

HP LaserJet 4345mfp Firmware Readme

Product Name(s): HP LaserJet 4345 mfp, HP LaserJet 4345x mfp, HP LaserJet 4345xs mfp, HP LaserJet 4345xm mfp

Model Number(s): Q3942A, Q3943A, Q3944A, Q3945A

IMPORTANT NOTE:

“This firmware version installs code signing verification functionality. Firmware signed by HP guarantees the integrity and authenticity of the code; meaning that the firmware was produced by HP (authenticity) and that the firmware has not been altered in any way (integrity). “

ATTENTION: Once this firmware has been applied to your printer or multifunction device it **CANNOT BE DOWNGRADED** to a firmware version earlier than **20120216 09.270.1**

BACKGROUND: It is important to note that Code Signing Verification functionality has been provided with this version of firmware and will be provided with all future versions of firmware, therefore, the ability to downgrade to a previous version of firmware no longer exists.

This document contains information for the firmware revision **20141218 09.310.2**, designated as CPE 11.2.6 for LJ4345MFP and any previous versions if applicable.

Description

- What is included in a Remote Firmware Update (RFU)?
- Who needs this firmware?
- Determining the current version level of your firmware

Enhancements and Fixes provided with this firmware revision

Enhancements and Fixes provided with the previous revision/s

Installation Instructions

- Updating firmware to a single device
- Using FTP from Internet Explorer
- For Windows Systems:
 - Using FTP:

For Unix systems:
For Macintosh systems:
Using HP Web JetAdmin 7.x or 8.X
Using HP Web JetAdmin 10.X

Expected device messages during an update

Troubleshooting a Firmware Update

System Requirements

Technical Assistance

Customer Support
Internet
Additional Information

Legal Statements

Trademark Notices
License and Copyright

Description

This Readme file provides specific installation instructions and other information you should know before you perform a firmware update for your HP LaserJet Series printer or MFP. Installation instructions are provided for Single and Multiple Printer Updates.

This document provides specific update, installation and troubleshooting information. For additional information on the device features, refer to the online user guide found on the Windows Printing System Installer CD-ROM that came with your printer or at hp.com.

What is included in a Remote Firmware Update (RFU)?

The HP LaserJet Printer Remote Firmware Update file available from the hp web site contains firmware for the printer, embedded JetDirect (if applicable), HP paper handling accessories used with the device in one convenient download file. When the Remote Firmware Upgrade file is sent to the HP LaserJet Printer or MFP firmware for the engine and all connected accessories are upgraded.

Who needs this firmware?

Similar to Hewlett Packard providing improved software for your HP LaserJet Printer or MFP, Hewlett Packard provides firmware updates for your printer periodically through its supported lifecycle. A firmware update may be necessary if it is determined that you may benefit from the resolution of any issue that is documented below. These updates are available on the HP support web site.

Determining the current version level of your firmware

To determine the current level of firmware installed on the device:

1. Go to the printer's or MFP's control panel.

2. Press the "MENU" button on the control panel.
3. Select the "INFORMATION" selection on the control panel.
4. Select the "PRINT CONFIGURATION" selection.

On the printed CONFIGURATION page look in the section marked "Device Information" for the firmware date code. The firmware date code will look something like this: **20040322 07.000.0**

**FIXES AND ENHANCEMENTS PROVIDED WITH THIS FIRMWARE REVISION
FIRMWARE DATECODE: 20141218 09.310.2.**

ENHANCEMENTS:

No new functionality or features are provided by this firmware release.

FIXES OR IMPROVEMENTS:

This firmware provides fixes or improvements for following issues-

Authentication/Security:

- This firmware addresses the following security issue:
 CVE-2014-0224 - SSL/TLS MITM vulnerability
 CVE-2014-3566 – SSLv3 POODLE (Padding Oracle on Downgraded Legacy Encryption) Vulnerability

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20141218 09.310.2
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.28.FF
Release Designation	11.2.6 Signed

FIXES AND ENHANCEMENTS PROVIDED WITH THIS FIRMWARE REVISION

You may see improvements for the problems mentioned below by updating your printer's firmware with revision: FIRMWARE DATECODE: **20140312 09.300.1.**

Enhancements

No new functionality or features are provided by this firmware release.

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release:

Base

- Unable to set 10 digit PjL password on the device with older firmware version.

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20140312 09.300.1
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.25.FF
Release Designation	11.2.5 Signed

FIXES AND ENHANCEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISION

The firmware had to roll due to an HP internal version string change necessary for a development tool change. It contains no other enhancements or fixes. FIRMWARE DATECODE: **20131017 09.290.1**.

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20131017 09.290.1
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p

Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.25.FF
Release Designation	11.2.4 Signed

FIXES AND ENHANCEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISION

The firmware had to roll due to an HP internal version string change necessary for a development tool change. It contains no other enhancements or fixes. FIRMWARE DATECODE: **20121228 09.280.1**.

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20121228 09.280.1
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.25.FF
Release Designation	11.2.3 Signed

FIXES AND ENHANCEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISION

This firmware is a digitally signed version of the previous release (**09.260.9**). It contains no other enhancements or fixes. FIRMWARE DATECODE: **20120216 09.270.1**

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20120216 09.270.1

Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.25.FF
HP Fleet Release Designation	CPE 11.2 Signed

FIXES AND ENHANCEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISIONS:

NOTE: ALL IMPROVEMENTS WITH PREVIOUS REVISIONS OF FIRMWARE ARE INCLUDED WITHIN THE MOST CURRENT REVISIONS

You may see improvements for the problems mentioned below by updating your printer's firmware with revision: FIRMWARE DATECODE: **20110429 09.260.9**

Enhancements

Base

- The Job Held Timeout feature can now be applied to Stored Jobs in addition to Quick Copy Jobs, and will be available for Oz based devices with this release. The timeout setting will be applied retroactively to any existing jobs. This feature is available through the EWS and Control Panel for customers who want all Job Data removed on a scheduled basis

Embedded Digital Sending

- Expanded support for Embedded Send to Network Folder jobs to Microsoft Distributed File System destination directories.

Fixes or improvements

Base

- No new updates

Embedded Digital Sending

- Autosend and Embedded Email alert functionality may not work properly on servers where SMTP Authentication is configured.
- Embedded Send to Network Folder jobs could fail for users with passwords containing ISO Latin-1 characters

Analog Fax

- Now 'Ringer Volume' setting of Receive Fax works properly.

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20110429 09.260.9
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.21.FF
HP Fleet Release Designation	CPE 11.2

* Not included in RFU, reference only

You may see improvements for the problems mentioned below by updating your printer's firmware with revision: FIRMWARE DATECODE: **20110220 09.230.9**

Enhancements

No new functionality or features are provided by this firmware release

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release:

Base

- You may see a PCL-XL error when changing print resolution from 600 to 1200.
- The MFP User Credential form is now viewable for workflows configured in HP MFP Digital Sending Software
- Possible 49 errors with direct printing of postscript files (no HP driver involved)
- Toner levels may report higher than they should, then drop by a large increment
- The Secure Erase Mode may be reported incorrectly if no disk is installed

Embedded Digital Sending

- A 49.00FF error may be seen when performing embedded Send to Network Folder digital send jobs
- The device priority for name resolution transport (DNS or WINS) can be configured for embedded Send to Network Folder
- Excessive DNS traffic may be generated when the SMTP server under Digital Sending -> Email Settings is configured by hostname instead of IP address
- Some embedded Send to Email digital send jobs may fail when configured to use SMTP authentication and custom message body text is specified
- User credentials containing diacritic characters in the password field may not pass properly for embedded Send to Network Folder digital send jobs

Current firmware revisions included in this firmware bundle

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	20110220 09.230.9
DC Controller:	17 *
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.21
HP Fleet Release Designation	CPE 11.1

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20101208 09.220.7).

Base

- When synchronizing with a network time server, the printer clock now copies the actual time from the server. Previously it only corrected for drift within a small time range.
- The number of user-defined media types is increased from 5 to 20

Embedded Digital Sending

- The configurable maximum attachment size for embedded send to email has been increased

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20101208 09.220.7).

Base

- You may see a 49.4C02 error when using ALM (Alternate Letterhead Mode)
- Not able to print the correct quantity of copies when using the Private Pin with certain Microsoft Word documents.
- A 49.5F11 error may be seen on the control panel when using the Alternative Letterhead feature
- Some pages will not be included with the print job when using the Alternative Letterhead feature
- A change in the File Erase Mode may not be updated in the EWS without a power cycle

Embedded Digital Sending

- A 49.4C02 Error may occur when applying a WebJetadmin configuration template containing Kerberos Authentication settings
- Digital Send jobs could have missing scan pages if a paper jam occurred during the scan

Analog Fax Accessory

- Email notification for Fax jobs initiated with the PC Send Fax Driver would fail with email addresses longer than 32 characters

Current firmware revisions included in this firmware bundle (Version 09.220.7)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.220.7 (Datecode: 20101208 09.220.7)
DC Controller:	17 *
Copy Processor Board (CPB):	0.214 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.21
HP Fleet Release Designation	CPE 10.4

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20100909 09.200.3).

- Blank Page Suppression is enhanced to include PCL6 (was only PCL5), and also work with duplex printing if both sides a page are blank.
- A feature has been added to the EWS to allow custom settings for tray mapping

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20100909 09.200.3).

- Boot-up hangs may be seen in the 6/C and 6/E process on machines more heavily used. The Event Log may also show a 49.1D34 error.
- ALM (Alternate Letterhead Mode) was not treating user-defined media types as asymmetrical
- Classic tray mode not working correctly
- Media type settings do not hold over a power cycle for non-Letter paper sizes
- After performing restore factory settings the Device Name is not changed to Factory Default

Current firmware revisions included in this firmware bundle (Version 09.200.3)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.200.3 (Datecode: 20100909 09.200.3)
DC Controller:	17 *
Copy Processor Board (CPB):	0.211 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.21
HP Fleet Release Designation	CPE 10.3

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Note:

Starting with this release, an HP Fleet Release Designation is added to the revision table. This is not printed on the configuration page, and is only included as a reference.

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20100520 09.180.9).

Base

- The EWS Security tab now has a checkbox to require the EWS password to see the EWS Information page

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20100520 09.180.9).

Base

- "Genuine HP Supplies" messages may force users to start over with control panel input
- Possible 49.5001 errors with DSMP network traffic

Embedded Digital Sending

- MFP DNS behavior could cause the email icon to disappear from the control panel of the device
- In embedded send to network folder configuration, the field length for the destination directory was limited to 63 characters
- The username field for Kerberos authentication has been expanded to allow a maximum of 64 characters

Embedded Jetdirect

- Will not interoperate with Win2008 Release 2, receives Failure 823 error response
- Printer slows and eventually hangs due to HTTPS/EWS usage
- Print job delays under HP UX RLP/LPD printing
- User is not prevented from installing identity certificate where a CA certificate is required.

Current firmware revisions included in this firmware bundle (Version 09.180.9)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.180.9 (Datecode: 20100520 09.180.9)
DC Controller:	17 *
Copy Processor Board (CPB):	0.211 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.21
HP Fleet Release Designation	CPE 10.2

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20100220 09.170.8).

HP has implemented a new method of page counting (known as Print Usage Tracker), which can be enabled if desired. The administrator or owner of the product has the option either to enable the new counting method or to do nothing. If the new counting method is enabled the device **cannot return to the previous counting method**. It is important to understand this. If the feature is not enabled, nothing will change on the device and it will continue to count pages the same as it originally did from the factory.

- **Background:** Current page counting methods were designed to enable efficient service and support. The Print Usage Tracker feature implements new page counting methods which are more aligned with today's job accounting needs.

Additional information: For more information about the Print Usage Tracker feature, visit, www.hp.com/go/support. To navigate to the support web page for your product, on the SUPPORT AND DRIVERS page, type the product name of your device (for example, HP Color LaserJet CM3530 MFP or model number CC520A) in the "See support and troubleshooting information" section. Once you have located your support page search for "Print Usage Tracker". Additional information may also be obtained by contacting your regions HP Customer Support Center. This information can be located in the "Use" manual that came with your product documentation or on the CD-ROM.

How to enable the feature: If desired, use the following steps to enable the new page counting method (known as Print Usage Tracker) via the product's Embedded Web Server.

1. Update your device firmware to this release or greater.
2. Once this is done the Print Usage Tracker acceptance and activation screen will be available from the product's Embedded Web Server (EWS) at the following location: EWS >> Settings >> Security >> Device Security Settings >> Print Usage Tracker
3. Review the acceptance screen so that the changes are understood and you are comfortable with how the changes may or may not affect your HP device or product use model.
4. If you are comfortable with the acceptance statements and the new counting functionality, choose to enable the feature. As stated previously it is very important to understand that once enabled the device cannot return to the previous counting method.
 - a. Select "I Accept"
 - b. Select "Enable the Print Usage Tracker feature on this device"
 - c. Press "Apply"

NOTE: Currently this functionality can only be enabled through the product's Embedded Web Server (EWS). In the future, HP will provide the ability to enable this functionality through HP's Device management software called HP Web Jetadmin. The Web Jetadmin support pages can be accessed using the following URL: www.hp.com/go/webjetadmin

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20100220 09.170.8).

Base

- A 49.4c06 may be displayed on the control panel when printing certain files from Excel that contain non-printable characters
- Very slow printing or printer hang would occur when a very complex postscript file with large amounts of lineto commands present.
- Possible 49 error when using PCL5 macros (more likely with USB mass storage device connected).
- You may see a 49.4C02 or 49.4C06 error when printing with the PCL5 driver due to a font management issue.

Embedded Digital Sending

- Authentication could fail if the user password contained the Euro character
- A 49.4C02 error could occur when applying Kerberos configuration settings through HP MFP Digital Sending Software

Current firmware revisions included in this firmware bundle (Version 09.170.8)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.170.8 (Datecode: 20100220 09.170.8)
DC Controller:	17 *
Copy Processor Board (CPB):	0.211 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.20

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20091020 09.160.4).

None in this release

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20091020 09.160.4).

Base

- You may see a 49.4C02 when printing and using the Papyrus font from the Macintosh.
- MFP print speeds would slow down in some environments when LDAP addressing is configured

Current firmware revisions included in this firmware bundle (Version 09.160.4)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.160.4 (Datecode: 20091020 09.160.4)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28

Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.20

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20090908 09.151.3).

Base

- The Wake-Up schedule can now be set with Sleep Mode disabled
- The Asset Field found in the products EWS (Embedded Web Server) which is used for assigning Asset numbers to a device has been changed to allow support for more characters.

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20090908 09.151.3).

Base

- Switching between languages may cause certain settings to reset/change back to their factory settings.
- A 49.4C02 may be seen on the control panel when printing large PostScript Files.
- Some PostScript files generated from SAP applications may print barcodes incorrectly.

Embedded Digital Sending

- LDAP authentication (Simple or Simple over SSL) could fail with an insufficient privileges error in some configurations
- A 49.4C02 error may be seen when "Disable Reverse DNS Lookups" is selected under Settings -> Kerberos Authentication -> Advanced
- If the configured LDAP server is specified by DNS alias (for example, corp.company.com) under Settings -> Kerberos Authentication and authentication fails due to a failed DNS lookup, the MFP will rollover to the next address in the list returned from a query against the configured LDAP hostname
- Embedded send to network folder digital send jobs would fail when NTLMv2 is selected as the password encryption method

- The digital send log would incorrectly designate some failed digital send jobs as successful
- A 49.00FF error could be generated after an abnormal communication break between the MFP and its configured DSS server
- Embedded send to network folder digital send jobs may fail to create XML metadata files
- Embedded send to network folder digital send jobs may generate metadata files with truncated output
- A 49.4C02 error may be seen when configuring Kerberos authentication through HP MFP Digital Sending Software
- A 49.4C02 error may be seen when trying to login after a power cycle or firmware update when the MFP is configured for sign in at home screen
- Copy jobs are able to be performed without signing in when MFP is configured for Kerberos authentication
- Kerberos Authentication may be successful in the user interface when incorrect credentials are specified in the MFP Embedded Web Server

Embedded Jetdirect

- HTTPS is now forced on Printer/MFP tabs when required
- When DNS responses are returned as a stream (TCP) rather than a datagram (UDP), JDI would wait forever for more data.
- When Web Jetadmin is on a different subnet than the printer and establishes an HTTPS connection to query status, the JDI would mishandle the connection and hang.
- IPP operation is now allowed when the EWS is disabled

Analog Fax Accessory

- A full fax activity log may result in Modem Fail (82) or Modem Fail (84) messages
- Possible Job Fail (0), compression errors or fax corruption with fax firmware versions 2.36v and 2.37m
- Stored Fax does not print after performing Restore Factory Settings
- In rare cases a No Fax Detected message may occur when a fax machine is at the other end.
- When sending a fax, a No Dial Tone occurrence does not result in an automatic retry
- Possible 49.00FF or 49.4C02 errors when using stored faxes
- A "Remote Abort" message is added to notify users the remote fax disconnected.
- Results column may be truncated in Fax Activity log when set to Verbose

Current firmware revisions included in this firmware bundle (Version 09.151.3)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.151.3 (Datecode: 20090908 09.151.3)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37p
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.20

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements: None in this release

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20090605 09.141.4).

Base

- When selecting to print all stored jobs from the front control panel you may see a longer than expected delay between stored jobs. With this new behavior you will no longer see a delay between files as long as the job attributes are the same.
- When printing a personal job without a PIN number the job will print N-1 based on the number of copies selected in the print driver for the job. For example: If 10 copies were selected in the driver only 9 copies will print.
- Alternative Letterhead mode will not function correctly when a tray selection is made using a tray selection command instead of a paper type selection command
- Issues may be seen using the Alternative Letterhead feature.

Embedded Digital Sending

- Some Embedded Send to Network Folder jobs would result in corrupt PDF output in the destination directory

- The configured time server set under Settings -> Date & Time -> Clock Drift Correction would intermittently change from the configured setting.
- When "Disable Reverse DNS Lookups" is enabled under Settings -> Kerberos Authentication -> Advanced, the MFP could experience a 49.4C02 error
- A potential for the Kerberos configuration on the MFP to become corrupt could generate a 49.4C02 error on the MFP

Analog Fax Accessory

- Possible 49.4C02 and 49.4C06 errors when using the fax address book
- Fax Thumbnails may be missing from the fax report.
- Fax shrinkage in some situations
- Improve fax receiving success rate in ECM mode
- Disable V.34 Menu Item is removed because V.34 is automatically enabled or disabled.
- Maximum Baud Rate can now be selected separately for send and receive
- Possible 49.6A1C errors when receiving faxes
- Stored faxes may not be completely deleted after printing. This can result in some faxes being reprinted.
- Possible 49.4C01, 49.4CF0 and 49.5001 errors
- A new "Remote Abort" fax error message is added to indicate the other party aborted a send or receive operation
- An erroneous "No Fax Detected" message may appear on the control panel

Current firmware revisions included in this firmware bundle (Version 09.141.4)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.141.4 (Datecode: 20090605 09.141.4)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.37m
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.19

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20081211 09.131.1).

Digital Sending

- Kerberos Authentication now supports the ability to specify multiple Kerberos domains

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20081211 09.131.1).

Analog Fax Accessory

- Canceling a fax job may take longer than expected when canceling job from the front control panel.
- Job Fail or Communication Errors may be generated with some received faxes
- The control panel may improperly display an error message during fax jobs
- Received fax jobs may generate a 49.4C02 or 49.4C06 error

Current firmware revisions included in this firmware bundle (Version 09.131.1)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.131.1 (Datecode: 20081211 09.131.1)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.36v
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.18

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20080723 09.120.9).

Digital Sending

- Send to FTP can now be configured to add a timestamp to the destination file name
- Send to FTP can now be configured to disable the access verification (send FTP test file) of the destination directory for every job

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20080723 09.120.9).

Digital Sending

- Under rare circumstances a user may not be able to initiate a send to FTP job if one is already in progress

Analog Fax Accessory

- NoAnswer or ModemFail(0) can be caused by incoming ring just before dialing another fax number
- Fax Time Stamp does not show the final retry time. It only shows the first try time.
- It may take 45-90 minutes to receive a one page fax, and may result with an error.
- The last digit of the incoming fax number is missing on the fax activity log when the received fax is from a non-hp fax device.
- A 49.4C01 error may occur after a firmware upgrade is performed on a device that is used primarily for faxing and/or has been in service for a long period of time.
- Occasional ModemFail, CommunicationError and PageFail error codes in the error report.
- Firmware upgrade may fail to upgrade to the correct modem (fax) FW version.

Current firmware revisions included in this firmware bundle (Version 09.120.9)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.120.9 (Datecode: 20080723 09.120.9)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)

Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.36k
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.18

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20080403 09.111.1).

Digital Sending

- Embedded Send to Network Folder has added support for Distributed File System (DFS) folder destinations
- When the device is managed by DSS 4.11 (or higher) it is now possible to have jobs sent to email and folder OCR processed.

Analog Fax Accessory

- Number of pages added to fax notification (printed and/or email)

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20080403 09.111.1).

Base MFP

You may see a 49.4CF0 when printing certain types of PDF files.

- "Warming Up" improperly localized in Russian
- SMTP server can't be configured by hostname from WJA
- Use Defaults button in EWS Custom DST settings does not work.
- Print jobs from the Microsoft Generic Text Only driver may not print.

Digital Sending

- Disk initialization does not properly clear authentication assignments

- Kerberos authentication fails when public credentials are used and Simple is configured as the LDAP server bind method
- MFPs could generate truncated Send to FTP output
- MFPs could pass credentials multiple times when performing send to network folder
- SMTP server could be configured with a port number of 0 for Embedded Send to Email
- The device may display "Processing Digital Send job" indefinitely when sending jobs through DSS.
- The device may display "Digital Send Server not responding" when trying to scan to any destination and the device is managed by DSS.
- The column name "Severity" is missing in the digital send log page of the embedded web server

Analog Fax Accessory

- Speed Dial number missing from printed Speed Dial list
- Fax printing schedule does not handle 12:00 AM/PM correctly.
- Fax does not fall back to v.17 correctly, resulting in increased fax failures.
- A No Answer may occur because Retry is too soon after a failure.
- Fax report headers may overlap
- Crashes or slow response time when printing the fax activity log. Occasionally other strange fax issues occur because too many T30 traces are stored on the disk.
- 13 Members allowed in Fax Speed Dial. Correct limit is 12 Members.

Embedded Jetdirect

- Possible 49 error when the EWS is disabled
- PML may become non-responsive on MFP. Result is only JDI EWS is available, not complete MFP EWS.

Current firmware revisions included in this firmware bundle (Version 09.111.1)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.111.1 (Datecode: 20080403 09.111.1)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.36i

Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.16

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20071212 09.101.0).

Base MFP

None in this release

Digital Sending

- Administrators can now specify the SMTP port used for embedded send to email. This option is now available under Digital Sending>Send To Email or Digital Sending>Email Settings under the embedded web server

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20071212 09.101.0).

Base MFP

- Authentication Manager help page incorrectly displayed DSS Secondary Email as DSS Secure Email
- The help page under Settings>Security of the embedded web server has been modified to better reflect product functionality
- The ability to specify the number of visible digital send log entries was not available under the Digital Sending>Log section of the Embedded Web Server
- In the past two FW revisions, an RFU did not automatically power cycle the device if the PJJL password was set. The FW upgrade did not happen until a manual power cycle.
- When configured for LDAP Authentication, authentication can fail if the entered username contains diacritic characters (For example á, ë, ö)
- EWS Time Zone display Strings are displaying Junk characters for German and Norwegian
- Improper capitalization of some words in the Embedded Web Server under Digital Sending/LDAP Settings or Digital Sending/Addressing
- Possible control panel hang when changing time zones

- Kerberos Authentication could successfully authenticate a user if date and/or hour on the MFP were not correct in relation to the Kerberos authentication server
- Supplies show UNKNOWN when device is in sleep mode
- A 49.4C27 error can occur when LDAP Authentication is selected as the authentication method and the user enters their email address in the username field and leaves the password field blank

Digital Sending

- When attempting embedded send to network folder, the MFP will become unresponsive if the server hosting the destination directory is unavailable
- Creating an e-mail distribution list erroneously copies entries to the fax address book.

Analog Fax Accessory

- Receiving fax will fail if the TSI (Transmitting Subscriber Identification) contains a multi-byte character (e.g. Asian character). The fax status message is typically "Communication Error (2)".
- The MFP may hang with a "Processing job" message when printing stored faxes off a schedule.
- A successfully received fax may show a status of "Page Fail (0)".
- Forwarded fax jobs are not included in the Fax Activity Log.

Current firmware revisions included in this firmware bundle (Version 09.101.0)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.101.0 (Datecode: 20071212 09.101.0)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.36f
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.15

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

NOTES for 20070925 09.091.4:

This release includes the ability to automatically adjust for daylight saving time. HP strongly recommends this be configured via the EWS (Embedded Web Server) or Web Jetadmin (it is not possible to verify all DST settings via the control panel or menu map). Selecting your time zone will automatically set the appropriate start and end dates for daylight saving time. After configuration, settings can be verified from the EWS as follows:

- Select the Settings tab from the top of the EWS (password may be required)
- Select Date and Time from the left side of the Settings Page
- Select Advanced
- Select Start Date/End Date
- Verify the Start Date, End Date, and DST Offset settings are correct for your time zone

Accessing the EWS:

- Open your web browser
- In the Address or Go To field, type the Internet Protocol (IP) address that is assigned to the product (for example, <http://192.168.1.1>) or the host name (for example, NPI474283)
- If the Information tab is the only one at the top of the page, your administrator has restricted access by setting an EWS password

A security enhancement in a previous release may prevent the automatic power cycle at the end of an RFU (Remote Firmware Upgrade). The firmware will not actually upgrade until the unit is power cycled, although it will display "Receiving Upgrade" during transmission. This can be avoided by clearing the PJI password prior to sending the upgrade, or by manually power cycling the unit after sending the RFU file.

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20070925 09.091.4).

Base MFP

- Enabled the ability to logon with UserPrincipalName without specifying a domain.
- Kerberos username field increased to accommodate longer UserPrincipalName entries
- An enhancement allows the keyboard language/layout to be selected independently from MFP Language. The new menu item is 'Keyboard Layout' in the Device Behavior for M-series products and Systems Setup for non-M-series products. A new keyboard layout option of Swiss/French (QWERTZ) is also added.

Digital Sending

- Embedded Send to Folder can now use DNS or WINS

Output Accessories

- A Stack Alignment menu item has been added to improve output stack quality. Speed will be reduced if Align Sheets is selected.

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20070925 09.091.4).

Base MFP

- A 49.4C02 error may be presented on the control panel when printing with hostprint / VPS print jobs
- A 49.4C04 error may be presented on the control panel when printing certain PDF files.
- A 49.4C27 may occur if a hardkey is pressed quickly after confirming authentication credentials.
- The firmware release prior to this one added the ability to automatic adjust the clock for daylight saving time. With that release, if the MFP is turned off for the entire duration of the time change (turned off before 2:00 AM, and on after 3:00 AM in the U.S.) the clock will not adjust.
- Time Zone control panel menu is English-only
- Time zone information prints outside the margins in the menu map
- You may received an error while trying to delete an email distribution list which has long entries.
- Excessive DNS traffic when resolving LDAP, SMTP, and KDC server IP addresses may cause the MFP to become slow or unresponsive
- Incorrect localization of time zone names in the EWS
- The Date/Time and Time Zone wizards no longer appear after a firmware upgrade, or with new units. This allows complete remote management. Users must remember to set the date, time, time zone, and DST behavior to insure correct time settings.
- You may see a 49.4C02 error while printing certain files from the Macintosh PS driver.
- Special Characters are not accepted in an MFP device password
- Unable to print using the Print option within the EWS

Digital Sending

- Digital Send client application may hang when you press the RESET or STOP buttons after initiating a scan.
- Embedded Send to Folder metadata files contain no carriage returns.
- An Embedded Send to Network Folder Job may fail when sending across different subnets.
- When sending an email, the time on the attached image's header may be ahead by one hour of when the email is sent.
- Setting the Compression Mode does not have any effect for Scan to Local Folder jobs.

Fax

- Receiving fax will fail if the TSI (Transmitting Subscriber Identification) contains a multi-byte character (e.g. Asian character). The error message is typically "Communcation Error (2)".

- The date stamp on received faxes prints improperly when the device is set to Chinese, Japanese, Korean and Russian language.

Output Accessories

- Possible MFP hang if the stapler/stacker door is opened during operation

Current firmware revisions included in this firmware bundle (Version 09.091.4)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.091.4 (Datecode: 20070925 09.091.4)
DC Controller:	17 *
Copy Processor Board (CPB):	0.209 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.36b
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	MP04.30
Embedded Jetdirect:	V.33.15

* Not included in RFU, reference only

Enhancements and Fixes provided with previous firmware revisions

Notes for 20070613 09.081.5:

- This firmware release has a new feature to automatically adjust for Daylight Saving Time. After installation of the firmware, the MFP may have a control panel screen prompt for time zone or date and time. These screens will remain on the MFP until action is taken by a user. While the prompts are displayed, the MFP will accept print and fax jobs, but will not print them until after the user responds to the prompt.
- There are isolated conditions where the time zone and Daylight Saving Time adjustment appear to be configured, but are not. Correct configuration can be verified in the EWS by going to the Start and End Date page in the EWS. A device that is not configured will have a "0" in the DST Offset field, and incorrect dates for Start Date and Stop Date. Navigate to the Start and End Date page of the EWS as follows:
[Settings]/[Date and Time]/[Advanced]/[Start Date / End Date]
- This release does not include firmware for the Stapler/Stacker (Q5691A). The firmware revision for this component will not change after firmware installation. Firmware updates for this device have been minor, so normal functionality should not be affected.
- As a side effect of a high-priority fix, the EWS Print functionality does not work with this release.

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20070613 09.081.5).

Base MFP

- Added Alternate Letterhead mode to MFP firmware, selectable via the control panel under Tray Behavior. This feature should only be used when the driver does not support the functionality. Selecting the feature in both the driver and MFP will produce unexpected results.
NOTE: This release may fail (49 error) when using this feature with A5, B5, and Executive paper sizes. A fix will be available in the next release.
- Automatic Daylight Saving Time adjustment added

Digital Sending

- Allows Embedded send-to-folder to be configured such that user directories can be locked down, limiting access to the user that owns the directory.
- Added support for e-mail PDL's and fax speed dials to Simple Device Address Book.
- When "Use address book entries only" is selected in the Embedded send-to-email configuration, end users will now be prevented from adding entries to the local address book. This enables administrators to further restrict send-to-email destinations.

Embedded Jetdirect

- Added JDI support for 802.1X

Output Accessories

- 3-Bin Mailbox firmware updated to accommodate M4730 MFP (no impact on 4345mfp)

Fixes or improvements

Fixes or improvements for the following issues are provided by this firmware release: (Datecode: 20070613 09.081.5).

Base MFP

- You may see a 20 Insufficient Memory error when printing certain pdf files with the postscript driver.
- A 49.00FF error may occur when printing certain PDF's.
- MFP will roll to a different NTP server when configured by hostname if named server is not available
- Event log may show values above 59 seconds instead of rolling to minutes
- Homescreen image may be missing from the EWS Authentication Manager Help when viewed through a Mozilla Firefox web browser

- MFP continues to print when side door of add-on trays are open
- If cartridge is changed while MFP is in power save, the new cartridge may not be recognized until after a power cycle
- Time server IP address lost on FW upgrade

Digital Sending

- 3rd party solutions developed using Simple Document Capture (SDC) will now work correctly when the device is added to the Digital Sending Software (DSS).
- Long email addresses are truncated when they are added to the local address book. The limit is now extended to 64 characters.
- Blank passwords not allowed for Embedded LDAP Authentication.
- Possible 49.4c02 error while using Embedded send-to-folder.
- Embedded LDAP over SSL Authentication does not work in Windows 2000 and Windows 2003 environments.
- Setting "Allow Use of Digital Send Service" to OFF clears default Subject for send to email

Analog Fax

- Fax volume control for receiving faxes is same audible level when switching between high and low.
- No support for localized characters in the COMPANY NAME field of the FAX HEADER in the EWS (only ASCII characters 32 to 127)
- When receiving faxes on a device set to French language, the name of the month in the fax header may appear incorrectly.
- Unable to enter Alt or Shift+Alt characters in Company Name field when Devices Language is set to Czech.
- Faxes received in ultra-fine (400 dpi) quality may fail with an error or print out distorted.
- The Fax Call Report may print twice if a received fax fails with certain errors.
- The MFP may display a 49.4c2f service error when receiving a fax.
- Stored faxes may not print at the scheduled time if the MFP is rebooted after they are received (and stored).

- When sending a fax to several destinations and some of the numbers fail with a "no answer", some of the numbers that were successful may not show in the Fax Activity Log.
- In some circumstances the "notify" and "one touch" section of the fax screen may not localize properly when the device language is changed.
- The time stamp on the Fax Call Report may be unreadable when the device is set to Russian
- The status message in fax email notifications may appear incorrectly when the device is set to French language.

Current firmware revisions included in this firmware bundle (Version 09.081.5)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.081.5 (Datecode: 20070613 09.081.5)
DC Controller:	17 *
Copy Processor Board (CPB):	0.208 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.35u
Three Bin Mailbox (Q5692A)	MP04.18
Stacker/Stapler (Q5691A)	Not included with this version
Embedded Jetdirect:	V.33.15

* Not included in RFU, reference only

Enhancements and Fixes provided with the previous revision of Firmware

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20070213 09.071.8).

Base MFP, including embedded digital sending:

NOTE: To access the Embedded Web Server page, open a web browser and type <http://www.xxx.yyy.zzz>, where www.xxx.yyy.zzz is the IP address of the device. The IP

address of the device is listed on the Jetdirect page, which can be printed by pressing the MENU button, then selecting INFORMATION, then selection PRINT CONFIGURATION.

- Add the ability to allow Web Jetadmin to set the clock forward or backward. Used for daylight saving time adjustment.
- Auto crop white space from documents on the glass, so that the image is located upper left of the page
- User PIN Authentication added
- Adding User Principle Name support to Embedded Kerberos Authentication
- Email and fax address books added
- Private jobs can now be sent with or without a PIN. New drivers rename them to Personal Jobs.
- Added the ability to set a Sleep Schedule from the EWS for each day of the week.
- Warning added when requesting Secure Storage Erase
- Additional Help information is provided for Secure Storage Erase from the EWS
- Authentication Manager settings are now saved during a disk init or Secure Storage Erase
- Added "Processing Copy 1 of N" message for duplex jobs
- Firmware enhanced to support manual duplexing on base model (requires driver support)
- Embedded Send to Network Folder permissions. Allows ESNF to be configured such that user directories can be locked down, limiting access to the user that owns the directory
- Increased the limit on how many digital send jobs can be queued
- Embedded Send to Network Folder - Add support for forward slash (/) characters in a UNC path.

Analog Fax

- Remove fax number from failed confirmation print out
- The MFP will no longer show voice calls in the Fax Activity Log.

Fixes

The following fixes or improvements are provided by this firmware release:
(Datecode: 20070213 09.071.8).

Base MFP, including embedded digital sending:

- Embedded Kerberos Authentication will not resolve passwords with European characters

- Extremely rare 49.4C02 errors when Embedded Send to Network Folder is enabled
- Time stamp information missing from XML data
- LDAP performance may be slow In Enterprise Directories
- MFP will not print from Trays 2,3,4 for incoming LTR faxes when Tray1 is set to anything other than ANY/ANY & FaxPaperTray=0
- Wording changes on Secure Storage Erase selection in EWS
- Menu Map does not correctly reflect control panel lock settings
- Possible errors importing CSV address book entries
- Event log entries not aligned with headings in non-English localizations
- EWS alert dialog for Cartridge Low Threshold says 0-20 instead of 0-99
- There may be issues with some font widths when using internal fonts for (Arabic, Greek, Hebrew and Cyrillic)
- Italian Localization is Incorrect for Image Cleaning Kit and Transfer Kit
- Possible 49.4C0X error while accessing the Supplies Status menu during a scan job.
- The "date" field is missing in the SMTP header
- Intermittent loss of "Send to Network Folder" Jobs
- Scan-to-local file fails when network not detected on bootup
- DSS Send to Network Folder file size setting may not work properly
- Possible Processing Job hang when sending to a remote (thousands of kilometers, 200 millisecond delay) SMTP gateway.
- Back button is not functional in the EWS email/fax address book if JavaScript is disabled in the browser
- Disk Initialization and/or Secure Storage Erase clears settings for Digital Send

Analog Fax

- Corrupt faxes may be scaled to a 1x1 inch thumbnail when printed
- Received Legal faxes are printed on B4 paper size even though legal is loaded in the printer
- Previously, for sent faxes, all retries were logged in the Fax Activity Log. Now, by default, only the final call is logged.
- Not possible to send fax when the MFP is disconnected from the LAN

- Resolved issues related to V.34 control channel and negotiation which could cause international fax calls to fail.
- The fax accessory is now less sensitive to telephone line issues, such as dropouts and line surges.
- Fixed a problem where the modem could get stuck forever receiving a fax.
- The fax accessory is now more robust in how it recovers from high speed signal loss situations.
- Company Name is not required for fax setup. With this release, a missing company name or phone number will result in the fax setup wizard appearing at power on.

Embedded Jetdirect and paper handling devices: No changes

Current firmware revisions included in this firmware bundle (Version 09.071.8)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.071.8 (Datecode: 20070213 09.071.8)
DC Controller:	17 *
Copy Processor Board (CPB):	0.208 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.35q
Three Bin Mailbox (Q5692A)	MP04.15
Stacker/Stapler (Q5691A)	MP04.24
Embedded Jetdirect:	V.28.64

* Not included in RFU, reference only

Enhancements and Fixes provided with the previous revision of Firmware

Enhancements

The following new functionality or features are provided by this firmware release: (Datecode: 20060914 09.062.0).

Base MFP, including embedded digital sending:

NOTE: To access the Embedded Web Server page, open a web browser and type <http://www.xxx.yyy.zzz>, where www.xxx.yyy.zzz is the IP address of the device. The IP

address of the device is listed on the Jetdirect page, which can be printed by pressing the MENU button, then selecting INFORMATION, then selection PRINT CONFIGURATION.

- Added HP job separator page in driver properties and MFP firmware. This feature adds three new capabilities: Allows clients to select job separator pages independent of the server; job separator pages can be used with job retention (retrieved jobs will have a banner page; Separator page treated as part of the job, so print speed is not impacted. Limitation: If stapling is selected, the separator page will be stapled to the first copy of the job. Beta drivers available via support channels until 4/07, when it will be included in MFP driver releases.
- Added Intermediate control panel lock level. The new intermediate level adds the paper handling menu to what is locked at the Moderate level.
- Adds a progress bar during a firmware upgrade
- New security page has been added to the Embedded Web Server.
- Toner Low threshold is now selectable via the EWS
- Provided an enhancement to Kerberos authentication so that the default realm (domain) can be used in the "Kerberos Server Hostname" field. The device will find the first available Kerberos Domain Controller in the Kerberos realm, and use this KDC for authentication.
- Firmware upgrades are now logged to the Event Log
- Firmware version included in all Event Log entries.

Analog Fax

- Added Backup and Export capabilities for Fax Address Book and Speed Dial lists.
- Fax reports now print from the designated fax tray
- Display the name of any speed dial chosen next to the number when using quick dial feature.

Fixes

The following fixes or improvements are provided by this firmware release:
(Datecode: 20060914 09.062.0).

Base MFP, including embedded digital sending:

- Some ADF jams may hang third party SCAPE solutions
- Direct PDF printing of files with embedded CCITT fax image data may cause errors
- More complete user information is include with send to email jobs sent through SMTP gateways
- SLEEP DELAY is not resetting to default after Restoring Factory Settings

- Times not being reported correctly in Job Accounting Data
- Some PDF files may print with inverse colors
- 49.5001 may appear when storing and retrieving large numbers of copy jobs
- MFP loses contact with NTP if IP address changes
- Kerberos Authentication may not work when the LDAP Server Bind Method is anything but Kerberos
- MFP may become unresponsive if the Reset key is pressed during a scan initiated by an MFP-based third party application
- 49.4C02 may occur on power cycling MFP with LDAP Authentication set to Log In At Walk Up
- EWS is reporting the NFS file system access incorrectly
- When setting up Embedded Send To Network Folder with MFP User Credentials, the user is prompted to enter Public Credential Information before leaving EWS
- Printing all Private Jobs may not print requested number of copies in each job
- SMTP Authentication may fail when using a Microsoft SMTP Server.
- In very rare cases, multiple Toner Low alerts are sent
- While "LDAP server not available" message is displayed, menu items may disappear or pressing Reset & Start initiates a copy job.
- 49.4C02 error may occur after performing restore factory setting following a Disk INIT/NVRAM INIT.
- 49.4C02 or 49.4C06 may occur when pressing Reset key with some third party Digital Send Enabler applications.
- Incorrect display for 60.02 - 60.04 error messages
- Unable to use simple or simple over SSL for LDAP addressing when using Kerberos authentication.
- Digital Send Services log is limited to 32 entries.
- Scan "Scaling Error" message is cropped in all languages except English.
- "Advanced" button missing next to the 'Kerberos Default Realm (Domain)' entry. Clicking the new button brings up a screen with up to 8 alternate Kerberos domain entries.
- Secure Storage Erase operations may not consistently show up in the event log.

Embedded Fax or Faxing Functionality

- Fax Modem failure when number dialed contains 80 digits or more (Prefix and Recipient combined).
- 49.6A08 or 49.6A18 Compression Error when a modem failure occurs while receiving a corrupted fax.

- Include Thumbnail not selectable on EWS fax notification page
- Analog fax card not disabled during secure disk erase
- Implemented new telecom features for Belarus fax compatibility.
- MFP will not print Legal size faxes from trays 2 or 3 when certain paper size settings are used.
- FAX ACTIVITY LOG may show negative job duration if no end time is logged when fax is terminated unexpectedly.
- Not all fax numbers are listed in the email notification when the list contains up to 1500-2000 characters.
- PC Fax email notification's "TO" field displays name garbled.

Embedded Jetdirect:

- Rare problems with secondary DNS server

Stacker/Stapler:

- Updated firmware for compatibility with new products

Current firmware revisions included in this firmware bundle (Version 09.062.0)

COMPONENT	FIRMWARE VERSION
HP LJ 4345mfp	09.062.0 (Datecode: 20060914 09.062.0)
DC Controller:	17 *
Copy Processor Board (CPB):	0.208 (2.0)
Scanner Control Board (SCB):	CMNPSL 28
Analog Fax Accessory (Q3701A)	2.35i
Three Bin Mailbox (Q5692A)	MP04.15
Stacker/Stapler (Q5691A)	MP04.24
Embedded Jetdirect:	V.28.64

* Not included in RFU, reference only

Enhancements and Fixes provided with the previous revision of Firmware

PLEASE NOTE!

This firmware release (20060519 09.051.7) is very similar to the release documented below (20060411 09.051.6). The 20060411 09.051.6 release had a defect that caused extremely long upgrade times when upgrading from versions prior to 20051215 09.041.8. This long upgrade time may provoke users to cycle power on the device prior to completion.

This action may result in a corrupted SCB (Scanner Control Board) Firmware.

Firmware release 20060519 09.051.7 fixes the long upgrade time. This readme also deletes references to upgrading via the EWS Print button, which has been found to cause upgrade problems.

=====
Firmware revisions for all devices included
in this firmware bundle (Version 09.051.7)
=====

DEVICE	FIRMWARE REVISION
LaserJet 4345mfp Series Printers:	09.051.7 (Datecode: 20060519 09.051.7)
Three Bin Mailbox (Q5692A):	MP04.15
Stacker/Stapler (Q5691A):	MP04.22
Embedded Jetdirect:	V.28.63.FF
Copy Processor Board:	0.206 (2.0)
Analog Fax Accessory (Q3701A):	2.32z
Scanner/Controller PCA	CMNPSL 28

The following is the original readme text for firmware version 20060411 09.051.6:

IMPORTANT NOTE

With this firmware upgrade (09.051.6) multiple sub-components of the MFP are upgraded. As a result, it may be necessary to manually power-cycle the product at the end of the upgrade process. If upgrading from the previous firmware version (09.041.8), a power cycle will not be required. This power cycle can also be initiated by Web Jetadmin. Programming some sub-components may take additional time during the upgrade process. The message "To continue power off then on" may be displayed on your mfp's Control Panel if subcomponents require the upgrade (some units may already have upgraded subcomponents, and not prompt for a power cycle). At that time please toggle the mfp's ON/OFF switch to OFF, then ON. The product will then power up in it's normal sequence. Sending a power cycle command from Web Jetadmin after the RFU process will

assure a complete firmware upgrade.

It is extremely important NOT to power OFF the product in the middle of the upgrade process.

This section lists enhancements and issues addressed by this firmware bundle, revision 20060411 09.051.6.

Enhancements to the base LJ 4345mfp product (including embedded digital sending):

- * Added email alert support for SMTP servers that require authentication.
- * Added the ability to reduce a 2-sided document when using the Automatic Document Feeder.
- * Added power cycle messaging to control panel for 49 errors
- * Added the ability to schedule fax printing at a different time for each day of the week
- * Added the ability to lock the Parallel port through the Embedded Web Server
- * Added Mixed Letter/Legal job support for Send to Email, Send to Folder, and Send to Fax
- * Added support for LDAP to transverse the entire LDAP tree.
- * Added the ability to configure SMTP and LDAP server hostnames to help with load balancing.
- * Administrators now have control over which LDAP attribute is used For LDAP Authentication. Previously, users had to enter a portion of their LDAP User DN at the front panel. Now, as an example, administrators can choose to allow users to login using their telephone number or employee ID.
- * Enhanced embedded send-to-ftp performance.
- * For send-to-email, added ability to auto-populate the CC: field with the sender's email address while allowing the user to edit the TO: field. This feature can be enabled via a PJI file available from HP.
- * For send-to-email, added ability to disable BCC: field. This feature can be enabled via a PJI file available from HP.
- * Added ability to mask pin number for DSS send-to-lanfax.

Enhancements to the optional analog fax (2.32z):

- * Some fax menu items now available with control panel lock set
- * Dialing sequences can now be hidden when using DSS

You may see improvements for the following issues by upgrading to this firmware revision (20060411 09.051.6):

Base product issues addressed (including embedded digital sending):

- * 49 service error with some jobs from OpenVMS DCPS systems
- * Print jobs with long file names will generate a 49.0E00 error when printing from Macintosh OS 10.4
- * Help screen in Workflow tab doesn't disappear when Back is selected
- * Minor localization errors
- * Possible 49.4C02 error when selecting unsupported tray options
- * The Russian string for ""reduce/enlarge"" on the copy settings screen is cropped at both ends of the string.
- * Possible user interface hang or crash when background buttons are pressed quickly after a failed home screen authentication.
- * Poor performance for 1-bit mixed mode TIFF/MTIFF jobs.
- * Entering a long, invalid string for a gateway may cause a 49.FF04 error.
- * Incorrect localized title for Send to Folder Network Settings.
- * Localization errors in Kerberos error message in French and Spanish
- * When Create Directory Based on User Name is used, scanned jobs may be lost
- * Upgrading FW may erroneously enable authentication
- * Autostore authentication settings lost when upgrading MFP firmware
- * Embedded send to folder EWS tab labeled as Fax when language = French

- * Spaces doubled with some Japanese font solutions
- * MFP may insert a space in DSS Metadata string, which causes problems with some file types
- * Changing from DHCP to Manual, then changing IP address twice may cause a 49.4C02 error
- * Display says WARMING UP, but MFP is fully functional
- * Menu screen may be available to unauthenticated users
- * MENU items disappear when device function is configured through LDAP bind method.

Analog fax issues addressed (2.32z):

- * Localization not correct for PC Send Fax "Disabled" on Finnish configuration page.
- * Possible 49.4c02 service error when printing fax speed dial entries.
- * Localization for the PC Send Fax driver not correct for some languages.
- * Help section for Fax PIN not localized correctly in Italian.
- * Analog fax modem does not upgrade firmware correctly.
- * PC Fax Send entry on Fax Accessory Configuration Page prints with space-colon instead of colon-space.
- * Display errors with language set to Czech
- * PC Fax Send driver sends a fax, even though fax is disabled with DSS.
- * A 49.4c02 Service Error may occur when deleting speed dial entries
- * Possible fax errors with Avaya PBX systems
- * Embedded Web Server Send To Fax not localized correctly in French.
- * Incorrect fax resolution Help in Italian localization

Embedded Jetdirect (V.28.63)

- * Under DHCP, device may disappear from the network from non-local subnet if IP address, or IP address of gateway, contains a zero in any octet.

=====
Firmware revisions for all devices included
in this firmware bundle (Version 09.051.6)
=====

DEVICE	FIRMWARE REVISION
LaserJet 4345mfp Series Printers:	09.051.6 (Datecode: 20060411 09.051.6)
Three Bin Mailbox (Q5692A):	MP04.15
Stacker/Stapler (Q5691A):	MP04.22
Embedded Jetdirect:	V.28.63.FF
Copy Processor Board:	0.206 (2.0)
Analog Fax Accessory (Q3701A):	2.32z
Scanner/Controller PCA	CMNPSL 28

IMPROVEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISIONS

This section lists enhancements and issues addressed by this
firmware bundle, revision 20051215 09.041.8.

Enhancements to the base LJ 4345mfp product (including embedded
digital sending):

- * Added embedded Kerberos authentication.
- * MFP serial # now included in embedded send to folder metadata.
- * Added a mechanism for the administrator to set the default copy value to Scale-To-Fit. This will help enable a end user to scan/copy an entire document without losing any information and without having to set Scale-To-Fit for each scan/copy job.
- * Added the ability to select a Turkish F keyboard via a PjL file.
- * Improved help messaging for 60.02 and 60.03 paper tray errors.
- * Excessive network traffic due to DSMP Polling. HP LaserJet MFP devices use the proprietary DSMP protocol to communicate with HP MFP Digital Sending Software (DSS). Previous firmware revisions caused the MFP to poll DSS every 60 seconds in order to check availability of digital sending. As long as DSS was available, the MFP would continue to display Email, Folder, Workflow or Fax icons. If DSS was unavailable, the MFP would display "not available" for these digital

send options. With this firmware release, MFPs will no longer periodically poll DSS for status. Email, Folder, Workflow and Fax icons will be displayed constantly if they are configured in DSS. If the MFP is unable to communicate with DSS when a user attempts to interact with these services, an error message will be displayed.

* Added "Enlarge/Reduce" to the Copy scale menu to help with usability.

Enhancements to the optional analog fax:

- * Added page & job counts for transmitted & received faxes.
- * Added the ability to set fax resolution per job.
- * Added support to show X of Y while Processing Fax Jobs.
- * Added the ability to hide PIN or confidential numbers from fax log.
- * Added support for a 30 character fax header.
- * Added support for PC Fax Send driver.

You may see improvements for the following issues by upgrading to this firmware revision (20051215 09.041.8):

Base product issues addressed (including embedded digital sending):

- * 95.0001 errors when using Autostore
- * The "From:" field no longer contains an Email address and is inaccessible after using the Autostore application.
- * Possible 49.00FF error when digital sending and email server replies with a multi-line response.
- * 49.4C02 on reset or timeout while "Authentication Method Not Found" message is displayed.
- * The FIH (Foreign Interface Harness) is not communicating properly with third party devices when copying from the flatbed glass.
- * 49.4c02 after reboot with email job processing and network cable removed.
- * Minor localization defects
- * Letter-size originals copied from the glass print on legal-size media when "mixed ltr/lgl" selected in the copy settings menu.
- * Find Settings in EWS Digital Sending menu may not work if a password is set.

* Disappearing DSS Workflow and Folder menus - In the previous firmware release users may observe that Folders and Workflows would disappear following a Email address lookup via LDAP, or a Secure Storage Erase. The Folders and Workflows would reappear following a normal powercycle. This issue is resolved in this firmware release.

Analog fax issues addressed:

- * Fax job with maximum length e-mail address (256 characters) as notification leads to a 49.4C06 error.
- * Printing faxes from tray 5 does not work.
- * Speed dial lists cannot be printed when the speed dial names contain special characters like ä.

=====
 Firmware revisions for all devices included
 in this firmware bundle (Version 09.041.8)
 =====

DEVICE	FIRMWARE REVISION
LaserJet 4345mfp Series Printers:	09.041.8 (Datecode: 20051215 09.041.8)
Three Bin Mailbox (Q5692A):	MP04.15
Stacker/Stapler (Q5691A):	MP04.22
Embedded Jetdirect:	V.28.62.FF
Copy Processor Board:	0.203 (2.0)
Analog Fax Accessory (Q3701A):	2.32w
Scanner/Controller PCA	CMNPSL 28

 IMPROVEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISIONS

The following changes occurred in the 20050930 09.032.0 and the 20050914 09.031.8 revision of the HP LaserJet 4345mfp firmware:

- Corrected the situation where the MFP clock failed to maintain the correct time.
- Corrected the situation where the option to restore defaults did not restore all settings to default.

- Corrected the situation where documents were stapled even though the the MFP staple setting was set to none.
- Corrected the situation where the MFP would fail when the total number of jobs sent was greater than the "Job Storage Limit" value.
- Corrected the situation where X and Y scaling percentages are different when copying A4 or Letter to smallest custom page size using 2-up printing.
- Corrected the situation where some front panel messages were not properly localized for a given language.
- Corrected the situation where documents may print as white letters on black background following a PostScript error.
- Corrected the situation where the MFP may show READY while processing a job rather than PROCESSING JOB.
- Corrected the situation where the MFP may print a version warning page indicating an unsupported PDF version when the version is actually supported.
- Corrected the situation where when using LDAP Authentication and send-to-workflow the name of the logged-in user is not published in the XML file.
- Corrected the situation where one may see a color shift in long run, duplex jobs copied from the ADF.
- Corrected the situation where Workflow selections and metadata were not retained even when "keep settings" was selected.
- Corrected the situation where Display IDs were not consistent across all localizations.
- Corrected the situation where when using SCAPI to submit send to email jobs the jobs are being suspended if the embedded Send to email SMTP gateway has not been configured.
- Corrected the situation where a user could set email notification even if email services were not configured.

- Corrected the situation where bookcopy and job mode were used while the ADF had paper loaded. An incorrect message would appear.
- Added support for Embedded SMTP Authentication.
- Added Alternative Letterhead Mode. This allows a user to do both simplex and duplex copy jobs on Letterhead, Pre-printed, and User Types 1-5 media types without having to re-orient the paper in the tray.
- Added the ability to compress color MTIFF and TIFF with new JPEG compression.
- Added a feature that the prompts the user to add new addresses to the local address book.
- Added a time stamp to MFP event logs.
- Added the ability for some 3rd party UI applications to specify the filename prefix and the multi-page numbering method to be used for the job.
- Added the ability to change the default File Name on Per Folder Basis.
- Improved performance with units in high production environments that are also using Secure Disk Erase.
- Improved the manner in which the MFP handles authentication revocation when using multiple authentications for a single user.
- Improved messaging in EWS when attempting to remove all folders in embedded digital send.
- Improved messaging in EWS when attempting to create a folder where the user does not have proper credentials.
- Improved front panel messaging when using some 3rd party configuration utilities.
- Improved front panel messaging when Authentication Agent not found.
- Improved front panel messaging when using workflow to scan to folder.

 Embedded Digital Sending - Fixes And Enhancements in 09.031.8:

- MFP polls the SMTP gateway every 60 seconds, which may fill the SMTP server log files
- Send to workflow in DSS 4 creates excessively large TIFF files

- Poor dynamic LDAP performance when using Active Directory
- MFP does not issue an SMTP QUIT command
- Applying DSS authentication settings clear embedded LDAP authentication settings
- Incomplete search root when using SSL may cause internal test to fail
- LDAP IP settings disappear after pressing OK in the Advanced screen
- Unable to select email address to delete after deleting address in AB edit
- Test LDAP Settings uses 1 second timeout rather than selected value
- Possible 68 errors if unit is powered down too soon after changing DSS settings
- Possible 86.1B8E errors when selecting multiple email destinations from a very large LDAP address book

 Analog Fax Accessory 300 - Fixes And Enhancements in 09.032.0 and 09.031.8:

- Added the ability to change the fax Ring Burst Time for compatibility with certain faxing environments.
- Fixed an issue where the fax header in French language incorrectly displayed when entered via the EWS.
- Fixed an issue where the fax would print 224 errors in the fax activity log when receiving faxes.
- Fixed an issue where fax confirmation reports were printing without a thumbnail.
- Fixed an issue where the fax would still receive calls, despite being disabled in HP DSS software.
- Fixed an issue where a 49.4c04 error would occur when receiving a corrupted fax.
- Fixed an issue where a 49.4c02 error would occur when configuring the date\time.
- Fixed an issue where fax recipients entered in the Search Phone Book screen are being duplicated after exiting Phone Book.
- Fixed an issue where Norwegian, Swedish, Danish, and German characters were not appearing correctly on the fax header.

- Fixed an issue where a 49.4c02 error would occur when scrolling thru the Fax Address Book.
- Fixed an issue where no error message would be displayed, when selecting e-mail for fax notification, and not entering an e-mail address.

This revision of firmware supports Digital Sending Software (DSS 4.4). The following changes were incorporated into DSS 4.4:

- Added ability to search multiple LDAP Bind/Search roots for LDAP Authentication

Although LDAP Authentication has worked well in the past, DSS was unable

to support a user environment where users exist in different LDAP containers. DSS 4.4 duplicates functionality included in Embedded Send to

Network Folder and allows searching multiple LDAP Bind/Search roots.

To

utilize this feature, enter multiple bind roots separated by the pipe (|) character.

- Added ability to specify bind prefix for LDAP Authentication

LDAP Authentication is performed by passing the user's distinguished name (DN) as part of an LDAP Bind operation. Following is a sample user

DN:

CN=john.doe@somecompany.com,OU=US,OU=Accounts,DC=somecompany,DC=net

In the example, "CN=" is the bind prefix. In previous DSS releases, the

bind prefix was assumed to be "CN=" unless the user specified something

different when logging in at the MFP front panel

(example: "UID=john.doe@somecompany.com"). In DSS 4.4, the DSS Admin may

set the bind prefix to any value so the user would only need to enter "john.doe@somecompany.com" at the front panel.

- Improved send-to-workflow support for 4100mfp and 9000mfp

Latest firmware (version 3.803.6) for the HP 4100mfp and 9000mfp enables

these devices to work with DSS's send-to-workflow feature. DSS 4.3 provided limited support, only allowing these devices to participate in

"Common MFP Group". DSS 4.4 enables these devices to function with custom

workflow groups.

- No longer leave SQL Svr Mgr icon on system tray

In DSS 4.3, HP introduced a SQL component. Following installation of DSS 4.3, a SQL Server Manager icon would be left on the system tray, although it provided no functionality with DSS. In DSS 4.4, this icon is automatically cleaned up following installation.

- Fixed Issues in Authentication

Resolved issues with LDAP and Windows SPNEGO authentication methods where spaces in username cause authentication failure

The following changes occurred in the 20050607 09.022.3 revision of the HP LaserJet 4345mfp firmware:

- Corrected situations where the EIO Configuration Page was missing when using some 3rd Party I/O devices.
- Corrected situations where a 49.2F90 and 49.2F9C errors would occur when using Secure Fast Erase and Santitize Erase.
- Corrected situations where the EWS Address Book import feature was locked if the Front Control Panel was using the address book.
- Corrected situation where one may use EWS to access the Security option, under Send to Fax, without creating a PIN number.
- Corrected situations where some characters were missing from the page if using Direct PDF printing.
- Corrected the situation where removing the Duplex Accessory, removed the duplex page counts.
- Added security feature of embedded SSL (Secure Socket Layers).
- Added security feature of embedded LDAP Authentication. This is enabled through EWS (Embedded Web Server).
- Added the new feature Send-to-Network Folder. This is enabled through the EWS (Embedded Web Server).
- Added the feature to hide the E-mail and Fax icons when the features are not configured.
- Corrected situations where a 49.4C02 error would occur after canceling the printing of the Menu Map and going back to the Main Menu.
- Corrected situation wherein the clearing of an ADF Jam, in certain situations, forced the product to re-boot.
- Added the indication that Secure File Disk Erase was enabled to the Configuration Page printout.

- Corrected the situation where a 49.4C02 error would occur when initially setting the Date/Time, and when changing the Wake Up Time.
- Corrected the situation where a 49.4C02 error would occur when printing the Event Log in the French language.
- Re-enabled the Create Cleaning Page in the Control Panel (under CONFIGURATION menu, PRINT QUALITY).
- Improvements were made to decrease the occurrences of random "Card Slot not Initialized" errors.
- Corrected situation where quick action of inserting and removing the paper from the ADF while the mfp was scanning would cause the mfp to "hang".
- Improvements were made for both ADF and Flat Bed optical calibration routines.
- Corrected situations where a 13.06.00 error would occur when making copy jobs from Tray 5.
- Changed the layout of the Turkish Q keyboard.

Embedded Digital Sending - Fixes And Enhancements in 09.022.1:

- Added support for SSL over LDAP. This support is provided via the JetDirect interface and provides encryption for embedded LDAP Addressing as well as embedded LDAP Authentication
- Fixed an issue with Black & White MTIFF compression.

Analog Fax Accessory 300 - Fixes And Enhancements in 09.022.1:

- Changed the default setting of Stamped Received Faxes from YES to No.
- Fixed an issue where a user could access the Security option under Send to Fax in the Embedded Web Server without a PIN.
- Added the functionality to access speed dials from the main fax screen.
- Added the functionality to access fax notification from the main fax screen.
- Added the functionality to delete a single entry in a speed dial list.
- Fixed an issue where fax input and output tray options in the embedded web server had invalid boxes.

- Fixed an issue where selecting Custom as paper size would result in a fax not being received.
- Fixed an issue where selecting a tray configured for ANY\ANY paper size, would result in a fax being received but never printed.
- Fixed an issue where a 49.4C02 service error would occur after canceling Print Menu Map and going back into Menu.
- Corrected a situation where a 49.4C04 service error would occur when a corrupted fax image was received.
- Fixed an issue where the Include Thumbnail option is not disabled in the embedded web server when e-mail notification is selected.
- Fixed an issue where the embedded web server would allow a user to create a pin number without numbers for Modem Security.
- Fixed an issue where the dialing prefix in the fax screen is not being limited to 5 characters.
- Fixed an issue where PRINT START TIME and PRINT END TIME had incorrect values in English.
- Added the functionality to auto complete entries in the fax phone book.
- Added the functionality to add an entry to a Speed Dial list after it has been saved.
- Changed the default fax resolution to be set to Standard.
- Fixed an issue where Internal Fax was being printed on mfp configuration report when no fax card is installed.

 This revision of firmware supports Digital Sending Software (DSS 4.3). The following changes were incorporated into DSS 4.3:

- Support for custom FTP and SMTP ports:
 DSS 4.3 enables administrators to change the port numbers for FTP and SMTP from the default values. FTP default port number is 21. SMTP default port number is 25.
- DSMP Encryption:
 HP's proprietary Digital Sender Management Protocol (DSMP) is used for communications between DSS and MFPs. With DSS 4.3, all DSMP communications are now encrypted for improved network security.
- Fixes for specific NetWare rights issues DSS 4.3 includes fixes for access issues with send-to-folder and send-to-workflow where the destination directory resides on a NetWare volume.
- Support for email servers that require SMTP Authentication.
 In an effort to prevent their mailservers from being used by

spammers, many ISPs now enforce SMTP Authentication. DSS 4.3 supports SMTP Authentication so HP MFPs can send email via these mailservers.

The following changes occurred in the first revision to the HP LaserJet 4345mfp firmware 09.011.5:

IMPORTANT

With this firmware upgrade (09.011.5) we upgraded many sub-components of the mfp product. As a result of this, it may be necessary to manually power-cycle the product at the end of the upgrade process. Programming some sub-component may take some additional time during the upgrade process, the message "To continue power off then on" may be displayed on your mfp's Control Panel if your mfp subcomponent require the upgrade. [Note, some newer products may already have upgraded subcomponents.] At that time please toggle the mfp's ON/OFF power switch to OFF, then ON. The product will then power up in it's normal sequence.

It is extremely important NOT to power OFF the product in the middle of the upgrade process.

- * New firmware for the mfp's Stapler/Stacker Accessory (Q5691A).
- * New firmware for the mfp's 3-Bin Mailbox Accessory (Q5692A).
- * New firmware for the mfp's Scanner/Controller PCA (corrected situation where premature "ADF Output Bin Full" messages occurred.)
- * New hp Embedded JetDirect firmware included in this bundle.
- * Re-enabled the "Create Cleaning Page" item in the Control Panel.
- * Web Jetadmin unable to complete a remote firmware upgrade with control panel locked. This revision changes how future upgrades will be handled, but upgrading to this revision will still require a manual reboot.
- * Simplex landscape images were rotated 180 degrees on any n-up copy job, this has been corrected.
- * Incorrect page counts in XML data (for Instant Support) were recorded.
- * Improvements were made for direct PDF Printing.
- * Corrected situations where a 49.4C02 error occurred while printing a Menu Map.
- * Corrected mfp interaction with Envelope Feeder.

- * Corrected situations where some jobs were not stapled until the next job was sent.
- * Corrected situations where the EIO Configuration Page was not printed when a third party solution was incorporated with the mfp.
- * Corrected some situations where the mfp would "hang" while performing continuous single page ADF jobs.
- * Corrected some situations of 65.12.99 Output Device Disconnected error when the mfp was woken-up from sleep mode by hp Web JetAdmin.
- * Corrected some situations where the mfp would hang at "Processing Job" after the paper trays were re-filled.

EMBEDDED DIGITAL SEND FIXES AND IMPROVEMENTS (09.011.5)

- * Fixed an issue where an LDAP hostname was not being resolved in the same way as an SMTP hostname.
- * Fixed an issue where Active Directory was losing a person or object.
- * Changed the display message E-mail "Not Available" to "Not Configured".
- * Fixed an issue where 75dpi E-mails were being sent as 150dpi with a 75dpi header.
- * Fixed an issue where multiple copies of the same e-mail were being sent.
- * Added the functionality of automatically copying the sender of an e-mail, a direct copy of the e-mail that was sent.
- * Fixed an issue where LDAP lookup no longer functions after executing a Find Send Gateways without network connectivity.

ANALOG FAX FIXES AND IMPROVEMENTS PROVIDED WITH this FW: 2.32s

- * Added Japanese fax certification.
- * Added Malaysian fax certification.
- * Fixed an issue that prevented a user from cancelling a fax with the stop button.
- * Fixed an issue where fax e-mail notification was being truncated in some languages.
- * Added fix from previous products that prevents fax menu

from falling off the menu.

- * Added country location codes for several missing countries including: for Estonia, Iceland, Japan, Latvia, Liechtenstein, Lithuania, Morocco, and Slovenia.
- * Fixed an issue when superfine resolution was enabled during fax processing, the fax job would fail.
- * Added support for integration with HP Output Management Server.
- * Fixed an issue that would result in a fax being lost if the mfp was powercycled.
- * Added additional analog fax assertion code granularity.
- * Fixed an issue where fax failure e-mail notification had a "?" for some characters.

Digital Sending Software (DSS) Improvements (09.011.5)

- * Improvementst for Cluster Server Support and support for Windows XP Service Pack2 support.
- * Improvements for the handling of trial license expiration messaging.

Note: Changes were made to other devices listed below:

DEVICE	FIRMWARE REVISIONS	
LaserJet 4345mfp Series Printers:	09.022.3	09.032.0
Three Bin Mailbox (Q5692A):	MP02.26	MP04.15
Stacker/Stapler (Q5691A):	MP02.27	MP04.22
Embedded Jetdirect:	V.28.59.FF	v.28.62.FF
Copy Processor Board:	0.188 (2.0)	0.196 (2.0)
Analog Fax Accessory (Q3701A):	2.32s	2.32w
Scanner/Controller PCA	26	26

IMPROVEMENTS PROVIDED WITH PREVIOUS FIRMWARE REVISIONS

The initial release of firmware for the LJ4345mfp was 09.002.0.

The first revision of firmware was 09.011.5 (see improvements).
The second revision of firmware was 09.022.3 (see improvements).
The third revision of firmware was 09.031.8 (see improvements).
The fourth revision of the firmware was 09.032.0 (see improvements
list under 09.031.8)

Installation Instructions

NOTE: Please be aware that an update in some circumstance may require ten minutes or more to complete.

Upgrading firmware to a single device

You can send an .RFU update to a device at any time; the device will wait for all I/O channels to become idle before cycling power.

Please print a configuration page prior to performing any firmware update. To print the configuration page:

1. Go to the printer's or MFP's control panel.
2. Press the "Administration" Icon on the touch screen.
3. Select the "INFORMATION" selection on the touch screen.
4. Select "CONFIGURATION/STATUS PAGES".
5. Select "CONFIGURATION PAGE".
6. Select the "Print" button.

On the printed CONFIGURATION page look in the section marked "Device Information" for the firmware date code. The firmware date code will look something like this: **20040322 48.001.0**

NOTE: If the firmware update involves a change in the format of NVRAM, the NVRAM settings will be lost and must be set again by the customer.

The elapsed time for an update depends on the I/O transfer time as well as the time that it takes for the printer to reinitialize. The I/O transfer time will depend on a number of things including the speed of the host computer sending the update and the I/O method (parallel, or network).

The re-initialization time will depend on the specific hardware configuration of the printer, such as the number of EIO devices installed, the presence of external paper handling devices, and the amount of memory installed. Finally, any print jobs ahead of the .RFU job in the queue will be printed before the .RFU update is processed.

NOTE: When the upgrade process has completed the LaserJet will reboot. Once the printer is back online, print a Configuration Page and verify that the new firmware has been installed.

Using FTP from Internet Explorer:

NOTE: This method is not recommended with Windows Vista or if Internet Explorer 7 is installed on your pc due to frequent timeouts. A stand-alone FTP client program is recommended for Windows Vista.

NOTE: Make sure that the printer is not in Power save mode. Also, make sure that any error messages are cleared from the control panel display.

1. Insure the "Enable folder view for FTP sites" box is checked on the Advanced tab under Tools/Internet Options.
2. Open the browser and type ftp://192.168.0.90 (this is an example).
3. Use the TCP/IP address of the printer from step 1). The display will show a folder labeled Port 1.
4. Open Windows Explorer and navigate to the directory where the .rfu file is located.
5. Drag the rfu file from Windows Explorer to the Port 1 folder in step 2.
6. Verify the printer's control panel displays "Performing Upgrade"

NOTE: When the upgrade process has completed the LaserJet will reboot. Once the printer is back online, print a Configuration Page and verify that the new firmware has been installed.

For Windows Systems:

If the device is shared on the network, then the following command can be issued from a command prompt:

```
copy /b FILENAME \\SHARENAME\PRINTERNAME
```

where FILENAME is the name of the .RFU file, <SHARENAME> is the name of the machine, from which the printer is being shared, and <PRINTERNAME> is the printer's share name (do not type the angle brackets).

If the device is attached locally, then the .RFU file can be sent directly to the printer with a COPY command from a command prompt or DOS window:

```
copy /b FILENAME PORTNAME
```

where <FILENAME> is the name of the .RFU file and <PORTNAME> is the name of the appropriate device port (such as LPT 1).

Setting the following on the devices control panel may help if a timeout messages is seen on the computer monitor during an update:

Change the timeout in the control panel

- a. Press the "Mode" button and select the "PRINT" mode.
- b. Once this has been done the PRINT menus will be displayed on the touch screen control panel.
- c. Press the Menu selection
- d. Press the Configure Device selection
- e. Press the I/O selection
- f. Press the I/O Timeout selection
- g. Enter a value of 300 seconds with the 10 key hard buttons
- h. Press OK
- i. Press EXIT

The following can also be set on the computer to help address a timeout message that is seen on the computer monitor during an update:

From a command prompt or DOS window type the following command and press the enter key:

```
Mode lpt1:.,p
```

If the device is attached to a parallel port other than LPT1, then substitute the proper LPT port number in the MODE command.

Once this command has been set the file can then be copied to the printer with the above mentioned COPY command.

NOTE: When the upgrade process has completed the LaserJet will reboot. Once the printer is back online, print a Configuration Page and verify that the new firmware has been installed.

Using FTP:

If your HP LaserJet product uses a direct network connection, you can use file transfer protocol (FTP) to update your HP LaserJet firmware. Take note of the TCP/IP address on the configuration pages.

NOTE: Make sure that the printer is not in Powersave mode. Also, make sure that any error messages are cleared from the control panel display.

1. Open a DOS command window on your computer.
2. Type ftp <TCP/IP PRINTER ADDRESS>(for example, if the TCP/IP address is 192.168.0.90, type ftp 192.168.0.90).
3. Press ENTER on the keyboard.
4. When prompted for user name and password press ENTER for each.
5. Type *bin* at the >prompt.
6. Press ENTER.

7. Type: put <path> where <path> is the location where the .RFU file was downloaded from the Web. For example, type:

put C:\LJXXXXVjXXXXFW.RFU

8. Press ENTER.
9. Type "bye" at the command prompt once the download process begins and the firmware is updated on the printer
10. Press ENTER to exit the FTP session.

NOTE: When the upgrade process has completed the LaserJet will reboot. Once the printer is back online, print a Configuration Page and verify that the new firmware has been installed.

For Unix systems:

Any method that delivers the .RFU file to the printer will work, including:

\$ cp /home/yourmachine/FILENAME /dev/ <XXXX>

where XXXX is the appropriate parallel device; and where /home/yourmachine/FILENAME contains the .RFU file.

For Macintosh systems:

Mac OS X System (ftp)

1. Open the Terminal application found in the Utilities folder; a terminal window will appear.
2. After the % symbol enter following information:

ftp <<your printers IP address>>(example - % ftp 192.0.0.192)

The terminal window will list that you are connected to the printer and the JD FTP Server is Ready.

3. Press the enter key twice. Both the Username and Password can be blank
4. Enter the following information after ftp>:

put <<path/Firmware File Name.rfu>>(Example - ftp> put /users/computername/Desktop/laserjet_fw.rfu)

Note: To ensure that the entire proper path to the .rfu file is placed in the put command, type in put and a space, then click and drag the .rfu file on to the

terminal window. The complete path to the file will be placed after the put command.

NOTE: When the upgrade process has completed the LaserJet will reboot. Once the printer is back online, print a Configuration Page and verify that the new firmware has been installed.

Remote firmware update using the HP Printer Utility (Macintosh OS X)

The HP Printer Utility is a software program that gives you access to the product in Mac OS X.

The HP Printer Utility is available in Mac OS X V10.3 and later. The HP Printer Utility does not work when it is installed by using the AppleTalk protocol. Use IP, Bonjour, Rendezvous, or a USB connection to enable the HP Printer Utility.

The HP Printer Utility can be found on the Administrator software CD ("Admin CD") that came with the product.

If you do not have the CD, you can obtain the HP Printer Utility by downloading the latest product installer from the following Web sites:

www.hp.com/support/cljcm6030mfp or www.hp.com/support/cljcm6040mfp

Complete the following steps:

1. Open the HP Printer Utility:
2. (OS X v 10.4 and 10.5) The utility can be found in the Application/Utilities folder by choosing the HP Printer Selector.
3. (OS X v 10.3) The utility can be found in the Library/Printers/hp/Utilities folder.
4. Choose your printer from the list, Press Select and continue with step 7.
 - a. If a list does not appear, click on the printer icon in the lower left corner.
 - b. Choose your printer from the list, Press Select and continue with step 7.
5. If the product does not appear, click More Printers.... The Connection Type screen will appear.
6. Choose the connection type (USB or TCP/IP). Choose the product name or enter in an IP address.
7. On the Connection Type screen, click Add. The Select Printer screen will now appear.
8. Choose your printer from the List and Press Select.
9. You are now in the HP Printer Utility.
10. Select Update Firmware on the left side of the window, click Choose, browse to firmware upgrade file, and then click Open.

11. On the Update Firmware screen, click Update.

Using HP Web JetAdmin 7.x or 8.X

Download the appropriate firmware update file from hp.com to a folder on your PC or the Web JetAdmin server.

1. Start Web JetAdmin 7.x or 8.x.
2. From the Navigation section of the screen, select the "Device management" selection from the dropdown menu. This is located in the top left hand section of the window.
3. Choose the "Device List " folder and select one of the following depending on what list your device/s are located under:
 - All Devices
 - Ungrouped Devices
 - New DevicesYou can also select the "Device Groups" folder if a device group has been created for the device/s you want to update
4. Once you have selected you list or group that your device is located in highlight the device/s you want to update from populated Device List or Device Groups List on the right hand section of the window.
5. Select "Update Printer Firmware from the Device Tools drop down on the top right hand section of the window.
6. Click the "Browse" button and locate the correct firmware image.
7. Select the file and Click on the "OK" button.
8. Select the "Update" button, found in the lower right portion of the window to start the update process.

NOTE: Do not turn printer off during the update process! When the update process is complete, the printer will automatically reboot. If the firmware update process fails, Web JetAdmin will provide notification with a page (screen) of information regarding the reason(s) for failure. A link will be provided to attempt the process again.

Using HP Web Jetadmin 10.x

NOTE: HP Web Jetadmin can be configured to get firmware details from hp.com directly. Use Tools, Options, Shared, Network, HTTP to add HTTP proxy details (if needed) and to enable "Allow download". "Allow download" is required for HP Web Jetadmin to communicate with the Internet. Once these settings are enabled, HP Web Jetadmin may be able to get firmware listing and firmware image files directly from HP.com if this is allowed on the network where HP Web Jetadmin is running.

1. Start Web Jetadmin 10.x

2. From the “Device Management” section, select "All Devices" (or the appropriate device group). An “All Devices” list will appear in the center window.
3. Find your device in the list, or type the IP address of the device in the Quick Device Discovery section in the lower-left of the screen (this will highlight your device in the device list). You can sort the device list by clicking on a column name at the top.
4. If your device list is sorted by model number, you may select multiple devices with the same model number by Control-Click or Shift-Click.
5. Right-click on the device and select “Upgrade firmware...”.
6. An Upgrade Firmware window will appear. Select “Device firmware” and click “Next”
7. A list of available firmware will appear. If the correct version is listed, click “Next”, and the upgrade process will start.

If the correct firmware version does not appear on the list, you will need to manually upload it. New firmware may be available on an FTP site prior to appearing on hp.com. The instructions below allow you to upload a RFU file from your local PC to WJA 10:

1. Click on “Firmware/Firmware Repository” in the “Device Management” pane
2. A “Firmware Repository” window will appear in the center of the screen
3. Click on “Upload” in the upper-right of the window
4. Browse to the .rfu file on your local PC
5. Click “Upload”
6. Once the .rfu file is uploaded, go back to step 2 in the first section and complete steps 2 through 6.

NOTE: Do not turn printer off during the update process! When the update process is complete, the printer will automatically reboot. If the firmware update process fails, Web JetAdmin will provide notification with a page (screen) of information regarding the reason(s) for failure. A link will be provided to attempt the process again.

Expected device messages during an upgrade

The device displays three messages during a normal update process:

Printer message	Explanation
-----------------	-------------

RECEIVING UPGRADE	Displayed from the time the device recognizes the beginning of an .RFU update until the time the printer has verified the validity and integrity of the .RFU update
PERFORMING UPGRADE	Displayed while the device is actually reprogramming the DIMM with the .RFU update
WAIT FOR PRINTER TO REINITIALIZE	Displayed from the time the device has finished re-programming the code until the printer reinitializes.

NOTE: To verify that the firmware update succeeded, print a Configuration page from the printer's control panel and verify the firmware datecode shown on the Configuration page is the same as the datecode of the .RFU file you downloaded.

Troubleshooting a Firmware Update

The following table lists causes and results for possible interruptions to the firmware update.

CAUSE	RESULT
Job cancelled from printer control panel	No upgrade has occurred. Resend upgrade
Break in I/O stream during send (for example, parallel cable removed)	No upgrade has occurred. Resend upgrade.
Power cycle during RECEIVING UPGRADE	No upgrade has occurred. Resend upgrade.
Power cycle during UPGRADING PRINTER	Resend upgrade.
Power cycle during WAIT FOR PRINTER TO REINITIALIZE	Upgrade completed.

Print jobs sent to the printer while an update is in process will not interrupt the update.

The following table lists possible reasons for the failure of a Remote Firmware Update and the corrective action to take for each situation.

REASON FOR FIRMWARE UPDATE FAILURE	CORRECTIVE ACTION
------------------------------------	-------------------

.RFU file corrupted	The device will recognize that the file is corrupted and will reject the update. Download the image again from the http://www.hp.com Web site and send the new file to the printer.
Wrong printer model	The device will recognize the model in .RFU file mismatch and will reject the update. Download the correct image from the http://www.hp.com Web site and send it to the printer.
Update interrupted.	No updated has occurred. Resend the upgrade package.

System Requirements

The RFU upgrade requires a network or USB port connection

Technical Assistance

Some of the services below are provided for the United States only. Similar services to those listed below are available in other countries. See your printer's user guide or call your local authorized HP dealer.

Customer Support

See your printer's user guide or call your local authorized HP dealer.

Internet

An anonymous FTP library service is available worldwide for around-the-clock access to drivers and technical support information for HP peripheral and computer products. Please note that paths may change without notice. Access the Internet or FTP address and use the menus to locate the software or support of your choice.

- URL for HP LaserJet 4345mfp Series Support: http://www.hp.com/go/lj4345mfp_firmware
-
- URL for Software and Support: <http://www.hp.com/go/support>
- URL for Access HP: <http://www.hp.com>
- FTP address: <ftp.hp.com>

Login: anonymous

Password: your Internet email address

Additional Information

Refer to your printer's user guide for additional methods of obtaining software and support information, such as printer driver distribution centers other online services, fax services, and other online support.

Legal Statements

Trademark Notices

- MS-DOS, Windows, Windows 2000, Excel 2000, Microsoft Office, Windows Server 2003, Outlook, PScript and Internet Explorer are registered trademarks of Microsoft Corporation in the United States and/or other countries.
- PostScript is a registered trademark of Adobe Systems Incorporated.
- Quark and QuarkXpress are trademarks of Quark Inc.
- Mac, Macintosh and Safari are registered trademarks of Apple Computer, Inc.
- The Adobe logo, Acrobat, the Adobe PDF logo, Distiller, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- Novell is a registered trademark of Novell, Inc., in the United States and other countries.
- Netscape Navigator, is a registered trademark of Netscape Communications Corporation in the United States and other countries.

License and Copyright

© Copyright 2004 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein
