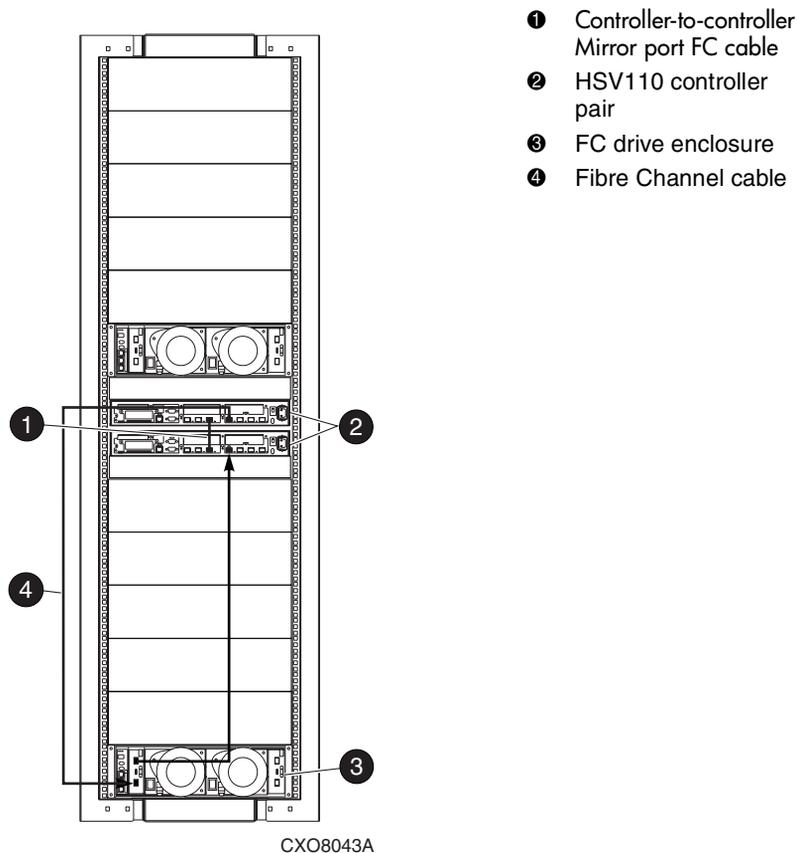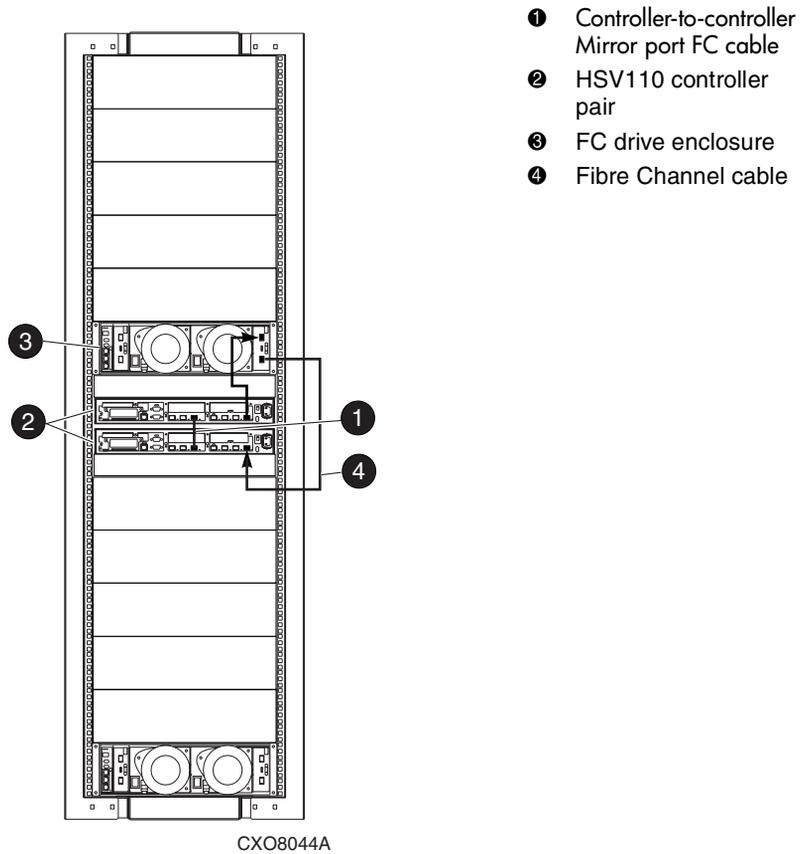
Figure 1–3 shows Fibre Channel loop 1A.

❶ Controller-to-controller Mirror port FC cable

❷ HSV110 controller pair

❸ FC drive enclosure

❹ Fibre Channel cable

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Figure 1–3: 2C2D configuration—Fibre Channel loop 1A

Figure 1–4 shows Fibre Channel loop 1B.

❶ Controller-to-controller Mirror port FC cable

❷ HSV110 controller pair

❸ FC drive enclosure

❹ Fibre Channel cable

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Figure 1–4: 2C2D configuration—Fibre Channel loop 1B

Figure 1–5 shows Fibre Channel loop 2A.

❶ Controller-to-controller Mirror port FC cable

❷ HSV110 controller pair

❸ FC drive enclosure

❹ Fibre Channel cable

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Figure 1–5: 2C2D configuration—Fibre Channel loop 2A

Figure 1–6 shows Fibre Channel loop 2B.

❶   Controller-to-controller Mirror port FC cable
❷   HSV110 controller pair
❸   FC drive enclosure
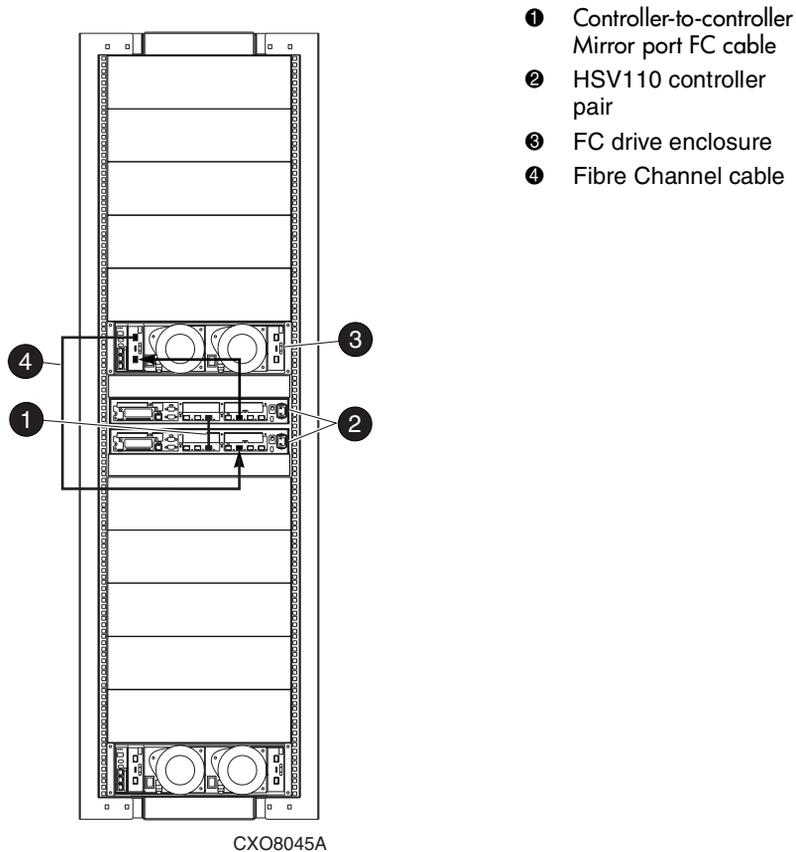❹   Fibre Channel cable

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Figure 1–6: 2C2D configuration—Fibre Channel loop 2B

Cable Management Configurations

The 2C2D configuration contains six cable containment spools and no cable management arms.

Please see "Cable Management Configurations" on page 2-23 for more information about cable containment spools and cable management arms.

Figure 1–7 shows the cable management configuration for the 2C2D configuration.

❶ Cable containment
spool

❷ Fibre Channel cable
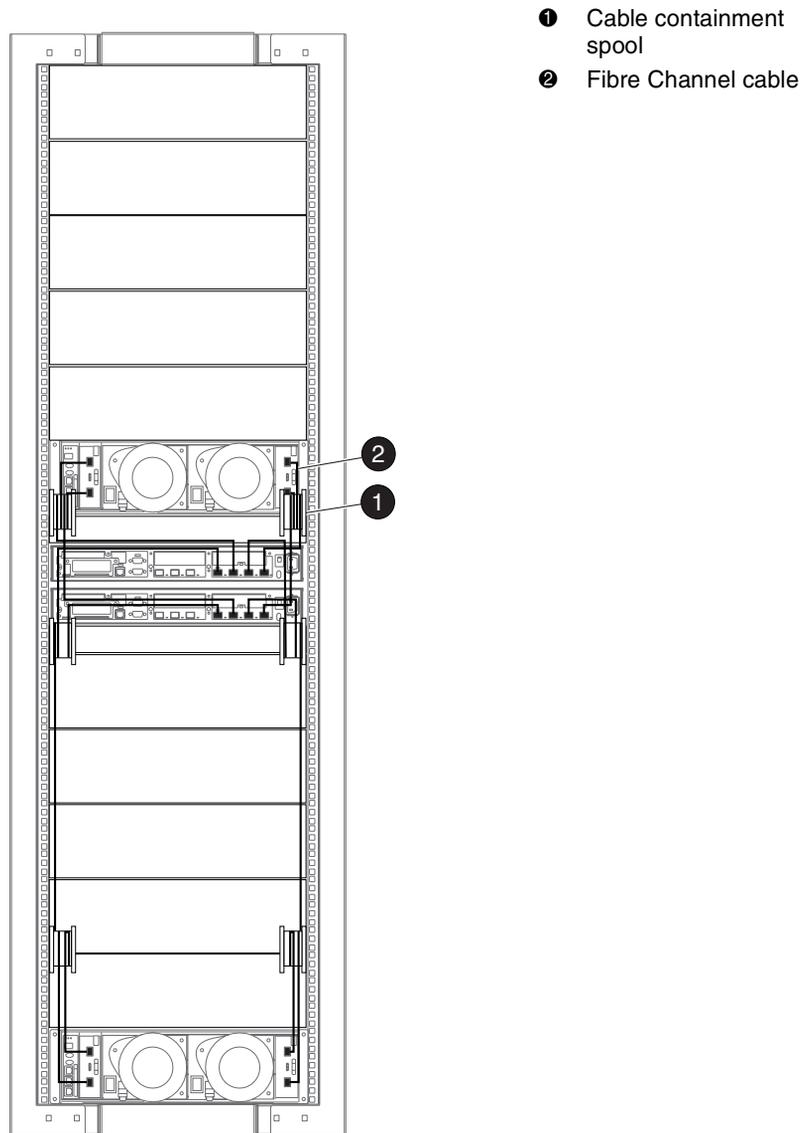
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Figure 1–7: 2C2D cable management configuration