HP High-Performance Secure Hard Disk



Setup Guide

HP High-Performance Secure Hard Disk Setup guide



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Applicable Products: J8018A/J8019A

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1 Introduction

HP Secure Hard Disks provide hardware-based encryption to secure sensitive print, scan, and copy data-at-rest on single and multiple function printing devices. HP Secure Hard Disks use the advanced encryption standard (AES), and are equipped with versatile time saving features and robust functionality.

The HP Secure Hard Disk includes the following features:

- Easy to install and configure.
- Managed with the HP embedded Web server or HP Web Jetadmin.
- Employs hardware based full-disk encryption for security and performance.
- Uses an automated randomly generated key or a key that you manually specify.
- Locked to the printer/MFP in which it is installed.
- △ CAUTION: Once the HP Secure Hard Disk is locked to the printer/MFP, the stored data is unreadable if removed from the printer/MFP. Secondary hard disks (EIO or internal) that are installed in the printer/MFP are automatically disabled after the HP Secure Hard Disk is installed.

Installing the HP Secure Hard Disk typically involves the following procedures:

- Backup any data that you need to save from the standard (non-encrypted) hard disks.
- Securely erase the standard (non-encrypted) hard disks.
- Install the HP Secure Hard Disk.
- Restore data and reinstall any third-party applications.

For detailed instructions see Installation on page 5.

HP Secure Hard Disk products

Product Name	Part Number	
HP High-Performance Secure Hard Disk	J8018A	
HP High-Performance Secure EIO Hard Disk (HP Secure Hard Disk lock adapter)	J8019A	
		Ledver

Supported printers/MFPs

Table 1-1 Supported printers/MFPs	
HP printer/MFP model number	Available HP Secure Hard Disk product
HP LaserJet CP3525, CM4730, CM6030, CM6040 M3027, M3035	HP High-Performance Secure EIO Hard Disk (J8019A)
HP LaserJet CM3530, DS9250c, M4345, M5025/M5035, M9040/M9050	HP High-Performance Secure Hard Disk (J8018A)
	HP High-Performance Secure EIO Hard Disk (J8019A)

Product accessibility

For information on our commitment to accessibility of HP Secure Hard Disk products:

- Visit the HP Web site at <u>http://www.hp.com/accessibility</u>.
- Send an email message to: accessibility@hp.com.

2 Installation

Use the information in this section to install the HP Secure Hard Disk in your compatible printer/MFP. Once installed, you can use the HP embedded Web server (or HP Web Jetadmin) to manage the HP Secure Hard Disk.

△ CAUTION: Your HP Secure Hard Disk contains electronic components that might be damaged by static electricity through electrostatic discharge (ESD). To prevent ESD damage, maintain frequent contact with any bare sheet metal surface on the printer. A grounding wrist strap (or similar device) is useful for this purpose. Handle the device carefully at all times. Avoid touching electronic components or circuit paths

- What you need for installation
- <u>Check printer/MFP operation</u>
- Backup data and note configuration settings
- Erase existing hard disk data
- Install the EIO HP Secure Hard Disk (J8019A)
- Install the HP Secure Hard Disk lock adapter
- Install the HP Secure Hard Disk (J8018A)
- Confirm HP Secure Hard Disk operation
- Restore data and reinstall applications

What you need for installation

 An HP printer/MFP with an available EIO slot or hard disk drive bay that supports an HP Secure Hard Disk. See <u>Table 1-1 Supported printers/MFPs on page 3</u> for a list of supported printers, MFPs, and digital senders.

The HP printer/MFP must be functioning properly. If required, use the setup or installation guides provided to assemble and test the printer/MFP.

- The appropriate HP Secure Hard Disk for your printer/MFP.
 - HP High-Performance Secure EIO Hard Disk (J8019A).



For added physical security, this HP Secure Hard Disk (J8019A) includes an EIO lock adapter (callout 1). The adapter can be outfitted with a Kensington-type lock (with or without a cable). Contact the Kensington Computer Products Group for information about a compatible lock.



HP High-Performance Secure Hard Disk (J8018A).



This HP Secure Hard Disk (J8018A) includes pre-mounted disk rails that are typically required for installation in the formatter door.

• The latest version of the printer/MFP firmware.

If you are installing an HP Secure Hard Disk in an existing printer/MFP, verify that it contains the latest firmware. For firmware upgrade instructions, see the setup or use guides provided with your printer/MFP.

NOTE: If you must upgrade the printer/MFP firmware, do this **now** before you install the HP Secure Hard Disk.

After upgrading the firmware, and restarting the printer/MFP, you can verify the firmware is installed correctly by using the following procedure:

- Start a supported Web browser and enter the IP address or host name of the printer/MFP.
- Select the **Settings** tab and then select **Security**.
- In the Hard Drive and Mass Storage Security Settings section, select Configure.

Because the current hard disk cannot be encrypted, you should see information similar to the following displayed in the **Hard Drive Status** section:

Hard Disk:	Internal (Not encryptable)
Serial Number:	ABCDE1234567890abcde
Drive Status:	Enabled
Encryption Status:	Not supported

The **Hard Disk**, **Drive Status**, and **Encryption Status** fields indicate that the firmware is capable of supporting the HP Secure Hard Disk.

NOTE: After the firmware upgrade, the check box to Automatically enable encryption when powered on is selected by default. To manually provide a drive password, select Manually Specify Drive Password from the HP Encrypted Hard Drive Configuration selections.

Once installed, the HP Secure Hard Disk automatically locks to the printer/MFP. Because all data on the HP Secure Hard Disk is encrypted, it is unreadable if removed from the printer/MFP.

You can exit the HP embedded Web server when you have verified that the firmware is upgraded.

• The latest version of HP Web Jetadmin.

If you are installing an HP Secure Hard Disk into an existing printer/MFP, and you use HP Web Jetadmin, verify that the latest version is installed.

- NOTE: If you must upgrade HP Web Jetadmin, do this **now** before you install the HP Secure Hard Disk. Older versions of HP Web Jetadmin do not support the HP Secure Hard Disk.
- Kensington-type locks and/or cables (optional).

The HP EIO lock adapter uses an optional Kensington-type lock (with or without a cable). In addition, most printer/MFP formatters can be outfitted with an optional Kensington-type lock. Contact the Kensington Computer Products Group for information about a compatible lock.

• Setup or use guides provided with your printer/MFP.

These guides are helpful during the HP Secure Hard Disk installation process.

• Font packages and any third-party party applications that are installed on the standard (nonencrypted) hard disk(s). These must be reinstalled on the HP Secure Hard Disk.

Check printer/MFP operation

Before attempting to install the HP Secure Hard Disk, print a printer configuration page to verify that your HP printer/MFP is working properly. The configuration page displays the operating status of the printer/MFP.

The steps to print a configuration page vary with each printer/MFP model. For models with a control panel, a menu map is provided to navigate the control panel menus. To print a configuration page, use the menu map or see your printer/MFP documentation for specific instructions.

NOTE: The name of the configuration page might vary by printer type.

Backup data and note configuration settings

Because only the HP Secure Hard Disk will be operational, backup any data that you need from the standard (non-encrypted) hard disk(s). After installation, restore the data to the HP Secure Hard Disk.

In addition, you must reinstall any third-party applications, fonts (including specialized fonts), and Postscript packages.

Configuration settings are lost and should be noted **before** installing the HP Secure Hard Disk.

Information you might need includes the following:

Address Book, Distribution Lists, and Authorized User List stored on an MFP

You can save the information using the HP embedded Web server by selecting Digital Sending Tab and Import/Export. Follow the instructions for exporting. (You can import the data to the new HP Secure Hard Disk.)

• Stored, Private, and Quick Copy jobs stored on an MFP

Print and scan the jobs, and then re-send to the printer/MFP. To print a list of all stored jobs, select Print List from the Job Storage application on the control panel.

• Third-party applications

Verify that you have the source files so you can reinstall the applications on the printer/MFP.

• Font and Postscript packages

Verify that you have the source files so you can reinstall the fonts and Postscript packages on the printer/MFP.

• HP embedded Web server configuration settings

Print or write down any configuration settings you need.

Erase existing hard disk data

Before installing the HP Secure Hard Disk, you should securely erase the data from existing EIO or internal hard disk drives when you complete either of the following procedures:

- Replace an existing non-encrypted hard disk (either EIO or internal) with an HP Secure Hard Disk.
- Install an HP Secure Hard Disk in a printer/MFP that contains a secondary (non-encrypted) hard disk. If the secondary hard disk remains in the printer/MFP, it is deactivated and not accessible.
- ☑ NOTE: You cannot access a secondary (non-encrypted) hard disk after the HP Secure Hard Disk is installed. However, if the HP Secure Hard Disk is re-initialized and subsequently removed from the printer/MFP, the secondary (non-encrypted) hard disk is again accessible.
- △ CAUTION: Verify that you have backed up any data that you need to keep **before** erasing the secondary (non-encrypted) hard disk.

See your printer/MFP use guides for information about securely erasing the hard disk. For information about using the HP embedded Web server **Secure storage erase** option, see <u>Secure storage erase</u> on page 27.

Install the EIO HP Secure Hard Disk (J8019A)

Use this section to install the HP High-Performance Secure EIO Hard Disk (J8019A).

- △ CAUTION: Verify that you have backed up any data that you need to keep from the non-encrypted hard disks. Use Secure Disk Erase or a similar utility to erase the standard non-encrypted hard disks **before** removal or deactivation.
- **NOTE:** Before you begin, locate the setup or use guides provided with your printer/MFP.
 - 1. Turn the printer/MFP off, and disconnect the power and all interface cables.
 - 2. Remove the printer/MFP cover, if required, to access the EIO slot.
 - **3.** If you are replacing an existing EIO hard disk, remove the two retaining screws, and then remove the hard disk itself.
 - 4. If you are installing an EIO HP Secure Hard Disk for the first time, locate an available EIO slot.
 - NOTE: If multiple EIO slots are available, you can typically install the disk into any slot. Review the setup or use guides provided with your printer/MFP for any restrictions.
 - 5. If the empty slot contains a cover plate, remove the two retaining screws and the plate. (You can discard the screws and the cover plate.)
 - 6. Align the EIO HP Secure Hard Disk with the guide rails in the slot, slide it into the slot, and press firmly until it is seated.
 - 7. Tighten each retaining screw a little at a time until both screws are secure. (Do not over tighten.)
 - 8. Replace the printer/MFP cover, if required.
 - 9. Reconnect the power and any interface cables and turn on the printer/MFP.
 - For additional physical security, you can install the EIO HP Secure Hard Disk lock adapter for use with an optional Kensington-type lock. For instructions, continue with <u>Install the HP Secure</u> <u>Hard Disk lock adapter on page 13</u>.
 - **11.** If you are not installing the HP Secure Hard Disk lock adapter, continue with <u>Confirm HP Secure</u> <u>Hard Disk operation on page 19</u>.

Install the HP Secure Hard Disk lock adapter

To install the HP Secure Hard Disk lock adapter (for use with an **optional** Kensington-type lock), use the following steps:

1. Place the included lock adapter over the EIO HP Secure Hard Disk.



2. Install the optional Kensington-type lock that you purchased for this purpose. (The lock is **not** provided with the EIO lock adapter.)



3. Turn to the locked position and remove the key.



4. Continue with Confirm HP Secure Hard Disk operation on page 19.

Install the HP Secure Hard Disk (J8018A)

Use the appropriate section to install the HP High-Performance Secure Hard Disk (J8018A).

- NOTE: Before you begin the installation procedure, locate the setup or use guides provided with your printer/MFP.
 - Install in the HP DS9250c digital sender
 - Install in the HP LaserJet M4345, M5025/M5035, or M9040/M9050
 - Install in the HP LaserJet CM3530

Install in the HP DS9250c digital sender

- △ CAUTION: Verify that you have backed up any data that you need to keep from the non-encrypted hard disks. Use Secure Disk Erase or a similar utility to erase the standard non-encrypted hard disks **before** removal or deactivation.
 - 1. Turn the digital sender off, and disconnect all power and interface cables.
 - 2. Locate the formatter in the back of the digital sender and loosen the two thumb screws. (See the setup or use guides provided with your digital sender for the specific location of the formatter.)
 - 3. Pull the formatter out of the digital sender and lay it on a clean, flat, grounded surface, positioning the formatter so you can access the cage door.
 - 4. Open the formatter cage door.

The hard disk is attached to the inside of the formatter cage door.

- 5. If you are replacing an existing internal hard disk, use the following steps:
 - a. Disconnect the data and power cables from the hard disk.
 - b. Press the black plastic latch on the left side of the hard disk inward to release it (callout 1).



- c. Slide the hard disk to remove it from the slot.
- 6. Slide the new HP Secure Hard Disk into the slot on the formatter cage door ensuring that the black plastic latch is firmly seated.

- 7. Connect the data and power cables.
- 8. Close the formatter cage door making sure that it is properly latched to the formatter cage.
- 9. Carefully align the formatter board and slide it back into the digital sender.
- **10.** Tighten the thumb screws.
- **11.** Reconnect the power and all interface cables and turn the digital sender on.
- 12. Continue with Confirm HP Secure Hard Disk operation on page 19.

Install in the HP LaserJet M4345, M5025/M5035, or M9040/M9050

- △ CAUTION: Verify that you have backed up any data that you need to keep from the non-encrypted hard disks. Use Secure Disk Erase or a similar utility to erase the standard non-encrypted hard disks **before** removal or deactivation.
 - 1. Turn the printer/MFP off, and disconnect the power and all interface cables.
 - 2. Locate and remove the formatter cover, if required.
 - **3.** Open the formatter cage door.

The hard disk is attached to the inside of the formatter cage door. (See the setup or use guides provided with your printer/MFP for the specific location of the formatter cage door.)

- 4. If you are replacing an existing internal hard disk, use the following steps:
 - **a.** Carefully disconnect the data and power cables from the hard disk (callout 1).



b. Press the black plastic latch on the left side of the hard disk inward to release it (callout 2).

c. Slide the hard disk to remove it from the slot.



- 5. Slide the new HP Secure Hard Disk into the slot on the formatter cage door ensuring that the black plastic latch on the left side is firmly seated.
- 6. Connect the data and power cables to the HP Secure Hard Disk.
- 7. Close the formatter cage door and replace the formatter cover, if required.
- 8. Reconnect the power and all interface cables and turn the printer/MFP on.
- 9. Continue with Confirm HP Secure Hard Disk operation on page 19.

Install in the HP LaserJet CM3530

- △ CAUTION: Verify that you have backed up any data that you need to keep from the non-encrypted hard disks. Use Secure Disk Erase or a similar utility to erase the standard non-encrypted hard disks **before** removal or deactivation.
 - 1. Turn the printer/MFP off, and disconnect the power and all interface cables.

2. Locate the formatter at the rear of the printer/MFP and remove the thumb screws (callout 1). (See the setup or use guides provided with your printer/MFP for the specific location of the formatter.)



3. Pull the formatter out of the printer/MFP and lay it on a clean, flat, grounded surface with the hard disk slot facing up.



- 4. If you are replacing an existing internal hard disk, use the following steps:
 - a. Carefully disconnect the data and power cables.
 - **b.** Press the black plastic latch on the left side of the hard disk inward to release and then remove the disk from the slot.
- 5. Slide the new HP Secure Hard Disk into the slot ensuring that the black plastic latch on the left side is firmly seated.
- 6. Connect the data and power cables.
- 7. Align the formatter board in the tracks at the bottom of the slot, and slide the board back into the printer/MFP.
 - **NOTE:** To prevent formatter board damage, ensure that it is properly aligned in the tracks.
- 8. Replace the thumb screws and carefully tighten them.

- 9. Reconnect the power and all interface cables and turn the printer/MFP on.
- 10. Continue with Confirm HP Secure Hard Disk operation on page 19.

Confirm HP Secure Hard Disk operation

After initially installing the HP Secure Hard Disk, confirm that it is operating correctly by using the HP embedded Web server.

NOTE: Use this section when you first install the HP Secure Hard Disk and are initially verifying printer/ MFP operation. Otherwise, use the <u>Troubleshooting on page 29</u> section.

You can also use the printer configuration page to verify the installation.

1. Start a supported Web browser and enter the IP address or host name of the printer/MFP as the URL.

See the setup or use guides provided with your printer/MFP for additional information about the HP embedded Web server.

- 2. From the HP embedded Web server page, select the **Settings** tab, and then select **Security**.
- 3. In the Hard Drive and Mass Storage Security Settings section, select Configure.

The HP Secure Hard Disk status is displayed, which includes the type, serial number, drive status, and encryption status, as in the following example:

Hard Disk:	Internal (encryptable)
Serial Number:	ABCDE1234567890abcde
Drive Status:	Enabled
Encryption Status:	Encrypted

Encrypted indicates that the HP Secure Hard Disk is locked to the printer/MFP. If the HP Secure Hard Disk is removed from the printer/MFP, the data is unreadable.

- NOTE: Automatic locking is enabled by default. Once installed, the HP Secure Hard Disk automatically locks to the printer/MFP.
- 4. If the **Hard Disk** status is set to **None installed**, meaning that the printer/MFP is not detecting the HP Secure Hard Disk, turn the printer/MFP off, disconnect the power cable, and try the following:
 - **a.** For the HP High-Performance Secure EIO Hard Disk (J8019A), check to see that it is properly seated in the slot.
 - **b.** For an HP High-Performance Secure Hard Disk (J8018A) mounted on the inside of a formatter door, ensure that the data and power cables are properly connected.
 - **c.** For an HP High-Performance Secure Hard Disk (J8018A) installed on a formatter, verify that the data and power cables are properly connected and that the formatter is properly seated.

If these steps did not resolve the issue, see Troubleshooting on page 29.

5. If the **Drive Status** option is **Not applicable**, this might also indicate that the HP Secure Hard Disk is not properly installed. (The **Hard Drive** option is probably set to **None installed**.)

Review the previous step. If you cannot resolve the issue, see <u>Troubleshooting on page 29</u>.

Restore data and reinstall applications

After verifying that the HP Secure Hard Disk is operating correctly, you can restore data from your backup and reinstall third-party applications. Use the following list to verify your progress:

• MFP Address Book, Distribution Lists, and Authorized User List

To restore previously saved data using the HP embedded Web server, select Digital Sending Tab and Import/Export. Follow the instructions for importing.

• MFP Stored, Private, and Quick Copy jobs

Re-send the printed and scanned jobs to the printer/MFP.

• Third-party applications

Reinstall needed applications on the printer/MFP.

• Font and Postscript packages

Reinstall needed fonts and Postscript packages on the printer/MFP.

Configuration settings

Set specific printer/MFP configuration settings using the HP embedded Web server, if required.

3 Manage the HP Secure Hard Disk

This section contains general information about the HP Secure Hard Disk, and then specific instructions for managing the HP Secure Hard Disk.

- General information
- Reinitialize, Disable, or Erase the HP Secure Hard Disk

General information

This section contains general information about managing your HP Secure Hard Disk.

- <u>Standard hard disks are disabled</u>
- Hard disk priority

Standard hard disks are disabled

After the HP Secure Hard Disk is installed, any standard (non-encrypted) EIO or internal hard disks that remain in the printer/MFP are **disabled**. Also, if you install a standard hard disk in a printer/MFP **after** an HP Secure Hard Disk is installed, that standard hard disk is automatically disabled. Disabled standard (non-encrypted) hard disks are inaccessible, but are reported as physically present by the HP embedded Web server and on the configuration page.

The following example shows the status of a standard (non-encrypted) internal hard disk after an HP High-Performance Secure EIO Hard Disk is installed:

Hard Disk:	Internal (Not encryptable)
Serial Number:	ABCDE1234567890abcde
Drive Status:	Disabled
Encryption Status:	Another encrypted drive present
Hard Disk:	EIO 1 (encryptable)
Serial Number:	ABCDE1234567890abcde
Drive Status:	Enabled
Encryption Status:	Encrypted

Notice that the **Drive Status** of the standard hard disk is **Disabled** and that the **Encryption Status** is **Another encrypted drive present**.

△ CAUTION: After installation, if the HP Secure Hard Disk is removed from the printer/MFP, any standard (non-encrypted) hard disks that were previously disabled are again accessible.

Hard disk priority

A printer/MFP can contain **one** locked HP Secure Hard Disk. If you install multiple hard disks in a printer/ MFP, the system uses the following priority to determine the active hard disk:

- Internal encrypted
- EIO encrypted
- Internal not encrypted
- EIO not encrypted

△ CAUTION: Installing more than one HP Secure Hard Disk in a printer/MFP can disable a previously functioning HP Secure Hard Disk. For example, if you install an internal HP Secure Hard Disk in a printer/MFP that contains a functioning EIO HP Secure Hard Disk, the EIO disk is disabled and no longer accessible.

Reinitialize, Disable, or Erase the HP Secure Hard Disk

When required, use the HP embedded Web server to reinitialize the HP Secure Hard Disk, disable encryption, or perform a secure storage erase.

- NOTE: For additional information about the HP embedded Web server and the supported Web browsers, see the setup or use guides for your printer/MFP model. For information about when to use these options, see <u>Troubleshooting on page 29</u>.
 - Reinitialize the HP Secure Hard Disk
 - Disable encryption
 - <u>Secure storage erase</u>

Reinitialize the HP Secure Hard Disk

The HP embedded Web server option **Reinitialize Hard Drive** unlocks the HP Secure Hard Disk from the printer/MFP and resets encryption making the data inaccessible. You might need to reinitialize if an installed HP Secure Hard Disk was encrypted or originally locked to a different printer/MFP.

A reinitialized HP Secure Hard Disk can be re-locked to the same printer/MFP, or moved to a different (compatible) printer/MFP. (Verify that the printer/MFP uses the latest firmware version.)

- △ CAUTION: All existing data on the HP Secure Hard Disk becomes inaccessible and disk encryption is reset. The printer/MFP restarts at the conclusion of the process. The setting that enables encryption when the printer/MFP starts (Automatically enable encryption when powered on) is disabled. You must manually select to enable encryption.
 - 1. Start a supported Web browser and enter the IP address or host name of the printer/MFP as the URL.
 - 2. From the HP embedded Web server page, select the **Settings** tab, and then select **Security**.
 - 3. In the Hard Drive and Mass Storage Security Settings section, select Configure.

The HP Secure Hard Disk status is displayed, which includes the type, serial number, drive status, and encryption status, as in the following example:

Hard Disk:	Internal (encryptable)
Serial Number:	ABCDE1234567890abcde
Drive Status:	Enabled
Encryption Status:	Encrypted

- 4. Select Reinitialize Hard Drive.
- 5. When the process is complete and the printer has restarted, go to the Hard Drive and Mass Storage Security Settings page (HP encrypted Hard Drive Configuration), and select Enable Encryption using Random Drive Password, which is recommended, or Manually Specify Drive Password.
- 6. If you select to manually specify the drive password, enter the password to use. (The password is displayed for auditing purposes.)
- 7. To activate your selection, click the **Enable Encryption** option.

Disable encryption

The HP embedded Web server option **Disable encryption and continue**, disables encryption on the printer/MFP. Use this option when a printer/MFP is configured to use an HP Secure Hard Disk, but a standard (non-encrypted) hard disk is installed in its place. Using this option assumes that you want to disable encryption and continue using the standard (non-encrypted) hard disk. Otherwise, you must locate and install the correct HP Secure Hard Disk that is locked to this printer/MFP.

When you disable encryption, the information on the previously encrypted HP Secure Hard Disk is unreadable, since the encryption key no longer matches the key stored on the printer/MFP. Selecting this option reboots the printer/MFP.

- △ CAUTION: All data on the original HP Secure Hard Disk becomes unreadable. The printer/MFP restarts at the conclusion of the process. The setting to enable encryption when the printer/MFP starts (Automatically enable encryption when powered on) is disabled.
 - 1. Start a supported Web browser and enter the IP address or host name of the printer/MFP as the URL.
 - 2. From the HP embedded Web server page, select the **Settings** tab, and then select **Security**.
 - 3. In the Hard Drive and Mass Storage Security Settings section, select Configure.

The HP Secure Hard Disk status is displayed, which includes the type, serial number, drive status, and encryption status.

- 4. To reset encryption, select **Disable encryption and continue**.
- NOTE: Disabling encryption occurs almost immediately. However, the time required to reboot the printer/MFP depends on the model.

Secure storage erase

Select this option to permanently remove **all** data from the encrypted HP Secure Hard Disk or the standard (non-encrypted) hard disk(s). After the data is erased, the printer/MFP reboots. Erasing the disk can take significant time (hours) to complete. (Unlike disabling encryption, which occurs almost immediately, this option overwrites data.)

- △ CAUTION: All data on the selected HP Secure Hard Disk or the standard (non-encrypted) hard disk is erased. The printer/MFP restarts at the conclusion of the process.
 - 1. Start a supported Web browser and enter the IP address or host name of the printer/MFP as the URL.
 - 2. From the HP embedded Web server page, select the **Settings** tab, and then select **Security**.
 - 3. In the Hard Drive and Mass Storage Security Settings section, select Configure.

The hard disk status is displayed, which includes the type, serial number, drive status, and encryption status.

- 4. Select the device to erase.
- NOTE: It can take a significant amount of time (hours) for the printer/MFP to complete this phase and restart.
- 5. Click Perform Secure Storage Erase.

4 Troubleshooting

- Solve general problems
- <u>Control panel messages</u>
- Printer configuration page messages
- Embedded Web server messages
- Reset to factory defaults
- NOTE: For general troubleshooting issues, see the setup or use guides provided with your printer/ MFP.

Solve general problems

Use the following checklist to address general HP Secure Hard Disk issues. For other issues, use the control panel, printer configuration page, or the HP embedded Web server.

- 1. If the Ready light is not on, ensure that the power cable is properly connected and the power switch for the printer/MFP is turned on.
- 2. If the printer/MFP control panel display does not show Ready, verify that all cabling was properly reconnected.
- **3.** If the printer/MFP is not detecting the HP Secure Hard Disk, turn the printer/MFP off, disconnect the power cable, and check the following items:
 - a. HP High-Performance Secure EIO Hard Disk (J8019A) Is it properly seated in the slot?
 - **b.** HP High-Performance Secure Hard Disk (J8018A) Are the data and power cables properly connected? If the disk is mounted on the formatter, is the formatter properly seated?
- 4. Check the control-panel display for any error messages.

See Control panel messages on page 31.

5. Print a printer configuration page and look for status or error messages.

See Printer configuration page messages on page 31.

6. Run the HP embedded Web server and check the status of the HP Secure Hard Disk.

See Embedded Web server messages on page 33.

Control panel messages

Review the following information about control panel messages.

NOTE: Control panel information about the HP Secure Hard Disk is limited to short warning messages about drive and encryption status. For more information about the message, use the HP embedded Web server.

Some printer/MFP functions might be limited until an error condition is resolved.

Control panel message	Description	Recommended action	
Expected drive missing	The printer/MFP was locked to an HP Secure Hard Disk.	Install the correct hard disk for this printer/MFP. Or, to permanently erase	
	• Installed hard disk is not capable of encryption.	and reboot the printer/MFP, select Reinitialize Hard Drive.	
	Installed HP Secure Hard Disk was locked to a different printer/MFP.		
	• Does not contain a hard disk.		
HP Encrypted drive disabled	Installed HP Secure Hard Disk is not locked to this printer/MFP.	Install the correct hard disk for this printer/MFP. Or, to permanently erase the contents of the HP Secure Hard Disk, and reboot the printer/MFP, select Reinitialize Hard Drive.	
Unsupported drive installed	Installed internal hard disk is not capable of encryption. However, this printer/MFP is capable of managing an HP Secure Hard Disk.	Install the correct HP Secure Hard Disk for this printer/MFP. Or, you can Disable printer/MFP encryption and continue.	

Printer configuration page messages

The **Installed Personalities and Options** section of the printer configuration page includes information such as the EIO slot installed, drive status, serial number, model name, and drive capacity. There are typically three states for the drive:

- Empty No hard disk is installed.
- Enabled A hard disk is installed. See the Security section for more information about the
 encryption status, such as whether the disk is locked to this printer/MFP and operating normally.
- Disabled A hard disk is installed, but it is not operational. See the Security section for more information.

In the **Security** section of the configuration page, use the **Hard Drive Encryption Status** for troubleshooting. Use the following table to verify whether your HP Secure Hard Disk is functioning properly. For additional troubleshooting information, use the HP embedded Web server.

Hard Disk Encryption Status	Message	Recommended Action
Not applicable	Normal status when no hard disk is installed.	Install an HP Secure Hard Disk.
Not supported	Normal status for a standard (non- encrypted) hard disk.	Install an HP Secure Hard Disk.

Hard Disk Encryption Status	Message	Recommended Action
ENABLED	Normal status when an HP Secure Hard Disk is installed.	None.
DISABLED	Disk is capable of encryption. However, encryption is disabled.	Enable encryption using the HP embedded Web server or HP Web Jetadmin.
		CAUTION: Data on this hard disk is not encrypted.
DISABLED: Expected Drive Missing	Incorrect hard disk installed. The printer/MFP was expecting an HP Secure Hard Disk that was previously locked to this printer/MFP.	Install the correct hard disk for this printer/MFP. Or, to permanently erase the contents of the HP Secure Hard Disk and reboot the printer/MFP, select Reinitialize Hard Drive.
	serious error, the disk status in the Installed Personalities and Options section is Disk Not Functional.	If the hard disk is Not Functional , turn the printer/MFP off and check all power and interface cables. Then, restart the printer/MFP. If the error continues, contact HP Support.
DISABLED: Encrypted by Another Device	Incorrect hard disk installed. The installed HP Secure Hard Disk was locked to a different printer/MFP.	Install the correct hard disk for this printer/MFP. Or, to permanently erase the contents of the HP Secure Hard Disk and reboot the printer/MFP, select Reinitialize Hard Drive.
DISABLED: Unsupported Drive Installed	Incorrect hard disk installed. Only HP Secure Hard Disks are supported in this printer/MFP.	Install the correct HP Secure Hard Disk for this printer/MFP.
Disk Not Functional (Internal or EIO)	Hard disk is not functional.	Turn the printer/MFP off and check all power and interface cables. Then, restart the printer/MFP. If the error continues, contact HP Support.

NOTE: See your printer/MFP documentation for instructions about viewing or printing configuration pages. For a description of configuration page messages other than those related to the HP Secure Hard Disk, see the setup or use guides provided with your printer/MFP model.

Embedded Web server messages

Use the HP embedded Web server to review status messages.

- 1. Start a supported Web browser and enter the IP address or host name of the printer/MFP as the URL.
- 2. From the HP embedded Web server page, select the Settings tab, and then select Security.
- 3. In the Hard Drive and Mass Storage Security Settings section, select Configure.

The HP Secure Hard Disk status is displayed, which includes the type, serial number, drive status, and encryption status.

4. Use the following information to resolve any issues.

```
NOTE: Messages are displayed in the section titled HP Encrypted Hard Drive Configuration. If the printer/MFP is capable of managing an HP Secure Hard Disk, the first message in the section states, This device allows storage encryption when an HP Encrypted Hard Drive is installed.
```

Although the **Hard Drive** field in the table displays EIO or Internal, the information provided can apply to **either** type.

For clarity, the table describes only status messages for the HP Secure Hard Disk. However, the **Hard Drive Status** section of the HP embedded Web server lists **all** installed hard disks.

The messages listed in the following table indicate normal operating conditions, and generally do not require attention.

Hard Disk Drive Statu	S	Meaning/Description	Recommended Action
Hard Drive:	None installed	No hard disk installed.	Verify that Automatically enable
Serial Number:	Not applicable	However, this printer/MFP can	install the HP Secure Hard Disk.
Drive Status:	Not applicable	manage an HP Secure Hard Disk.	
Encryption Status:	Not applicable		
Hard Drive:	Internal (not encryptable)	Standard (non-encrypted) hard	Verify that Automatically enable
Serial Number:	0987654321		install the HP Secure Hard Disk.
Drive Status:	Enabled	However, this printer/MFP can manage an HP Secure Hard Disk.	
Encryption Status:	Not supported		
Hard Drive:	EIO 1 (encryptable)	Encryption is enabled and hard disk is functioning correctly	None.
Serial Number:	0987654321	disk is functioning correctly.	
Drive Status:	Enabled		
Encryption Status:	Encrypted		

Table 4-1 Normal Operation Messages

The warning messages listed in the following table indicate a condition that might require attention.

Table 4-2 Warning Messages

Hard Disk Drive Statu	IS	Meaning/Description	Recommended Action
Hard Drive:	Internal (encryptable)	HP Secure Hard Disk installed.	Select Enable Encryption using
Serial Number:	0987654321	However, it is not locked to the printer/MEP and it is not	(Recommended), or Manually
Drive Status:	Enabled	encrypting data.	then select Enable Encryption.
Encryption Status:	Not encrypted	CAUTION: Data on this HP Secure Hard Disk can be read on another device.	
Hard Drive:	None installed	No hard disk installed.	Verify that Automatically enable
Serial Number:	Not applicable	However, this printer/MFP can manage an HP Secure Hard Disk.	install an HP Secure Hard Disk.
Drive Status:	Drive missing		
Encryption Status:	Not applicable	NOTE: MFPs require a hard disk for certain operations. Copy, fax, and send functions might be disabled.	

The messages listed in the following table indicate a condition that requires immediate attention.

Table 4-3 Error Mess	ages		
Hard Disk Drive Status		Meaning/Description	Recommended Action
Hard Drive:	None installed	No hard disk installed.	Locate and install the correct
Serial Number:	Not applicable	An HP Secure Hard Disk that was	HP Secure Hard Disk for this printer/MFP.
Drive Status:	Not applicable	MFP was removed.	
Encryption Status:	Expected drive missing		
Hard Drive:	Internal (encryptable)	Incorrect hard disk installed.	Install the correct hard disk for this printer/MEP. Or select
Serial Number:	0987654321	The installed HP Secure	Reinitialize Hard Drive to unlock
Drive Status:	Disabled	to a different printer/MFP. This	
Encryption Status:	Encrypted by another device	printer/MFP is expecting an unlocked HP Secure Hard Disk	of the installed hard disk is erased and the device reboots.
Hard Drive:	Internal (encryptable)	Incorrect hard disk installed.	Install the correct HP Secure
Serial Number:	0987654321	An HP Secure Hard Disk is	to permanently erase the contents
Drive Status:	Disabled	HP Secure Hard Disk was	Hard Disk, select Reinitialize
Encryption Status:	Expected drive missing	MFP.	Hard Drive.
			of the installed hard disk is erased and the device reboots. In addition, all data on the HP Secure Hard Disk previously locked to this printer/MFP is unreadable.
Hard Drive:	Internal (not encryptable)	Incorrect hard disk installed.	Install the correct HP Secure Hard Disk for this printer/MFP. Or.
Serial Number:	0987654321		· · · · · · · · · · · · · · · · · · ·

Hard Disk Drive Status		Meaning/Description	Recommended Action
Drive Status:	Disabled	Standard (non-encrypted) hard	select Disable encryption and
Encryption Status:	Expected drive missing	HP Secure Hard Disk was previously locked to this printer/ MFP.	CAUTION: All data on the HP Secure Hard Disk previously locked to this printer/MFP is unreadable.
Hard Drive:	Internal (not encryptable)	Incorrect hard disk installed.	This HP printer/MFP only
Serial Number:	0987654321	Installed secure hard disk cannot	Hard Disk. Install the correct hard
Drive Status:	Disabled	be encrypted.	UISK.
Encryption Status:	Unsupported drive		
Hard Drive:	Internal (not encryptable)	Hard disk is not functional.	Turn the printer/MFP off and
Serial Number:	0987654321	NOTE: The hard disk has	cables. Then, restart the printer/
Drive Status:	Not functional	encountered a serious error.	Contact HP Support.
Encryption Status:	Not applicable		

Reset to factory defaults

Resetting to factory defaults does not reset an HP Secure Hard Disk that is locked to a printer/MFP.

NOTE: For information about the factory default values, see the setup or use guides for your printer/ MFP.

5 Customer support

Contact customer support using the following methods.

HP support online

Click your way to a quick solution! The HP Web site at <u>http://www.hp.com/support</u> is a great place to start for information about your HP Secure Hard Disk – 24 hours a day, 7 days a week.

HP support by phone

Highly trained technicians are ready to take your call.

For toll-free phone support in the USA and Canada, call HP support at: 1-800-HPINVENT (1-800-474-6836)

For the most recent HP support telephone numbers and available services worldwide, visit <u>http://www.hp.com/support</u>.

NOTE: The phone numbers listed may not be toll-free. Telephone fees are the responsibility of the caller. Rates may vary. Contact your local telephone company for current rates.

A Specifications

- Electrical
- Environmental
- Electromagnetic
- <u>Acoustic</u>
- <u>Safety</u>

Electrical

Electrical power is supplied by the device EIO slot.

1.25 A maximum @ 3.3 V nominal

Environmental

	Operating	Non-Operating
Temperature	0° to 55° C	-40° to 70° C
	(32° to 131° F)	(-40° to 158° F)
Relative Humidity (non- condensing)	15% to 95% at 40° C (104° F)	15% to 95% at 65° C (149° F)
Maximum Altitude	4.6 km (15,000 ft)	4.6 km (15,000 ft)

Electromagnetic

- FCC Title 47 CFR Part 15 Class B for Ethernet (USA)
- ICES-003 Class B (Canada)
- VCCI Class B (Japan)
- AS/NZS3548 Class B (Australia, New Zealand)
- CISPR-22 Class B (1997)* (International, Europe)
- CNS 13438 Class B (Taiwan)
- Korean EMI Law, No. 1996-98 Class B (Korea)

Acoustic

Not applicable.

Safety

Product complies with:

• EN60950-1 (2000) First edition.

B Regulatory Statements

FCC Statements

△ CAUTION: Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by the Hewlett-Packard Company may cause interference and void the FCC authorization to operate this equipment.

General Information. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The Federal Communications Commission has prepared a booklet titled Interference Handbook (1986), which may be helpful to you. This booklet (stock number 004-000-004505-7) may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

FCC Class B. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.
- **NOTE:** For further information, contact:

Manager of Corporate Product Regulations Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304

(650) 857-1501

Regulatory Model Identification Number

For regulatory identification purposes, these products are assigned a Regulatory Model Number. The Regulatory Model Number for the HP Secure Hard Disk is:

RSVLD-0607

The regulatory numbers should not be confused with the marketing name (such as HP High-Performance Secure Hard Disk) or the product numbers (J8018A or J8019A).

European Community

This equipment complies with CISPR22/EN55022 Class B. This is a Class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

VCCI (Japan)

Class B

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この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準
に基づくクラスB情報技術装置です。この装置は、家庭環境で使用すること
を目的としていますが、この装置がラジオやテレビジョン受信機に近接して
使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。
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RRL Statement (Korea)

Class B

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든지역에서 사용할 수 있습니다.

C Warranty Service

Hewlett-Packard Limited Warranty Statement

HP Product	Duration of Limited Warranty
HP High-Performance Secure Hard Disk	1 Year
HP High-Performance Secure EIO Hard Disk	1 Year

1. HP warrants to you, the original end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the original date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace, products, that prove to be defective. Replacement products may be either new or equivalent in performance to new. If the original end-user customer transfers the HP hardware and accessories to another user, warranty service is available to that user only for the remainder of the original warranty period. This Limited Warranty applies only to authentic HP-branded hardware products sold by or leased from Hewlett-Packard Company, its worldwide subsidiaries, affiliates, authorized resellers, or authorized country/region distributors.

2. HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for a period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software that does not execute its programming instructions due to such defects.

3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

7. HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

8. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Your Authorized Dealer

If you encounter difficulty, begin by contacting the person who sold you the HP Secure Hard Disk. Your HP Authorized Dealer will be familiar with your requirements and can provide assistance.

During the warranty period, HP will replace the unit at no charge provided the defective unit is returned. You may return the unit to your HP Authorized Dealer or your local HP Sales and Service Office representative. *Be sure to include a copy of your purchase receipt.*

For warranty service on HP Secure Hard Disk products, call HP support. When calling, please have the following information ready:

- HP Secure Hard Disk product you are calling about.
- Model number of the product.
- Serial number of the product.
- Complete description of the problem.
- Proof of purchase of your product.
- Your shipping address.

The HP support representative will help you with troubleshooting, and advise you on warranty service.

Service Billing (Out of Warranty)

When ordering a replacement unit for out-of-warranty service, you may be charged a repair cost. See your HP Authorized Dealer or your local HP Sales and Service Office representative. Or, you can call HP at (800) 227-8164 (USA only).

Service Outside the USA

Customers outside the USA should contact their HP Authorized Dealer or HP Sales and Service Office to obtain information on prices, exchange unit availability and instructions.

Local Warranty Statements

Australia and New Zealand

For consumer transactions in Australia and New Zealand: The warranty terms contained herein except to the extent lawfully permitted, do not exclude, restrict, or modify and are in addition to the mandatory statutory rights applicable to the sale of this product to you.

ENWW

www.hp.com

