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Kodak Workflow With Hewlett Packard

HP ML370G5 RAID Upgrade Kit Installation

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Revision History

Revision	Date	Author	Comments
1.0	4 Oct 2007	Gary Tanaka	Created document.
1.1	24 Oct 2007	Janet K.	Changed template and edited.
1.2	5 Dec 2007	Janet K	Took in edits.

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1. INTRODUCTION

This document describes how to set up an HP® ML370G5 base server with the eight-drive RAID upgrade option (Kodak® part number 518-02492A). The upgrade option contains these components:

Item	Quantity	Description
Internal storage eight-bay drive cage	1	609-00499 SAS SFF Drive Cage Kit 401415-B21
RAID card	1	607-00475 Smart Array P400 512MB Battery Backed Write Cache (BBWC) controller 383280-B21
Disks	8	607-00206 (146GB 2.5” 10Krpm SAS drives, 431958-B21)

2. INSTALLING THE ML370G5 RAID UPGRADE HARDWARE

2.1 Removing the Cover

1. Unlock the cover release lever (if necessary) by turning the cam approximately 90° counterclockwise, using the hex key provided on the rear panel of the server.
2. Pull up the cover release lever to disengage the top cover from the chassis.
3. Slide the cover toward the rear of the server until the tabs release from the slots in the chassis.
4. Lift the cover off the chassis.

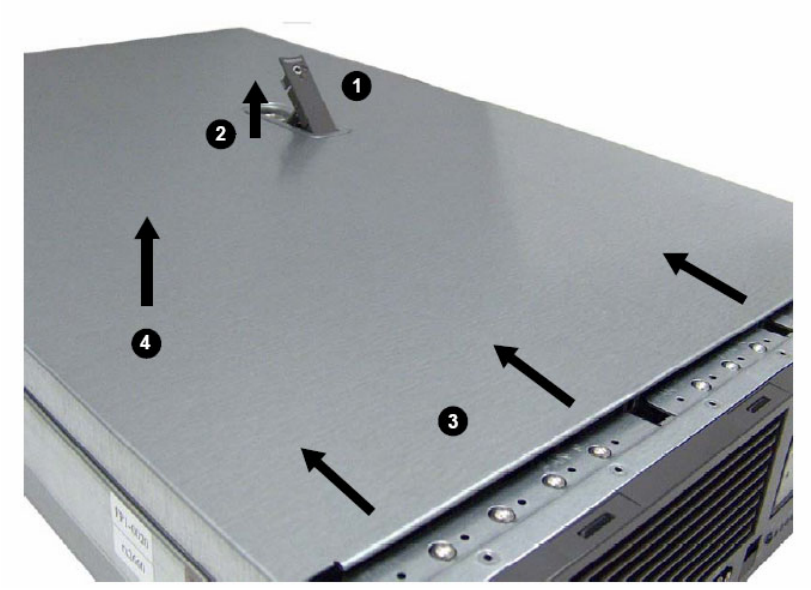


Figure 1: Removing the cover from the chassis

2.2 Installing the RAID Card

Install the Smart Array P400 Raid Controller card in PCI expansion slot 4 (#4 in the following diagram).

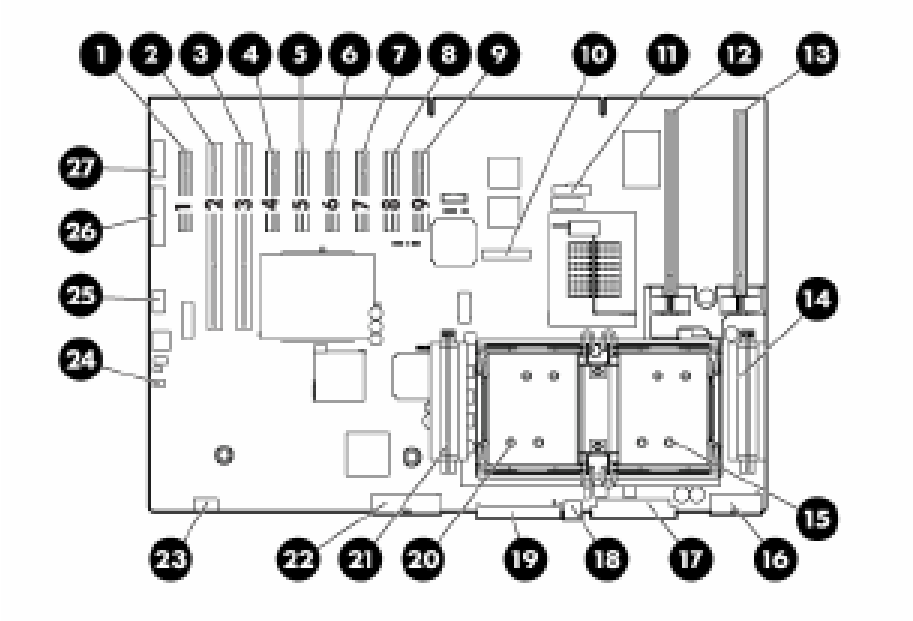


Figure 2: System board components

2.3 Installing the Drive Cage

1. Remove the four screws holding the cage blank in place. Pull off the cage blank.

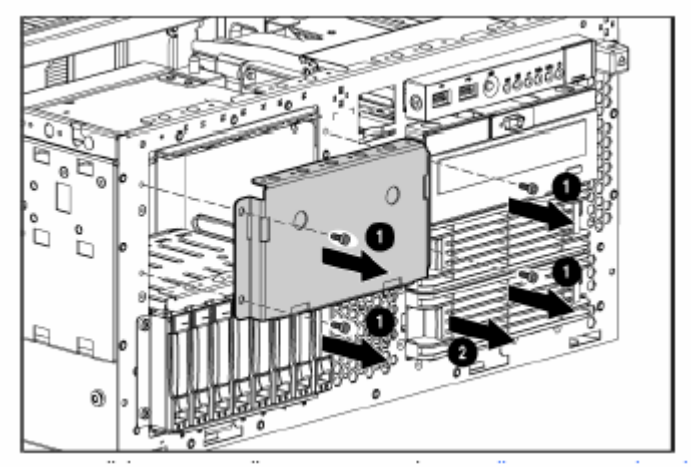


Figure 3: Removing the cage blank

2. Slide the hard drive cage into the drive bay. Insert the four screws to secure the drive cage to the chassis.

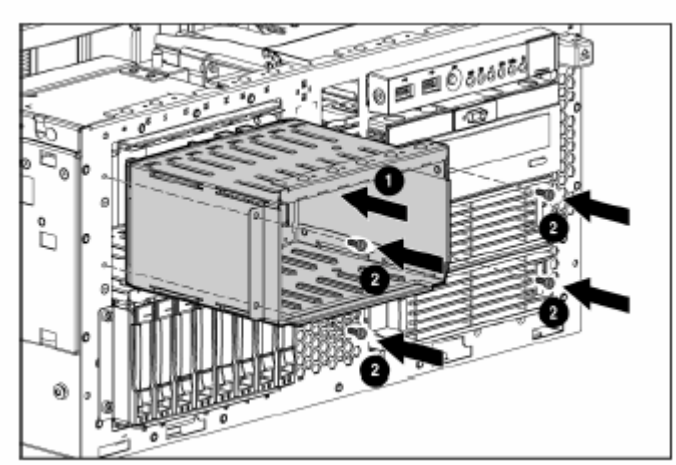
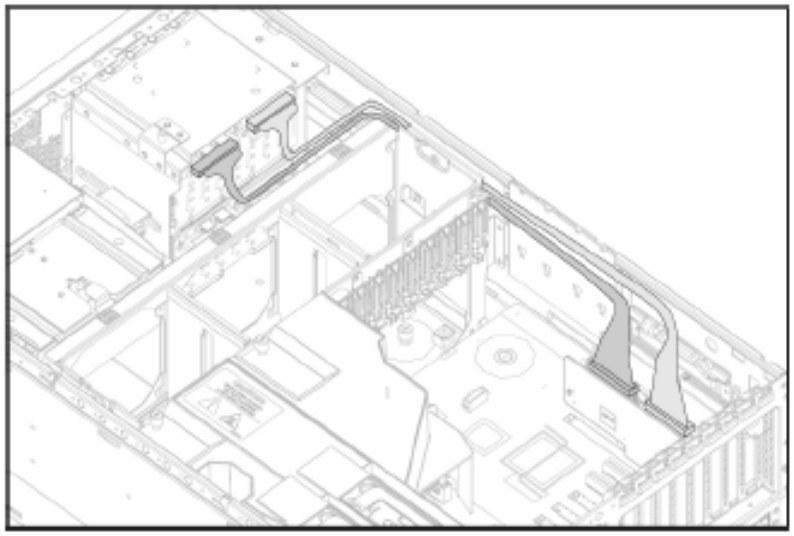


Figure 4: Installing the drive cage

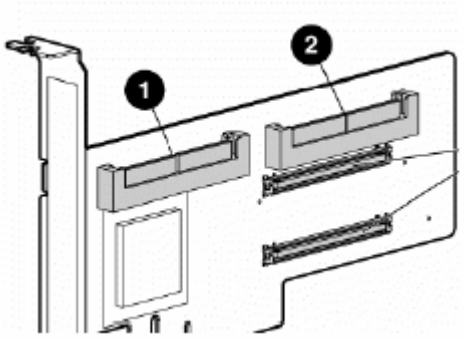
2.4 Connecting the Data Cables

1. Connect the two SAS data cables to the drive backplane.
2. Confirm that the SAS drive connectors are inserted in the correct ports on the P400 card.
   - Connector 9–12 should be inserted in Port 1.
   - Connector 13–16 should be inserted in Port 2.

   Note: Port 1 is labeled as item #2 in the P400 card diagram that follows. Port 2 is labeled as item #1.



P400 Card



1 SAS Port 2I (internal), 4x wide SFF8484 connector

2 SAS Port 1I (internal), 4x wide SFF8484 connector

Figure 5: Connecting the cables to the backplane

3. Attach the battery backup cache to the P400 card.

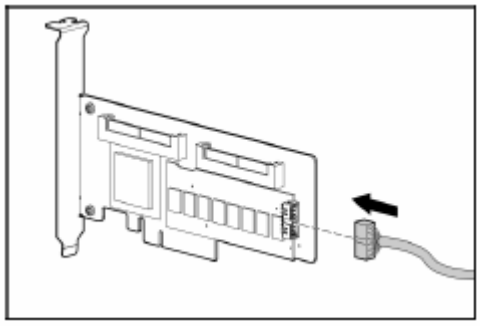


Figure 6: Attaching the battery backup cache

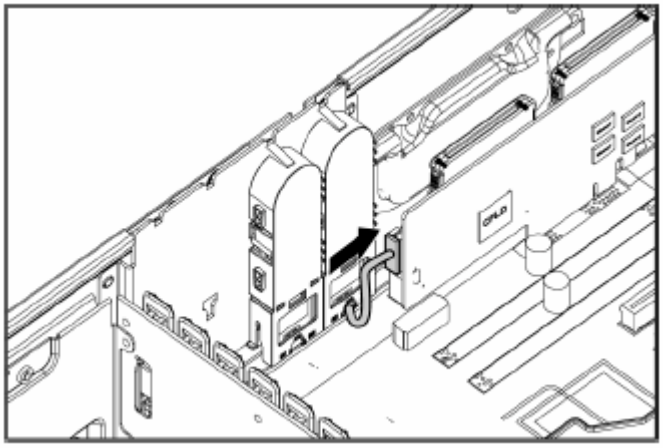
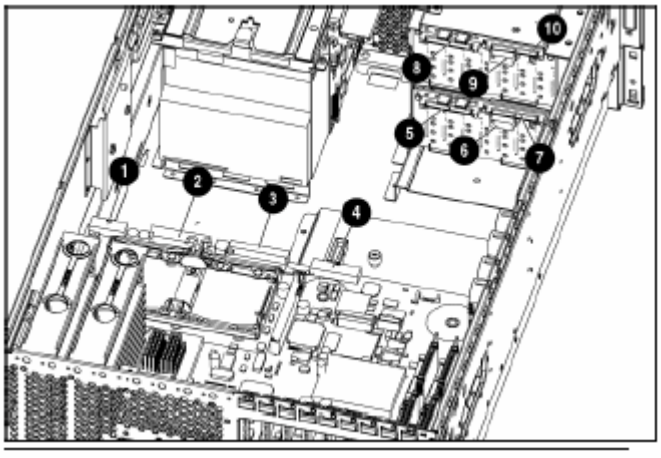
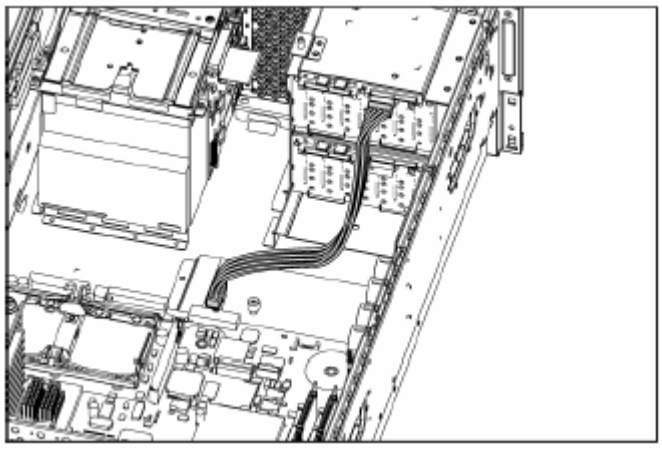


Figure 7: Completed BBWC cabling and mounting

4. Confirm that the power cable is connected from the SAS drive cage to the system board.



Connect the power cable to #4 on the system board



Completed power cable connection

Figure 8: Power cable connection to the system board

5. Install the drives in bays.

3. CONFIGURING THE RAID CONTROLLER

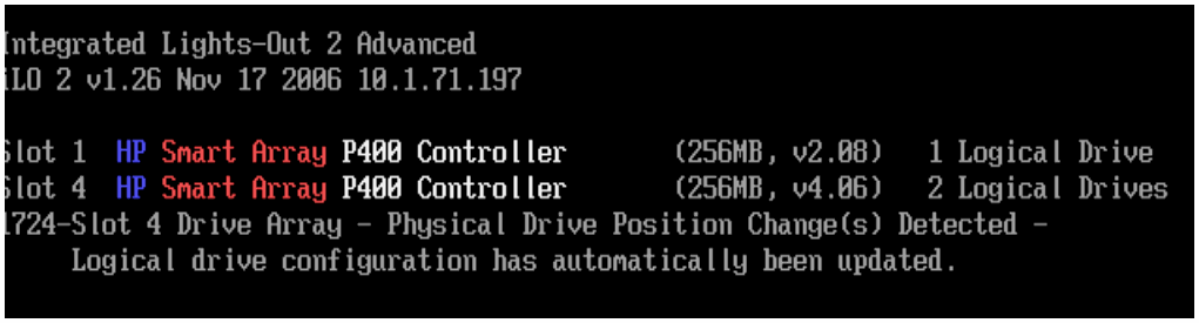
RAID settings

Number of data disks: 8

P400 ports: 1 and 2

RAID settings: 5

1. During startup, when the `Smart Array P400 RAID Controller` prompt appears, press F8.
2. Confirm that the correct P400 controller is in Slot 4.



3. Create the DATA Mirror.
   a) Select **Create Logical Drive**. You should see the following:

      Available Physical Drives
      Port 1I, Box1, Bay 9–12
      Port 2I, Box1, Bay 13–16

   b) Ensure the disks in both ports (bays 9–16) are selected. An **X** should appear at the front of both items. If a disk is not selected, click the item, and press the space bar. The **X** appears.

   c) Configure the other settings as follows:

      Raid Configuration: RAID 5

      Spare: Clear the check box.

      Maximum Boot Partition: Disable (4 GB Max)

   d) Press F8, and then press ENTER to accept the configuration.

   e) Press ESC to exit and restart the server.

The RAID device should now be available. Create the primary partition, format, and assign a drive letter.