HP 9200c Digital Sender
Support Guide

hp

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1 About the digital sender

The HP 9200C Digital Sender connects directly to your network and uses the included HP Digital Sending Software (HP DSS) program to convert black-and-white and color documents, drawings, and photographs into an electronic form and then distribute them directly to several kinds of destinations.

- **E-mail**—Scan a document and send it to one or more e-mail recipients in the form of a .PDF, .JPEG, .TIFF, or .MTIFF file.

- **Secondary (secure) E-mail**—Send a document by using a secure third-party e-mail solution.

- **Fax**—Scan a document and send it to a local area network (LAN) fax, Internet fax, or Windows® 2000 fax destination. (The device does not have analog fax capability.)

- **Workflow**—Scan a document and save it to a network folder or file transfer protocol (FTP) site along with additional information about the document. A third-party software program can then retrieve and decipher the information, and perform the appropriate operation on the scanned image. A printer can also be set up as a workflow destination, allowing scanned documents to be printed.

- **Network Folder**—Scan a document and send it to a folder on the network.

The digital sender includes a flatbed scanner as well as an automatic document feeder (ADF) that can accept up to 50 pages.

The digital sender supports network authentication, allowing you to require users to log in before they can use the digital-sending options. It can also make use of Lightweight Directory Access Protocol (LDAP) to find and use e-mail addresses on directory servers that are located elsewhere on a network.

Installing the device is simply a matter of connecting it to your network, installing the HP DSS program that comes with the device, and configuring the digital-sending features. The digital sender operates as a standalone unit on the network and does not require network privileges for administration.

Features

The digital sender includes the following features:

- **Digital sending—**Send scanned files to e-mail addresses, fax destinations, network folders, and workflow folders. Digital-sending functions are carried out by the HP Digital Sending Software (HP DSS), which is included with the device.

- **ADF—**The legal-size ADF accepts up to 50 pages, and includes built-in duplexing for scanning both sides of a double-sided document.

- **Interactive touchscreen control panel**—Intuitive onscreen menus and wizards help you to complete digital-sending tasks.

- **Flatbed scanner**—The letter/A4-size scanner can scan in both black-and-white and color, with the ability to scan up to 1 mm (0.04 inch) from the paper edge.

- **Memory—**The device comes standard with 128 megabytes (MB) of random access memory (RAM).

- **Hard disk—**The device includes a 20-gigabyte (GB) internal hard drive for storing documents and settings.

- **Connectivity—**The device provides a 10/100Base-T port and an enhanced input/output (EIO) expansion slot for connectivity.

- **HP Jetdirect Inside—**An HP Jetdirect embedded print server is integrated into the device for reliable network connectivity.

Specifications

The following are the digital sender specifications.

Paper handling

The HP 9200C Digital Sender supports the following standard paper sizes:

- **Letter:** 215.9 x 279 mm (8.5 x 11 inches)

- **Executive:** 190 x 254 mm (7.5 x 10 inches)

- **A4:** 210 x 297 mm (8.3 x 11.7 inches)

- **A5:** 148 x 210 mm (5.83 x 8.27 inches)

- **B5:** 176 x 250 mm (6.9 x 9.8 inches)

- **Legal (from the ADF only):** 215.9 x 355.6 mm (8.5 x 14 inches)

Paper weight: 60 to 120 g/m2 (16 to 32 lb)

Up to 50 sheets of paper can be stacked in the ADF, with a maximum height of 5 mm (0.2 inch).

Performance

The following sections give specific performance statistics for the digital sender.

ADF performance

The following table shows the page per minute (ppm) speed of the digital sender ADF.

Mode	Dots per inch (dpi)	Speed (ppm), A4	Speed (ppm), Letter
Simplex Mono Mode	600 x 600	29	30
Simplex Mono Mode	600 x 300	46	47
Simplex Color Mode	600 x 300	29	30
Duplex Mono Mode	600 x 600	18	18
Duplex Mono Mode	600 x 300	24	24
Duplex Color Mode	600 x 300	18	18

Flatbed performance

The following table shows the seconds per scan cycle for scanning on the flatbed.

NOTE These performance numbers are for scanning only. They do not include the time that it takes the digital sender to process and send the scanned file.

Mode	dpi	Speed (seconds), A4	Speed (seconds), Letter
Black and White	600 x 600	4.1	3.9
Black and White	600 x 300	3.1	3.0
Color	600 x 600	5.9	5.6

Duty cycle

- The maximum duty cycle is 60,000 total images scanned per month.
- The average duty cycle is 3,600 total images scanned per month.

Parts of the digital sender

The following figures illustrate the digital sender parts.
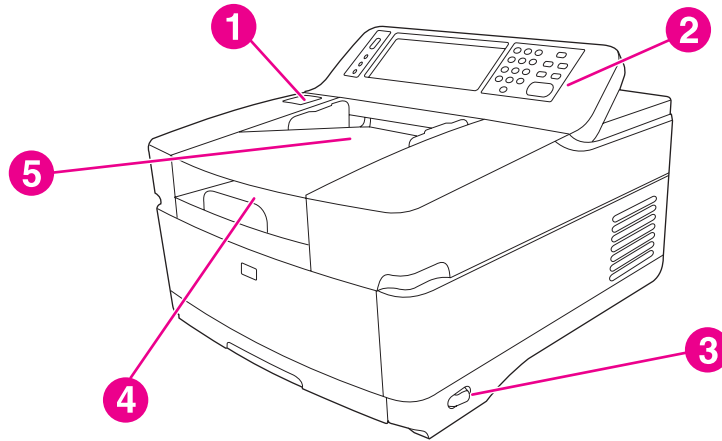
1   Jam release button
2   Control panel
3   On/off switch
4   Output bin
5   ADF input bin
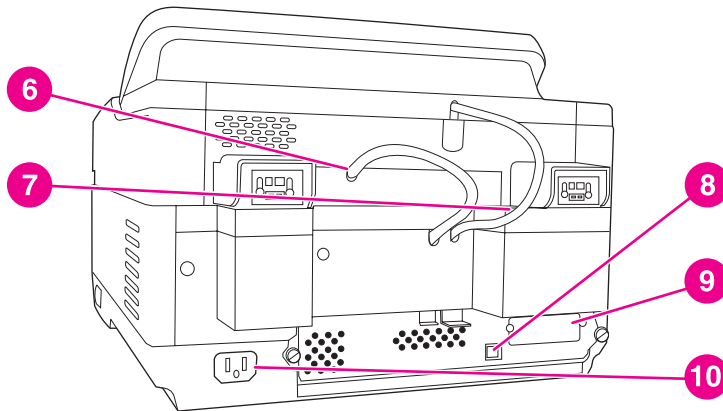
6   ADF cable
7   Control-panel cable
8   10/100Base-T network port
9   EIO port
10 Power connector
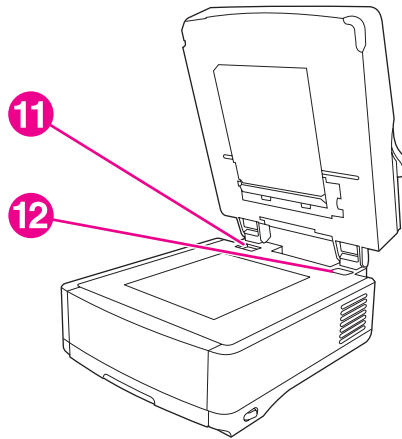
11 Scanner lock
12 Serial number

The following figure shows the features of the digital sender control panel.
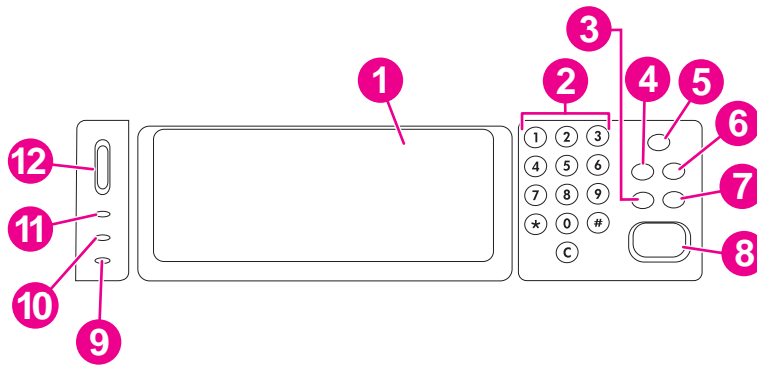
1 Touchscreen graphical display
2 Numeric keypad
3 RESET button
4 MENU button
5 SLEEP button and LED
6 STATUS button
7 STOP button
8 START button and LED
9 **Attention** LED
10 **Data** LED
11 **Ready** LED
12 Contrast control wheel

Environment and network

The following are environment and network considerations for the product.

Environmental ranges

Install the device in an area that is within the following temperature and humidity ranges.

CAUTION The operating environment should be stable, with no abrupt changes in temperature or humidity that might damage the device. If you move the device from a cold environment to a warm one, wait about two hours before using it.

Temperature	
Operating	0° to 40°C (32° to 104°F)
Storage	-40° to 60°C (-40° to 140°F)
Humidity	
Operating	15 to 80% noncondensing (up to 40°C [104°F])
Storage	15 to 90% (up to 60°C [140°F])

Network components used for digital-sending

The following table describes the network components used for digital sending.

Component	Description
Network server running Windows® 2000 Professional, Server, or Advanced Server; Windows XP Professional; or Windows Server 2003 Standard or Enterprise Server	The server contains the following components: • HP DSS • HP MFP DSS Configuration Utility—used to configure and monitor digital-sending features after the HP DSS program has been installed • Windows 2000 Fax service—required only when the Windows 2000 Fax service is the method of fax transport
Network	Fast Ethernet 100Base-TX or Ethernet 10Base-T

Component	Description
Digital senders or HP multi-function peripheral (MFP) products	An HP DSS server can support up to 250 HP 9200C Digital Senders or MFP products on the same network. Each device can be individually configured to support any or all of the digital-sending options. **NOTE** HP DSS does not support the HP 9100C or 8100C Digital Senders.
Web browser	Users can use a Web browser from any computer on the network to configure and monitor the digital sender by using HP Web Jetadmin, or the digital sender's embedded Web server.
SMTP gateway	This gateway facilitates the e-mail and Internet fax digital-sending options.
LAN fax server	A LAN fax server is a network device that centrally handles the sending and receiving of large numbers of fax jobs. HP DSS can be used to configure the digital sender to route outgoing faxes to a LAN fax server.
LDAP server	An LDAP server is a directory server that contains recipients' names and e-mail addresses and supports Lightweight Directory Access Protocol (LDAP). HP DSS uses the LDAP server to obtain addresses for the digital-sender address book.
FTP server	A file transfer protocol (FTP) server can be used as a destination for documents scanned by the digital sender.
Domain controller/Novell directory server	In order to support user authentication, the digital sender must have access to a domain controller or Novell directory server in order to validate the user's login information.
Network printer	A network printer can be set up as a destination for documents scanned by the digital sender.

Novell NetWare support

If Novell file servers are used on the network, HP DSS can write files into network folders and support network fax folders that reside on Novell servers. The Novell client software must be installed on the network and be configured correctly before Novell-specific attributes can be configured in HP DSS.

In order to support Novell NetWare authentication and Novell digital sending destinations, HP DSS requires both of the following components:

● Novell NetWare version 3.12, 3.2, 4.11, 4.2, 5, or 6 running on the Novell NetWare server

  -AND-

● Novell NetWare Client version 4.6 (or later) installed on the Windows computer that runs HP DSS

Space requirements

The following figures illustrate the space requirements for the HP 9200C Digital Sender.
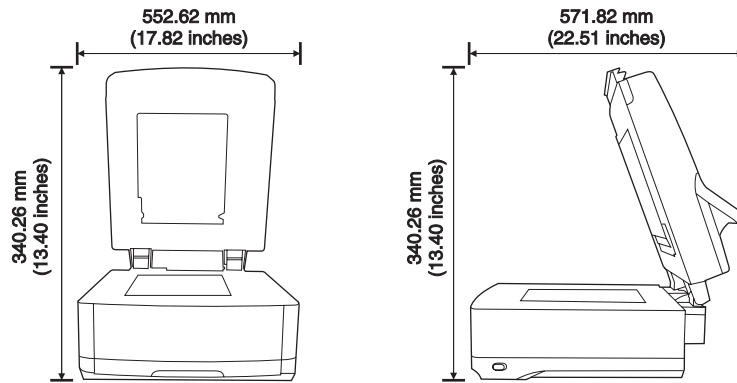
NOTE   The digital sender requires 90 mm (3.5 inches) of free space behind the device in order to fully open the top.

2 Configuring HP DSS

Without using the HP DSS service, the digital sender can only scan documents and send them as attachments to e-mail. If you prefer, the digital sender can be used in this way, without installing the HP DSS service. The e-mail settings can be configured by using the control-panel menus. However, to enable all of the other digital-sending features, including send-to-folder, send-to-fax, and send-to-workflow, the HP DSS service must be installed.

The digital-sending features must be configured within the HP DSS service before they can be made available on the device. This section explains how to configure these digital-sending features.

Using the Digital Sending Software

NOTE   See the *HP 9200C Digital Sender Getting Started Guide* for instructions about unpacking the digital sender, installing the software, and setting up the initial configuration. The following instructions cover the configuration options in more detail.

Use the HP MFP Digital Sending Software Configuration Utility to configure all of the digital-sender features. Each feature that is enabled appears on the digital-sender control-panel display as an option.

Use the following instructions to open the program.

1. On the server where HP DSS was installed, click **Start**, click **Programs**, click **Hewlett-Packard**, click **HP MFP Digital Sending Software**, and then click **Configuration Utility**.

2. In the **HP Digital Sending Software Configuration** dialog box, select **This computer** and click **OK**.

General tab

The **General** tab contains HP DSS license and administrator contact information.

When the HP Digital Sending Software is installed for the first time, the software is fully functional in trial mode for a set period of time. The **Licenses** section of the **General** tab displays a "Trial License" entry. The remaining trial period is displayed in this entry. When the trial period expires, the software becomes inactive until a valid license is installed.

The digital sender comes with a one-seat license. Additional licenses can be purchased in 1, 5, 10, and 50 seat varieties. Each seat enables digital sending features on one digital sender or MFP. You can install as many licenses as you like in order to accumulate seats, but 250 is the maximum number of devices that can be supported by a server.

Click the **Add** button to type in the license key code for the HP Digital Sending Software.

Fill in the administrator contact information in the **Administrator Information** section of this tab. Select the **Notify administrator of critical errors** check box if you would like to be notified by e-mail about errors that require administrative assistance.

Click the **Help** button to get more information about this tab.

E-mail tab

The device can send SMTP e-mail messages to Internet addresses. It uses SMTP-MIME to deliver these messages. It is **highly recommended** that the SMTP gateway be located on your own local area network. However, you can also configure your product for e-mail functionality even if your mail services are provided by an outside Internet service provider (ISP) over a digital subscription line (DSL).

If your server supports it, ESMTP (Extended SMTP) can be used to send e-mail. This capability is automatically detected and no specific configuration steps are necessary. The e-mail service is also compatible with the DSN (Delivery Status Notification) standard.

The document that you scan at the device becomes an attachment to your e-mail message. The portable document format (.PDF) file format is most often used for the attachments, which gives recipients the ability to both view and print them. Users can obtain a free copy of the Adobe® Acrobat® Reader for viewing .PDFs from the Adobe Systems Incorporated Web site (http://www.adobe.com).

Use the **E-Mail** tab of the configuration program to configure and organize the SMTP e-mail servers that HP DSS uses to send e-mail messages.

To add SMTP servers

1. Click **Find Servers** to find all of the SMTP servers on the network.
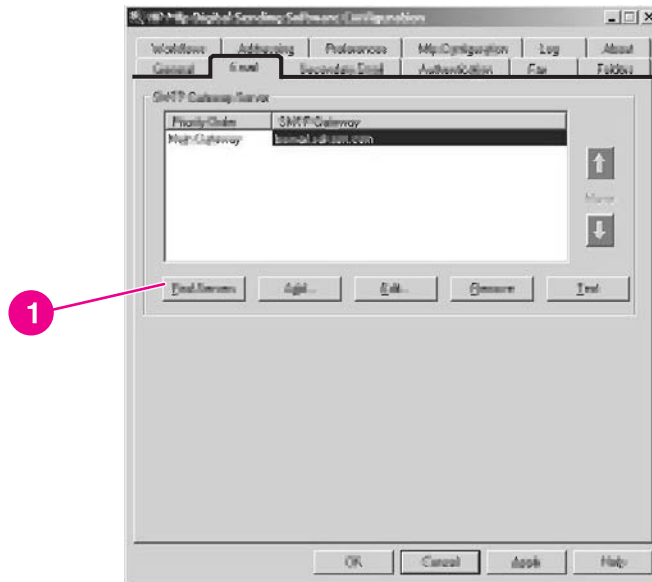
2. A list of SMTP servers appears. Select one or more and click **OK**. The selected servers are loaded into the **SMTP Gateway Server** list.
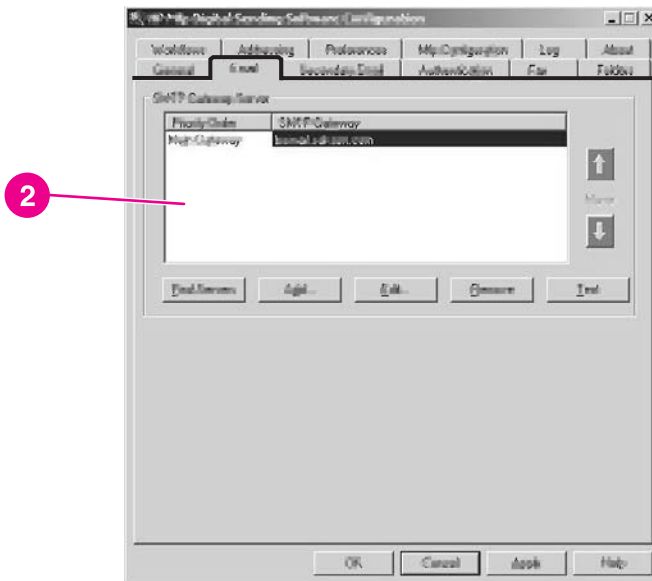
NOTE   If the discovery process does not find any SMTP servers, use the **Add** button on the **E-mail** tab to add the SMTP server manually by typing in the host name or IP address of the SMTP server.

3. Select each server and click the **Edit...** button.
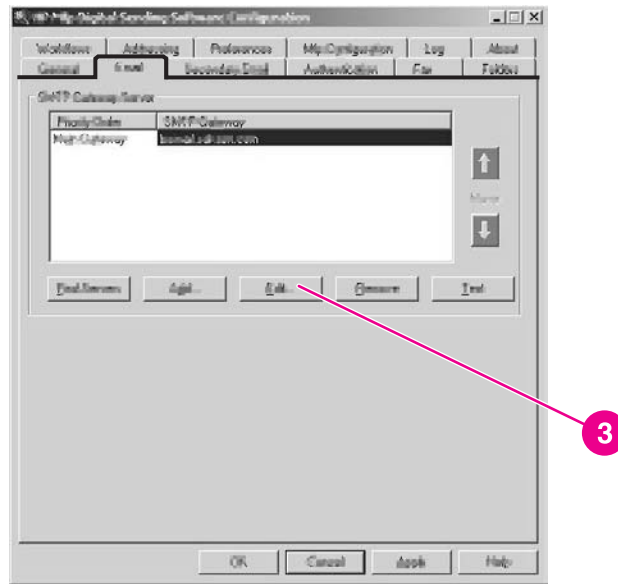
The **Edit SMTP Gateway** dialog box appears.
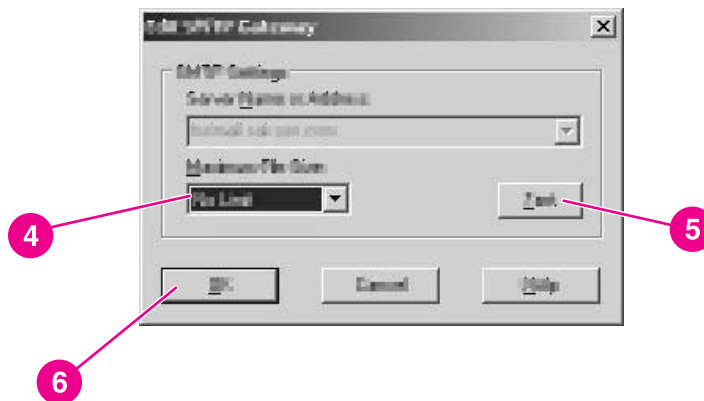
4. If you want to set a maximum file size for the specified SMTP gateway, select it in the **Maximum File Size** drop-down list. If an e-mail attachment is larger than this file size, the attachment will be divided into two or more smaller attachments.

5. Click **Test** to verify the presence of the SMTP gateway.

NOTE   If the test fails, double-check the gateway address and then contact your network administrator to see if the SMTP server is functioning.

6. Click **OK** to save the SMTP settings.

7. Add more SMTP servers as needed, and use the **Move** arrow buttons to change the priority order.
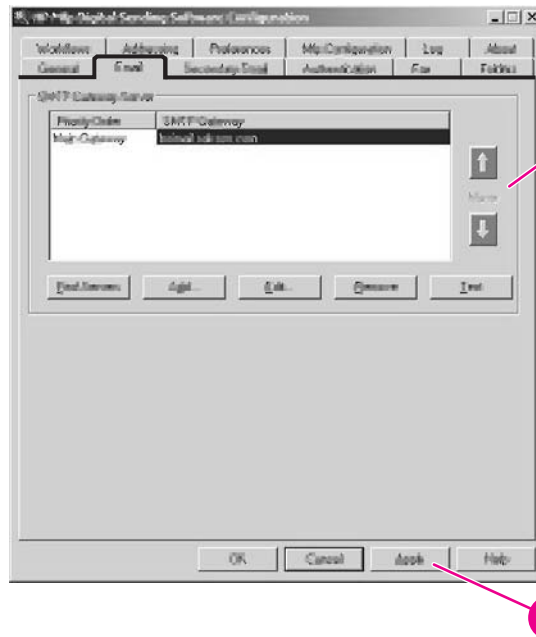
8. Click **Apply** to save the E-mail settings.

NOTE   Click the **Help** button to get more information about this tab.

Secondary E-mail tab

A number of third-party software vendors offer services for secure e-mail delivery. For example, Omtool offers a secure email solution that encrypts email messages and requires authentication for recipients before the email message can be delivered. These programs help organizations comply with new laws being enacted such as the E-sign act and the HIPAA requirements for electronic delivery of confidential documents. The Secondary E-mail feature is designed to work with one of these third-party software programs for users that require an extra measure of data security. It differs from the regular e-mail feature in that the data between the device and the HP DSS server is encrypted. An rfc822-compliant e-mail message that includes the scanned data as a MIME attachment is created in the folder "\HPEMAIL2" in the HP DSS program directory on the HP DSS server. The third-party software program, which is monitoring this folder, processes the e-mail message and sends it out in a secure manner.

The **Secondary E-mail** tab contains settings for the secure e-mail option.
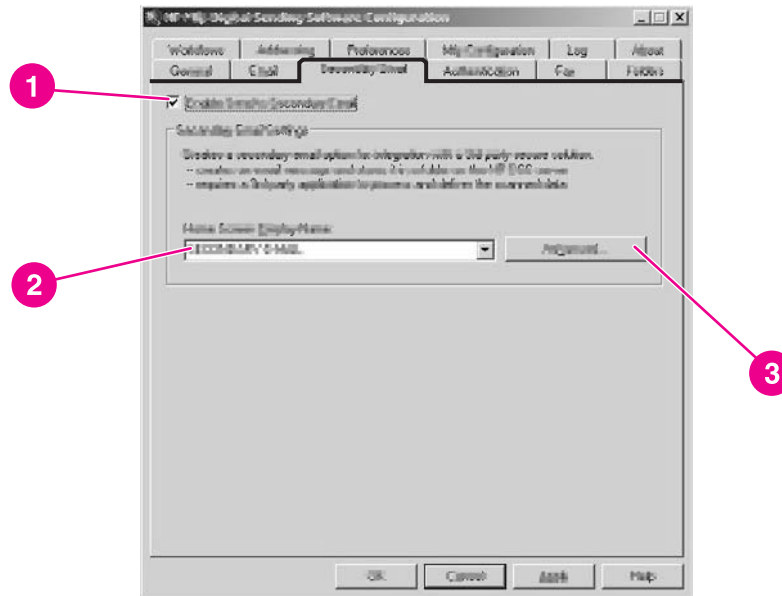
1. To enable the Secondary E-mail option, select the **Enable Send to Secondary E-mail** check box.

2. The name of this feature can be altered to more closely reflect the third-party program's functionality (such as Secure or Encrypted E-mail). The name provided here will be displayed on the digital sender's control panel home screen. Use the **Home Screen Display Name** field to specify the display name. Type a custom display name into the **Home Screen Display Name** box or select from one of the following options:

   - Secondary E-mail
   - Secure E-mail
   - Specialized E-mail

3. Click the **Advanced...** button on this tab to specify any X-Headers that you want to include in the e-mails.

   X-Headers provide the administrator with the capability of providing a user-defined header that will be inserted in the rfc822 file for each Secondary E-mail message sent by the digital sender. The third-party e-mail software program can then perform actions based on this header information.

NOTE   Click the **Help** button to get more information about this tab.

Authentication tab

Use the **Authentication** tab to control how users are authenticated when using the digital-sending features. Authentication is an important security feature of the digital sender. It is highly recommended that you enable authentication on the digital sender in order to prevent unauthorized use.

Authentication consists of two interdependent parts. First, the device verifies the user's credentials by using the selected authentication method. Then, the device attempts to find the user's e-mail address in the database of an LDAP server by using settings specific to your LDAP server. If either step fails, the user is denied access to the digital-sending features. These two steps utilize two distinct technologies (an authentication server and an LDAP server), except in the case of the LDAP server method, where both steps are accomplished by using the LDAP server.

To enable authentication, start by selecting an option from the **Authentication Method** drop-down list. The following options are available.

● None

● Microsoft® Windows

● LDAP server

● Novell NDS (if Novell client software is present)

● Novell Bindery (if Novell client software is present)

LDAP Configuration

After you select the authentication method on the **Authentication** tab, the LDAP configuration settings appear. The device uses LDAP to retrieve the e-mail address for the authenticated user. After the user has provided valid credentials, the software uses this information to match an attribute in the LDAP database. After the match is made, and the user is identified in the database, the user's e-mail address is retrieved by using another database attribute. The LDAP settings include the following options.

● Options for configuring HP DSS to gain access to the LDAP server

● Options for searching the database to obtain user e-mail addresses

To configure the LDAP server
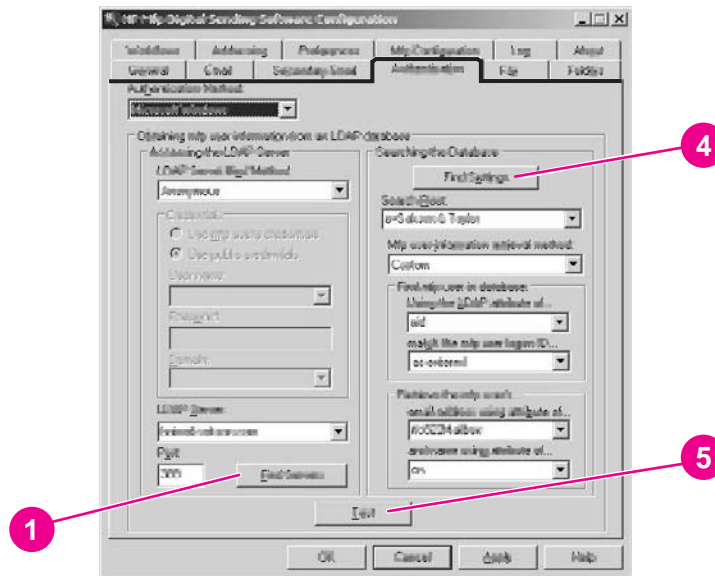
1. Click the **Find Servers** button. The program searches the network for LDAP servers, and might also prompt you for your network username and password, depending on your network configuration. Next, the **Select LDAP Server** dialog box appears, containing a list of LDAP servers on the network.

2. Select the LDAP server that you want to use. The information about the selected server appears.

3. Click **OK** to accept the selected server. The server information is filled in on the **Authentication** tab.

4. Click **Find Settings**. The server settings appear in a dialog box. Click **Yes** to accept the settings.

5. Click the **Test** button on the **Authentication** tab to test the settings. In the **Test User Authentication** dialog box, type in the network logon credentials of a user in order to test wether LDAP can successfully retrieve an e-mail address.

NOTE   If the **Find Servers** process fails to find any LDAP server, you can type the host name or IP address of the LDAP server directly into the **LDAP Server** text box, and then use the **Find Settings** button to retrieve the server's settings. See Troubleshooting SMTP and LDAP servers for more information, and if you are unable to communicate with the LDAP server, contact your network administrator for help with troubleshooting.

NOTE   Click the **Help** button to get more information about this tab.

Fax tab

If this feature is enabled, users can send faxes directly from the device. They can select destinations from an address book if one is loaded, or type fax numbers in at the control panel. The same document can be sent to multiple fax numbers.

The configuration program **Fax** tab controls all of the HP DSS fax settings.

To configure the fax option, first select the fax delivery method from the **Faxing Method** drop-down list. The following options are available.

- None
- LAN Fax
- Internet Fax
- MS Windows 2000 Fax

Depending on which method is selected, the applicable settings appear on the **Fax** tab. Fill in these settings to complete the fax configuration process.

To set up a LAN fax service

Follow these instructions to set up faxing from the digital sender by using your network's LAN fax service.
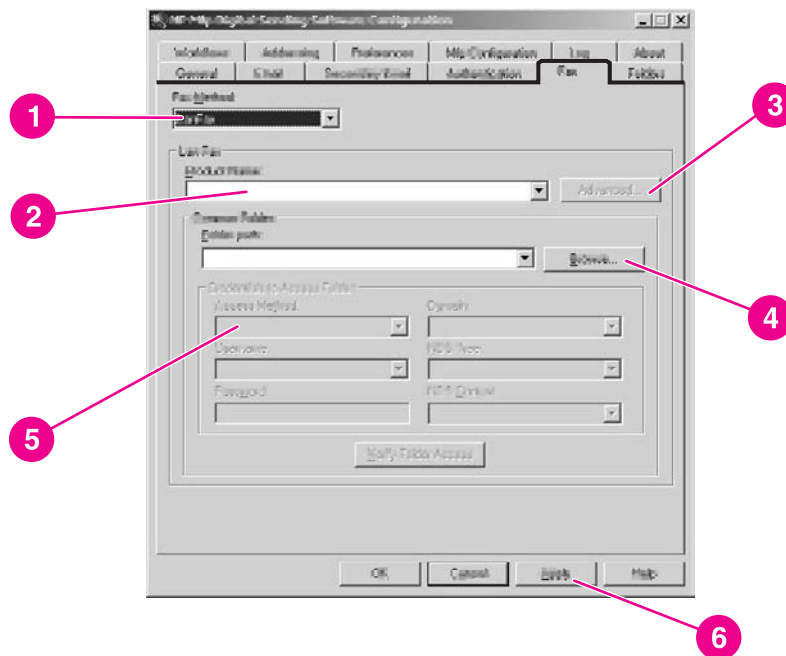
1. Select **LanFax** from the drop-down list on the **Fax** tab.
2. Select your LAN fax software product name from the **Product Name** drop-down box.
3. Click the **Advanced** button to set up input and output settings for your LAN fax product.
4. Use the **Browse** button to select the network folder that your fax software uses.
5. Fill in the **Credentials to Access Folder** section, if required. Use the **Verify Folder Access** button to test the credentials and make sure that you have access to the folder.
6. Click **Apply** to save the LAN fax settings.

To set up an Internet fax service

With an Internet fax service, faxes are sent by e-mail. When using HP DSS, the user specifies a fax number at the device, and then the software creates and sends the e-mail behind the scenes.
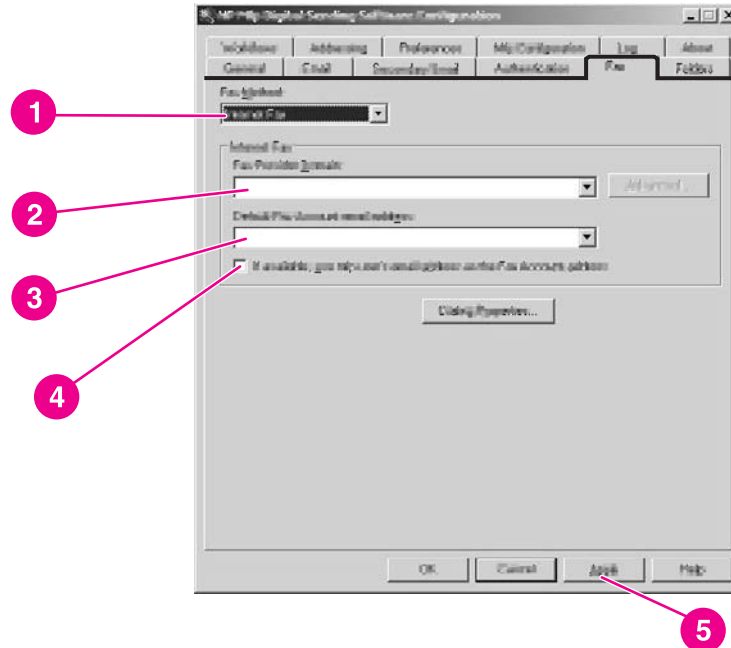
1. Select **Internet Fax** from the drop-down list on the **Fax** tab.

2. Type the domain name for your Internet fax provider into the **Fax Provider Domain** text box, for example, **efax.com**. HP DSS takes the phone number that is typed at the device and then uses this domain name to create the e-mail, for example, [phone number]@efax.com.

3. Type a valid e-mail address into the **Default Fax Account e-mail address** text box. The fax service uses this e-mail address for billing purposes and for any returned or failed Internet fax e-mail.

4. Select the check box if you want HP DSS to use the authenticated user's e-mail address as the return e-mail address.

5. Click **Apply** to save the Internet fax settings.

To set up a Windows 2000 fax service

In order to use the Windows 2000 fax service, you must have a fax modem installed on the HP DSS server.

1. Select **MS Windows 2000 Fax** from the drop-down list on the **Fax** tab.

2. Click the **Fax Properties** button. The Windows **Fax Console** dialog box appears. Use the **Tools** menu to configure any settings, if needed.

3. Click **Apply** to save the Windows 2000 fax settings.

NOTE   Click the **Help** button to get more information about the **Fax** tab.

Folders tab

Use the **Folders** tab to set up the send-to-folder feature. To enable this option, select the **Enable Send to Folder** check box.

To add folders to the Folders list
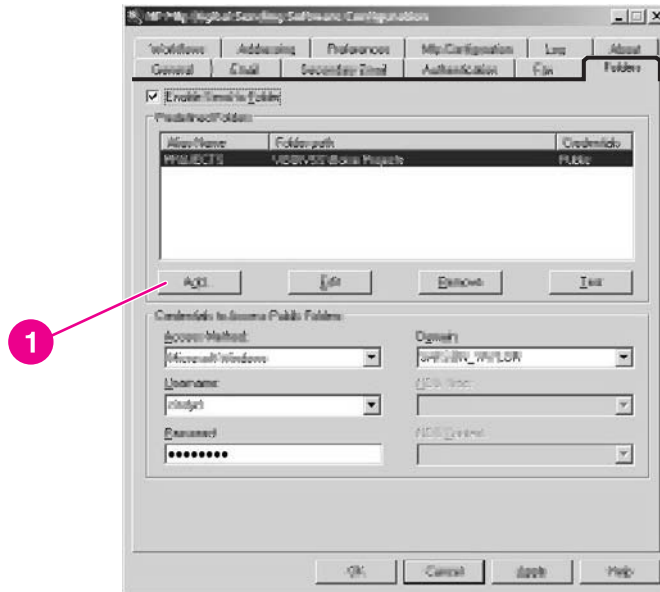
1. Click **Add…** to add a new folder. The **Add Predefined Folder** dialog box appears.
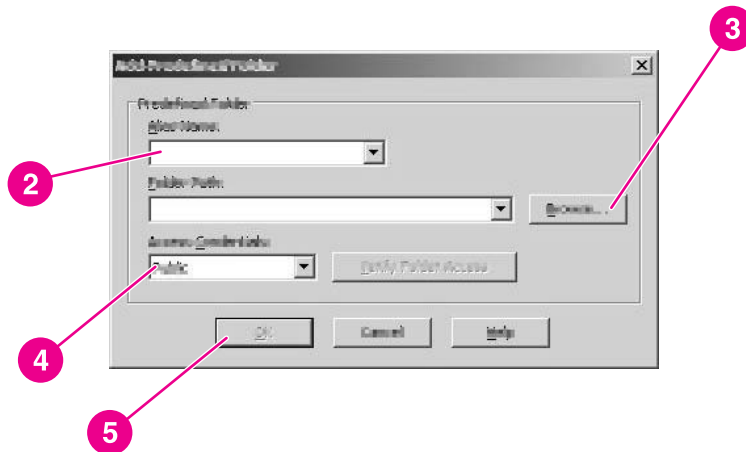
2. Type a name for the folder into the **Alias Name** text box. This name appears in the device control-panel interface.

3. Click **Browse…** to browse to a folder location, and then click **OK** to accept it.

NOTE   Supported operating systems for folder destinations are Windows 98, Windows NT, Windows 2000, Windows XP, Windows Server 2003, and Novell NetWare.

4. Select the credentials that you want to use for access to the folder from the **Access Credentials** drop-down list. If **Public** is selected, the program uses the **Credentials to Access Public Folders** from the **Folders** tab. If **MFP User** is selected, the program uses the credentials with which the user has logged into the device.

5. Click **OK** to save the settings. The new folder is added to the list.

6. Repeat steps 1 through 5 to add more folders.
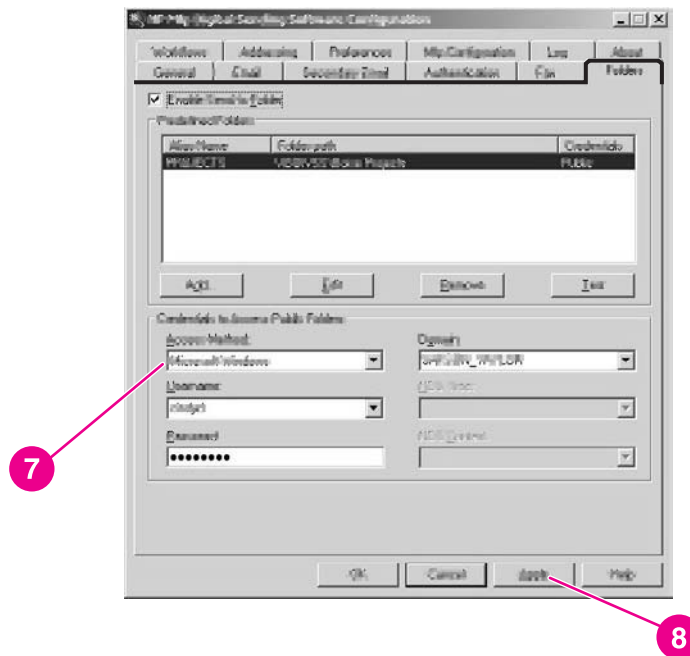
7. Type in the public access credentials that are required for access to folders in the **Credentials to Access Public Folders** area of the **Folders** tab. This information is required before you can save the folder list.

8. Click **Apply** to save the new folders.

NOTE   Click the **Help** button to get more information about this tab.

Workflows tab

With workflows, users can scan a document and send it to a custom workflow destination. The workflow feature gives users the ability to send additional information in the form of a file that is saved with the scanned document in a specified network or FTP location. Prompts at the control panel are used to collect specific information. A third-party software program monitoring the network folder or FTP site can then retrieve and decipher the information, performing the specified operation on the scanned image. You can also set up a printer as a workflow destination, which allows users to scan a document and then send it directly to a network printer to be printed.

Use the **Workflows** tab to set up workflow processes for use with third-party software programs. To enable this feature, first select the **Enable Workflows** check box at the top of the tab.

Creating a workflow process consists of three parts:

- The workflow group, which defines which workflow menus and forms will be available on the control panel of the digital sender.

- The workflow menu, which creates logical groups of workflow forms.

- The workflow form, which collects information entered by the user at the control panel before initiating a send-to-workflow job.

To create a workflow group
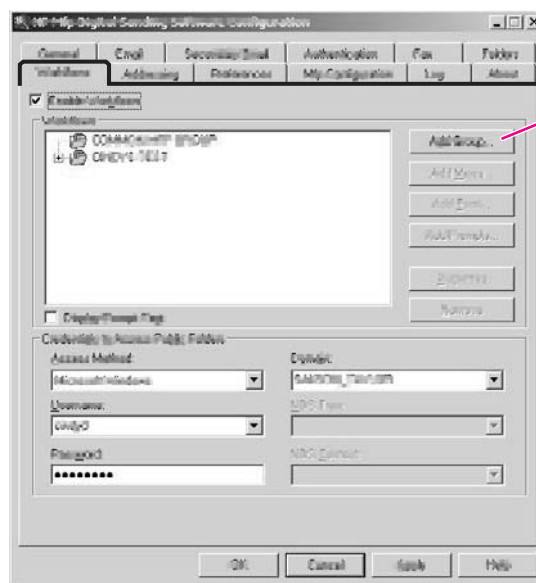
1. Click the **Add Group** button. The **Workflow Group** dialog box appears.

2. Type the name of the new group. The name must be unique.

3. Click **OK** to save the new group.

To create a workflow menu

1. In the workflow tree, select the group that you just created.
2. Click the **Add Menu** button. The **Workflow Menu** dialog box appears.
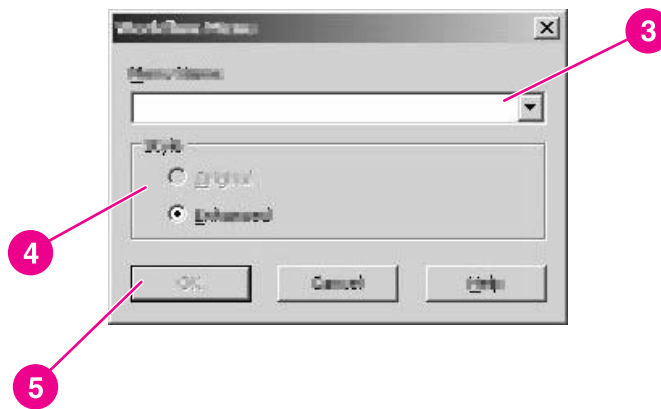
3. Type the name of the new menu. This name must be unique within the workflow group.

4.   Select the style of the workflow menu. The style determines which options are available for workflow forms within this workflow menu. The only available choice is **Enhanced**.

5.   Click **OK** to save the new workflow menu.

To create a workflow form

1.   Select the workflow menu that you just created.
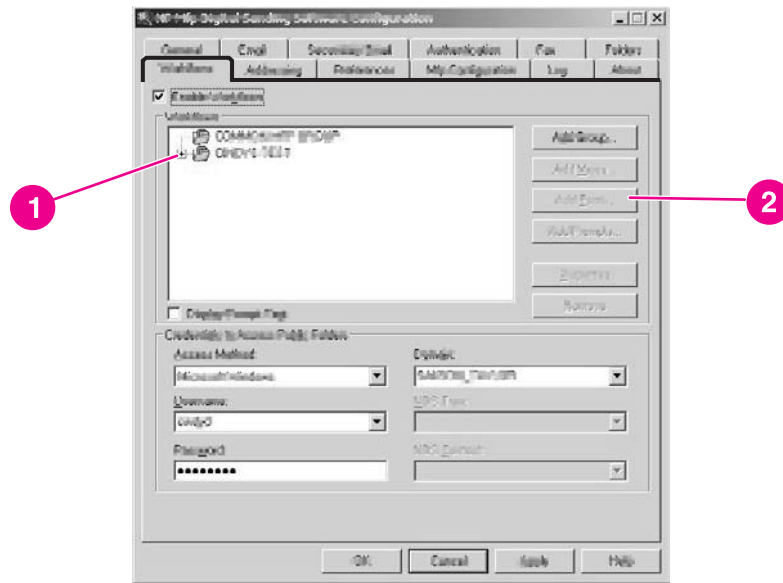
2.   Click the **Add Form** button. The **Workflow Form** dialog box appears.
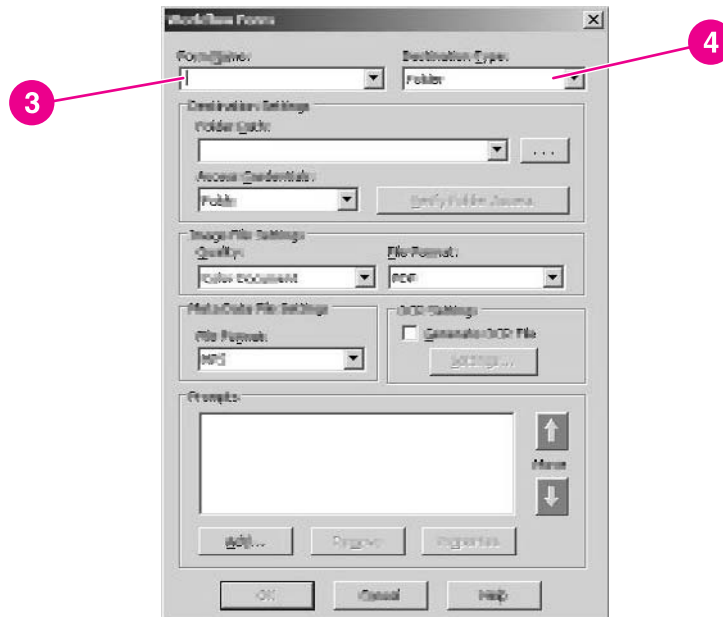
3. Type a name for the new form into the **Form Name** text box.

4. Select the destination type from the **Destination Type** drop-down list. The options are Folder, FTP Site, and Printer.

5. Type the path for the destination folder in the **Folder Path** text box, or use the browse button to select a path.
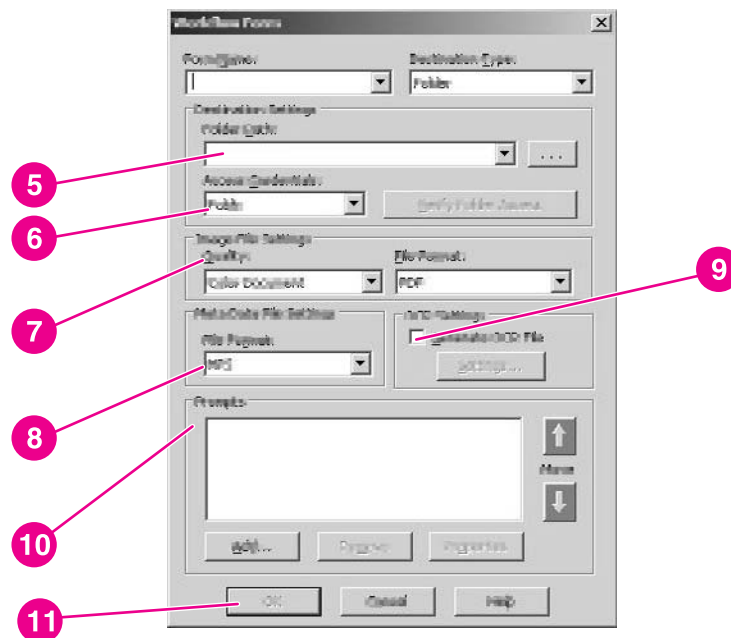
6. Select the access method for the folder from the **Access Credentials** drop-down list. The choices are "Public" and "MFP User." If MFP User is selected, HP DSS uses the credentials of the user that is logged in to the device. If Public is selected, HP DSS uses the **Credentials to Access Public Folders** that are specified on the main **Workflows** tab.

7. Under **Image File Settings**, select the settings for the scanned file. These should be the settings that are required by the third-party software program that processes the file.

8. Select the file type for the metadata file from the **File Format** drop-down list. The options are None, .HPS, or .XML. This is the file that contains the data that the workflow prompts collect. If you are not creating any prompts, you can select None.

9. Select the **Generate OCR File** check box under **OCR Settings** if the processing software program needs an OCR (optical character recognition) file. Click the **Settings** button to specify the OCR settings for language and output file format.

10. In the **Prompts** area, you can define prompts and expected responses for the user of the workflow form. The prompts appear on the device control panel. The responses to the prompts are saved in the metadata file, which is stored with the document image for use by the third-party workflow software program.

Follow these instructions to add prompts.

a. Click the **Add** button to add prompts.

b. In the **Add Prompts** dialog box, click the **New** button to create a new prompt. This opens the **Workflow Prompt** dialog box.

c. Under **Prompt Settings** in the **Workflow Prompt** dialog box, type the **Prompt Name**, the **Prompt Text**, and any **Help Text** for the prompt. The Help text appears if the user touches the HELP button on the digital-sender control panel while the prompt is on the screen.

d. Under **Response Settings**, select the **Response Format**. The Response Format options are String, Numeric, Date, Time, or Privacy.

e. Under **Response Type**, select **User Editable** or **Selection List**. If **User Editable** is selected, you can select the **User must supply a response** check box to require a response.

f. If applicable, type a default response in the **Default Response** text box. The program uses the default response if the user does not provide a response to the prompt.

g. Click **OK** to save the prompt settings. The new prompt is added to the **Prompts List** in the **Add Prompts** dialog box.

h. Repeat steps b through g as needed to create more prompts.

i. After creating all of the required prompts, you can use the **Move** buttons at the bottom of the list to adjust the order of the prompts.

j. Click **OK** to accept the new set of prompts. The new prompts appear in the **Prompts** area of the **Workflow Form** dialog box.

11. Click **OK** to accept all of the settings on the **Workflow Form** dialog box. The new form appears in the workflows list on the **Workflows** tab.

NOTE   A workflow form can be edited at any time by selecting it and then clicking the **Properties** button.

12. Type the public access credentials for access to workflow folders in the **Credentials to Access Public Folders** area of the **Workflow** tab. This information is required before you can save the workflow settings.

13. Click **Apply** to save the new workflow settings.

To create a workflow form for an FTP site
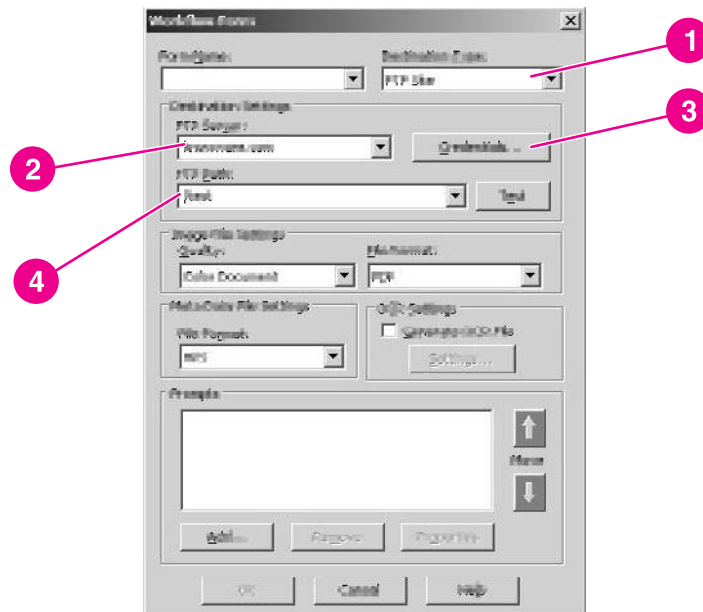
1. In the **Workflow Form** dialog box, select **FTP Site** in the **Destination Type** drop-down box.

2. Type the host name or IP address of the FTP server into the **FTP Server** text box.

3. Click the **Credentials** button, and then type in the user name and password that are required for the FTP server. Click **OK** to save the credentials.

4. In the **FTP Path** text box, type in the path to the directory on the FTP server that you want to use for the scanned documents.

5. Follow Steps 7 through 11 in the previous procedure to complete the remainder of the workflow form settings and add any prompts.

To create a workflow for a printer

You can use a workflow form to send a scanned document to a network printer to be printed.
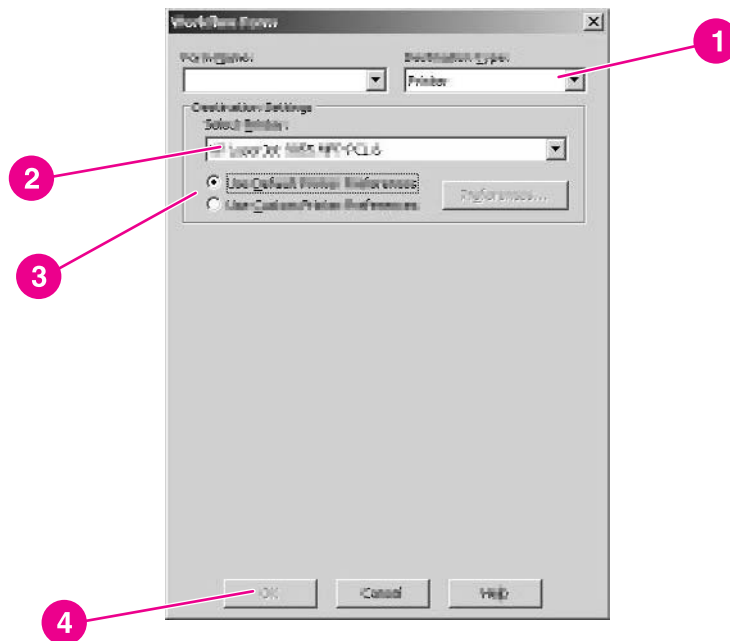
1. In the **Workflow Form** dialog box, select **Printer** in the **Destination Type** drop-down box.

2. Select a printer from the **Select Printer** drop-down box, which lists the available network printers.

3. Select one of the radio buttons to use the default or custom printer preferences. If you select custom printer preferences, click the **Preferences** button to set them up.

4. Click **OK** to save the workflow form.

5. Click **Apply** to save the settings on the **Workflow** tab.

NOTE   Click the **Help** button on the **Workflows** tab or any of the workflow dialog boxes to get more information.

Addressing tab

Use the **Addressing** tab to configure HP DSS to make centralized address books available to digital-sender users.

LDAP directory replication

An address book is available on the digital sender to speed up the process of selecting e-mail and fax destinations from the control panel. The e-mail addresses and fax numbers in the address book come from several sources:

● The LDAP server on the network

● Destinations previously specified by users at the control panel

● E-mail and fax address books created with the HP Address Book Manager

You can use one of two methods to synchronize the digital-sender address books with the LDAP server.

Method	Description	Effect at the control panel
Using a replicated LDAP address book	HP DSS takes a snapshot of the LDAP server's database and populates the digital sender's address book with the addresses that it finds. The HP MFP DSS Configuration Utility can be used to either manually initiate the task or schedule it to run automatically at a certain time.	As you type the initial characters in a name, the digital sender attempts to complete the name from the names in the address book. You type more characters until a match is found. When you select a name, the associated e-mail address is automatically selected.
Using an LDAP address book directly	Firmware in the digital sender initiates and resolves name queries directly with the LDAP server. You do not have to synchronize the address book with the LDAP server, either manually or according to a schedule.	You type a partial name. The digital sender displays the list of resulting names from the LDAP server. When you select a name, the associated e-mail address is automatically selected.

NOTE   If the digital sender is configured to use an LDAP address book directly, it cannot access the replicated address book.

If replication is enabled, only the display names and e-mail addresses are replicated.

To set up automatic replication of the LDAP address book
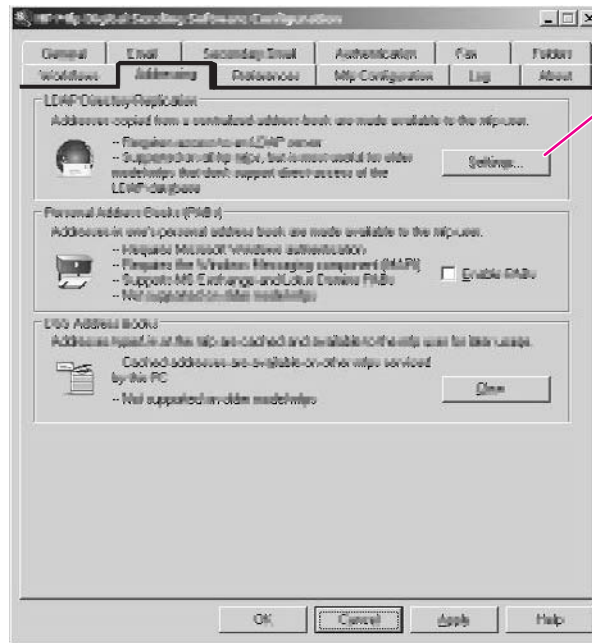
1. Click the **Settings...** button. The **Replicating LDAP Address Book** dialog box appears.

2. Select the **Enable LDAP Directory Replication** check box.

3. On the **LDAP Settings** tab, set up the necessary parameters for logging into the LDAP server and searching the LDAP database. See LDAP Configuration for more information. After setting up the LDAP parameters, you can also click the **Advanced** button to set up more advanced LDAP search options.

4. On the **Replication** tab, select the schedule for replicating the LDAP database. If you select **Daily**, **Weekly**, or **Monthly**, you can set a specific time and day of the week for the replication process.

Personal address books

Select the **Enable PABs** check box to enable users to use their personal address books to address e-mail on the digital sender. Personal address book support is only available if authentication is enabled and the authentication method is set to Microsoft Windows (see Authentication tab). The Microsoft Messaging API (MAPI) is also required to interface with a user's personal address book. Make sure that the Windows Messaging Component is installed. If you have a MAPI client software program installed (such as Microsoft Outlook), this component should already be in place.

DSS address books

HP DSS uses address books to store e-mail addresses that a user types at the device. If user authentication is enabled on the device, addresses are stored in a user's individual HP DSS address book. Otherwise, the addresses are stored in a public HP DSS address book. HP DSS address books are available to every digital sender or MFP that HP DSS supports. If the addresses that are contained in these address books are no longer needed, you can clear out any or all of the HP DSS address books by clicking the **Clear** button in the **DSS Address Books** section of the **Addressing** tab. This displays a list of any existing address books.

See Working with address books for more details on address books.

<table>
<tr><td>NOTE</td><td>Click the **Help** button to get more information about the **Addressing** tab.</td></tr>
</table>

Preferences tab

The **Preferences** tab specifies the path for the HP DSS temporary files. These files can be very large, so you should select a location that has sufficient disk space. Click the **Browse...** button to select a location.

Click **Apply** to save the new folder path if you change it.

<table>
<tr><td>NOTE</td><td>Click the **Help** button to get more information about this tab.</td></tr>
</table>

MFP Configuration tab

The **MFP Configuration** tab specifies which digital senders and MFPs are using the
HP DSS service, and also provides an interface for customizing HP DSS features for specific
digital-sending devices.
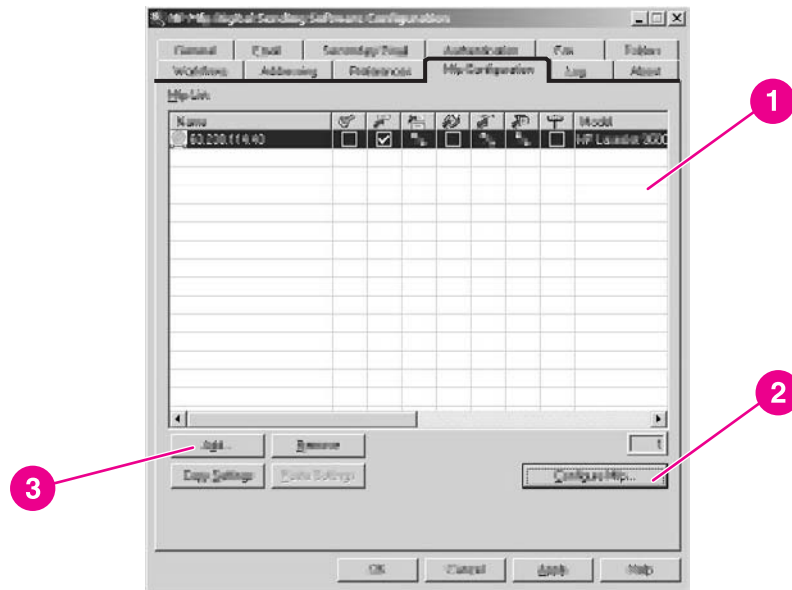
MFP Configuration tab

1   MFP list
2   **Configure MFP** button
3   **Add** button

To add a new digital sender or MFP

1. Click the **Add...** button near the bottom of the tab. The **Add MFPs** dialog box appears.
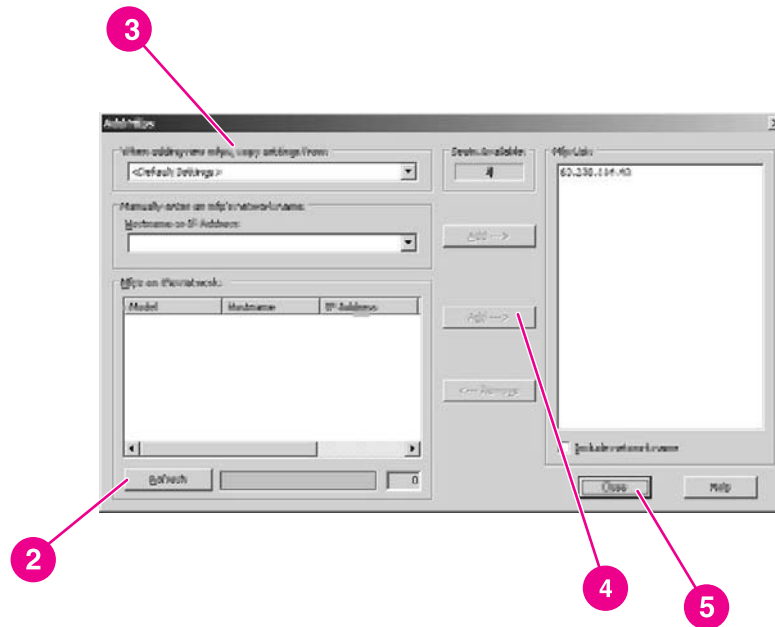
2. Click the **Find MFPs** button to find all of the MFPs and digital senders on the network. Select the device you want to add from the list that appears.

If you know the hostname or IP address of the device, you can type it in the **Hostname or IP Address** text box under **Manually enter an MFP's network name** rather than using the **Find MFPs** button.

3. If you want the device that you are adding to use the same settings as a previously configured device, select the previously configured device from the **When adding new MFPs copy settings from** drop-down list.

4. Click the **Add-->** button to add the device to the **MFP List**.

You can only add as many digital senders or MFPs as you have "seats" available in your HP DSS license. Near the top of the **Add MFPs** dialog box you can see how many seats you have available.

5. Click **Close** to close the **Add MFPs** window.

To configure an individual digital sender or MFP

1. Select the digital sender or MFP from the list on the **MFP Configuration** tab.

2. Click the **Configure MFP...** button. The dialog box that appears looks similar to the main Configuration program interface. Use this interface to customize the specific digital-send settings for this device. Settings that are specified on these tabs override the settings that are made on the general HP DSS Configuration program tabs.

NOTE   You must use this interface to enable the digital sending features for the individual devices. Even if a feature is enabled on the HP DSS configuration tabs, it is not enabled on the device until it has been enabled in the **Configure MFPs** interface.

3. On the **Authentication** tab, select the **Enable Authentication** check box to enable authentication for the selected device. Select the check boxes next to the features that you are enabling. This requires the user to log in before using that feature. Select the network domain from the **Default Domain** drop-down box.

4. On the **Send to Email** tab, select the **Enable Send to Email** check box, and select **via the Digital Sender service** in the **Send Emails** drop-down list.

5. If you would like the users to be able to add their own e-mail message when sending e-mail, click the **Advanced** button and select the **Editable by user** check box.

6. On the **Addressing** tab, select the **Allow MFP to directly access an LDAP Address Book** check box if you want HP DSS to retrieve e-mail addresses directly from an LDAP server. Select the previously-configured LDAP server in the **LDAP Server** drop-down list.

7. On the **Send to Email (2)** tab, select the **Enable Send to Secondary Email** check box if you are using the secondary e-mail feature. Select the display name for the secondary e-mail service from the **Home Screen Display Name** drop-down list.

8. On the **Send to Fax** tab, select the **Enable Send to Fax** check box if you are using the fax feature. Make sure that **via the Digital Sending service** is selected in the **Send Faxes** drop-down list.

9. On the **Send to Folder** tab, select the **Enable Send to Folder** check box if you are using this feature.

10. On the **Send to Workflows** tab, select the **Enable Send to Workflows** check box if you are using workflows. In the **Workflow Group** drop-down box, select the group that contains the workflow menu and form that you want to use for this device.

11. Click **OK** to save all of the changes.

12. Click **Apply** to update the **MFP Configuration** settings.

NOTE   The settings are not propagated to the digital sender until you click the **Apply** button.

To configure a group of digital senders or MFPs

If you need to configure a group of digital senders or MFPs, you can configure them all at one time rather than one by one. To do this, hold down the Shift key or Ctrl key on your keyboard and then click on the devices you want to configure on the **MFP Configuration** tab. Then click **Configure MFP** to configure the entire group.

NOTE   The devices you select must all be of the same type. For example, they must be all digital senders, or all MFPs of a specific model type.

Click the **Help** button to get more information about the **MFP Configuration** tab.

Log tab

The **Log** tab shows the HP DSS activity log. This log contains all of the activities that the HP DSS service performs. The following information is included in the list for each log entry:

- Severity
- Event
- Date and Time

Click the **Details** button to open a **Details** dialog box that provides additional information about the selected log event.

Click the **Help** button to get more information about this tab.

About tab

The **About** tab provides HP DSS version information.

Click the **Help** button to get more information about this tab.

Testing the configuration

After configuring all of the digital-sending features, you should test them on the digital sender. Verify that all of the enabled options appear on the digital-sender control-panel display. Then try each option to make sure that the document is successfully delivered to the correct location.

Uninstalling the software

Uninstall the HP DSS service software by using one of the following procedures.

To uninstall the software with the uninstall program

To uninstall the software from Windows 2000 or XP, you must log on with administrator privileges.

1. Close all of the open programs.
2. On the **Start** menu, point to **Programs**, point to **Hewlett-Packard**, point to **HP MFP Digital Sending Software**, and then click **Uninstall**.

3. In the **Confirm Uninstall** dialog box, click **OK**.

4. The uninstall process removes the program from your computer. At the end of the process, you might have to restart your computer.

To uninstall the software with Add or Remove Programs

An alternate method for uninstalling the digital sender software is to use the Windows **Add or Remove Programs** method.

1. Click **Start**, point to **Settings**, and then click **Control Panel**.

2. Click **Add or Remove Programs**.

3. Scroll through the list of software programs and click **HP MFP Digital Sending Software**.

4. Click **Remove**.

3 Administering the digital sender

This section provides information about the tools that you can use to administer the digital sender.

Using the embedded Web server and HP Web Jetadmin

The embedded Web server (EWS) and HP Web Jetadmin are two online tools that can be used to remotely administer the device.

The embedded Web server

This digital sender is equipped with an embedded Web server, which provides access to information about digital sending and network activities. When a Web server is "embedded," that means that it resides on a hardware device (such as a digital sender) in the firmware, rather than as software that is loaded on a network server. The advantage of an embedded Web server is that it provides an interface to the device that anyone who has a network-connected computer and a standard Web browser can use. You do not need to install or configure any special software.

Features

Use the EWS to view the digital sender and network status and to manage digital sending functions from your computer. With the EWS, you can complete the following tasks:

- View digital-sender status information
- Determine the remaining life on the ADF Maintenance Kit
- View the control-panel menu configuration
- View device configuration reports
- Receive notification of digital-sender events
- Add or customize links to other Web sites
- Select the language in which to show the embedded Web server pages
- View and change network configuration

To view the EWS Web pages

To view the EWS Web pages, you need to have the device's IP address. You can find the IP address in one of the two following ways:

- Go to the digital sender and look at the upper-left corner of the touchscreen. Next to the word **Ready** the IP address should appear.

- If the IP address does not appear on the touchscreen, press the MENU button on the control panel. Touch the **INFORMATION** menu, and then touch **CONFIGURATION**. The digital-sender configuration information appears on the touchscreen. Touch the **OK** button to see the Jetdirect data. Scroll through the information until you find the IP address.

Open a Web browser and type the digital sender's IP address into the Address box to open the EWS Web page.

NOTE You can gain access to the embedded Web server from any operating system that supports the TCP/IP protocol and a Web browser, preferably either Netscape Navigator 4.7x or Microsoft Internet Explorer 5.0**x** or later. You cannot view the embedded Web server pages from outside a firewall.

Information pages

The pages on the **Information** tab of the embedded Web server provide status information for the digital sender.

- **Device Status page**—This page shows the status message that currently appears on the device control panel.

- **Configuration page**—The digital-sender **Configuration** page lists device information that includes the serial number, and other information about the device. It also has an **Options** list that lists options that are installed in each DIMM slot, CompactFlash slot, and EIO slot. The **Memory** section of the page lists the digital-sender memory (RAM) information, and the **Security** section lists the status of the security features.

- **Supplies Status page**—This page shows the status of the ADF Maintenance Kit, and indicates how soon it needs to be replaced.

- **Usage page**—This page shows how many pages have been scanned by the device and how many pages have been scanned with the ADF and the flatbed.

- **Device Information page**—This page lists the device name for network management needs, and shows the IP address for the device.

NOTE The device name can be edited on the **Settings** tab.

- **Control Panel page**—The Control Panel page shows a snapshot of the current state of the control panel. Click the **Refresh Image** button to refresh the snapshot.

Settings pages

The pages on the **Settings** tab of the EWS contain a variety of digital-sender settings.

- **Configure Device page**—The options on this page are the same as some of the menus on the device control panel. Use this page to configure some of the digital-sending options.

- **E-mail Server page**—Use this page to set up the SMTP server that should be used to send digital sender e-mail alerts (set up on the **Alerts** page).

- **Alerts page**—Use this page to set up e-mail alerts for many digital-sender events. These alerts can be sent to a list of up to 20 e-mail, mobile device, or Web site destinations.

- **AutoSend page**—Use the AutoSend screen to send product-configuration and usage information periodically to your service provider. This feature establishes a relationship with Hewlett-Packard Company or another service provider to provide you with services that include support agreements and usage tracking.

- **Security page**—Use the **Security** page to set up a password to prevent unauthorized users from gaining access to device configuration settings. After a password has been set, any user opening the EWS Web page only sees the **Information** tab. To view the other tabs, you must click the **Log In** link in the upper right corner of the screen and log in using the password.

NOTE For security reasons, it is strongly recommended that you set up a password to protect the digital sender EWS. This prevents unauthorized users from making configuration changes. See Controlling security for more information about security.

- **Edit Other Links page**—Use this page to add links to the **Other Links** box, which appears in the lower-left corner of the EWS Web pages.

- **Device Information page**—Use this page to change the device name, asset number, and company contact information.

- **Language page**—Use this page to specify the language that the EWS Web pages use.

- **Date and Time page**—Use this page to set the correct date and time for the device.

- **Wake Time page**—Wake Time can be set to wake the product up at a certain time on a daily basis. There can only be one wakeup setting per day; however, each day can have a different wakeup time. The sleep mode delay can also be set on this page.

Digital sending pages

The pages on the **Digital Sending** tab of the EWS control configuration of the digital-sending features. Because the digital sender uses the HP DSS service to carry out its digital sending tasks, it must be configured by using the HP MFP DSS Configuration Utility. This centralizes configuration tasks and helps control security. Therefore, you do not have access to any of the configuration settings on the **Digital Sending** tab as long as the digital sender is using the HP DSS service.

Networking pages

The pages on the **Networking** tab of the EWS provide information about the digital sender HP Jetdirect Inside embedded network connection and contain tools that you can use to configure some specific network settings.

HP Web Jetadmin

HP Web Jetadmin is a server-based online tool that system administrators can use to configure all of the printers and digital senders on their network. If you have a number of HP digital senders and printers, this is a useful tool for controlling and configuring them as a group rather than one by one. For supported host systems and available languages, and to download the software, go to http://www.hp.com/go/webjetadmin.

Using the control-panel menus

The control-panel menus provide access to a wide variety of digital-sender settings. Some configuration settings can only be changed by using the control-panel menus.

To view the control-panel menus, push the MENU button on the control panel.

Information menu

Use the **Information** menu to view some digital-sender configuration and statistical information.

Item	Explanation
SHOW CONFIGURATION	Shows the configuration information for the device. Click **OK** at the bottom of this screen to see the EIO/HP Jetdirect information.
SUPPLIES STATUS	Shows the remaining life for the ADF Maintenance Kit. See The ADF Maintenance Kit.
SHOW USAGE	Shows usage statistics for the number of pages that have passed through the ADF and the number of scans that have been done.

NOTE To view these reports in a printable format, open them by using the EWS Web pages. See Information pages in the EWS section.

Configure Device menu

The administrator can use the control-panel **Configure Device** menu to configure the device directly from the control panel. This menu contains the following submenus:

- Originals
- Enhancement
- Sending
- System Setup
- I/O
- Resets
- Security

Originals submenu

These settings control the default settings that describe the original document. The user can change any of these settings at the time of scanning by using the control-panel interface.

Item	Values	Explanation
PAPER SIZE	EXECUTIVE LETTER A4 A5 LEGAL B5 (JIS)	Sets the paper size of the original document. The default setting is **LETTER**.
NUMBER OF SIDES	1 2	Indicates whether one side or both sides of the original document are scanned. If **2** is selected, the ADF duplexer scans both sides. Or, if the original is placed on the glass, the device prompts the user to turn the page over after the first side is scanned. The default setting is **1**.
ORIENTATION	PORTRAIT LANDSCAPE	Indicates whether the default orientation of the content on the original is portrait (short edge at top) or landscape (long edge at top). The default is **PORTRAIT**
CONTENT	TEXT PHOTO MIXED	Describes the default content type of the original. Select **Photo** if the original consists of graphic images, or **Text** if the image consists of text only. Select **Mixed** if the original contains both graphics and text. The default setting is **MIXED**.
DENSITY	0 through 8	Specifies the default contrast and brightness of the scanned image. You can select from nine increments: 0=lightest 8=darkest The default setting is **4**.

Enhancement submenu

These settings control the default settings for the enhancement options. The user can change these settings at the time of scanning by using the control-panel interface.

Item	Values	Explanation
SHARPNESS	0 through 4	Specifies the default sharpness of the scanned image. 0=minimum sharpness 4=maximum sharpness The default setting is **2**.
BACKGROUND REMOVAL	0 through 8	Controls the default amount of background material from the original that is eliminated in the scanned image. Background removal is useful when you scan both sides and do not want the material on the first side to be visible on the second side. 0=minimum background removal (more background is visible) 8=maximum background removal (less background is visible) The default setting is **2**.

Sending submenu

These settings control the default settings for sending the scanned image. The user can change the first four of these settings at the time of scanning by using the control-panel interface. The remainder of these settings are for setting the SMTP and LDAP gateways used by the device. It is recommended that these be set up with the HP MFP DSS Configuration Utility rather than at the control panel.

Item	Values or submenu items	Explanation
E-MAIL	**SCAN PREFERENCE**	Determines whether the document is scanned in color or black and white. The default setting is **COLOR**.

Item	Values or submenu items	Explanation
E-MAIL (cont.)	**FILE TYPE**	Specifies the default file format of the e-mail attachment. ● .PDF ● .TIFF ● .MTIFF ● .JPEG The default setting is **PDF**.
	FILE SIZE	Specifies the default compression of the file, which determines the file size. ● SMALL ● STANDARD ● LARGE The default setting is **STANDARD**.
	RESOLUTION	Specifies the default resolution of the scanned image. A lower dpi results in a smaller file size, but image quality is affected. ● 75 DPI ● 150 DPI ● 200 DPI ● 300 DPI The default setting is **150 DPI**
	ADDRESS VALIDATION	Enables the device to validate e-mail syntax. Valid e-mail addresses require the @ sign and a period ("."). The default setting is **ON**.
	FIND SEND GATEWAYS	The device searches the network for SMTP and LDAP gateways that it can use to send e-mail.
	SMTP GATEWAY	The IP address of the SMTP server used to send e-mail.
	LDAP GATEWAY	The IP address of the LDAP gateway that is being used for looking up e-mail address information.
	TEST SEND GATEWAYS	Tests the configured gateways to see if they are functional.

Item	Values or submenu items	Explanation
E-MAIL (cont.)	**LDAP SETTINGS**	These are the settings that are necessary for contacting the LDAP server. The settings include the following items: • LDAP Search Root • LDAP Logon Method • LDAP Username • LDAP Password
REPLICATE MFP	None	This item copies the local Send settings from one MFP or digital sender to another. This menu item only appears if the digital sender is not connected to the HP DSS service. Send settings can also only be copied to devices that are not using the HP DSS service.

NOTE Gateway and LDAP settings are generally set up by using the HP DSS Configuration software rather than at the control panel. See Configuring HP DSS.

System setup submenu

These settings control the digital-sender system configuration.

Item	Values or submenu items	Explanation
DATE/TIME	DATE FORMAT DATE TIME FORMAT TIME	Sets the format of the date and time and presents a wizard interface to set the current date and time.
SHOW ADDRESS	AUTO OFF	Controls whether or not the device IP address appears on the home screen (next to "Ready"). The default setting is **AUTO**.

Item	Values or submenu items	Explanation
SLEEP DELAY	1 MINUTE 15 MINUTES 30 MINUTES 45 MINUTES 60 MINUTES 90 MINUTES 2 HOURS 4 HOURS	Sets how long the device remains idle before it enters Sleep mode. Sleep mode minimizes the amount of power that the device consumes when it is idle, and reduces wear on the digital-sender electronic components (by turning off the display backlight). The default setting is **60 MINUTES**.
SEND SETTINGS	**INACTIVITY TIME OUT**	This is the amount of time before the device resets to default settings after a period of inactivity on the control panel. It is a range from 10 to 300 seconds. The default setting is **60**.
	AUTO SETTINGS RESET	Controls whether or not the device automatically resets to default settings as soon as the user initiates a job. The default setting is **OFF**.
	TIMEOUT AFTER SEND	This is the length of time after the user initiates a send job that the device waits before it returns to its default settings. It is a range from 10 to 300 seconds. The default setting is **10**.
	SCAN AHEAD	A send job can be scanned even if the device is busy sending another job. The job is scanned and held until it can be sent. The default setting is **ON**.
	AUDIBLE FEEDBACK	Controls whether or not the control panel provides a sound when the user selects an item. The default setting is **ON**.

Item	Values or submenu items	Explanation
WAKE TIME	MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY	Sets the time that the device automatically comes out of Sleep mode. This feature can be set for a different time for each day of the week. This setting is off by default.
LANGUAGE	A list of the available control-panel languages appears.	Sets the language of the control panel. The default setting is **ENGLISH**.

I/O submenu

These settings control the input and output port configuration.

Item	Values or submenu items	Explanation
I/O TIMEOUT	5 to 300	Use this to select the Input/Output (I/O) timeout period in seconds. The I/O timeout refers to the time that the device waits before ending a job. The default setting is **15**.
FIND SEND GATEWAYS	None	Initiates a search to find a valid SMTP server and a valid LDAP server on the network.
SMTP GATEWAY	IP address	The IP address of the SMTP server that processes the e-mail sent by the digital sender.
LDAP GATEWAY	IP address	The IP address of the LDAP server that provides the address book for the e-mail service.
EMBEDDED JETDIRECT MENU	See the following table.	This submenu contains all of the device network settings.
EIO 1 ENU	**NOVELL** **DLC/LLC** **IPX/SPX** **TCP/IP** **ETALK**	This menu does not appear unless you have a card installed in the EIO slot. This menu controls the communication protocols for the EIO card. The actual content of the EIO menu depends on the card that is installed.

Item	Values or submenu items	Explanation
TEST SEND GATEWAYS	None	This tests the configured SMTP and LDAP gateways to see if they are functional.

Embedded Jetdirect submenu

The Embedded Jetdirect submenu under the I/O menu contains all of the digital-sender network settings.

Item	Options	Values	Explanation
TCP/IP	ENABLE	ON OFF	Use this item to enable or disable the TCP/IP protocol.
	HOST NAME	None	This is an alphanumeric string, up to 32 characters, that identifies the device. This name is listed on the Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.

Item	Options	Values	Explanation
TCP/IP (cont.)	CONFIG METHOD	BOOTP DHCP AUTO IP MANUAL	Use BOOTP (Bootstrap Protocol) for automatic configuration from a BootP server. Use DHCP (dynamic host configuration protocol) for automatic configuration from a DHCP server. If this option is selected and a DHCP lease exists, the **DHCP RELEASE** and **DHCP RENEW** menu items are available to set DHCP lease options. Select **AUTO IP** to use automatic link-local IP addressing. An address in the form 169.254.x.x is automatically assigned. If you select Manual, use the **MANUAL SETTINGS** menu to configure the TCP/IP parameters.
	DHCP RELEASE	NO (default) YES	If you select **NO**, the current DHCP lease is saved. If you select **YES**, the current DHCP lease along with the leased IP address are released.
	DHCP RENEW	NO (default) YES	If you select **NO**, the device does not request to renew the DHCP lease. If you select **YES**, the device requests to renew the current DHCP license.
	MANUAL SETTINGS	IP ADDRESS SUBNET MASK SYSLOG SERVER DEFAULT GATEWAY IDLE TIMEOUT	Fill in the network settings for the device. The **IDLE TIMEOUT** is the time period, in seconds, after which an idle TCP connection is closed. The default is 270 seconds.

Item	Options	Values	Explanation
TCP/IP (cont.)	DEFAULT IP	AUTO IP LEGACY	If **AUTO IP** is selected, a link-local IP address 169.254.x.x is set. If **LEGACY** is selected, the address 192.0.0.192 is set, consistent with older HP Jetdirect products.
	PRIMARY DNS	None	Specify the IP address of the primary Domain Name System (DNS) server.
	SECONDARY DNS	None	Specify the IP address of the secondary DNS server.
IPX/SPX	ENABLE	ON OFF	Enables or disables the IPX/SPX protocol.
	FRAME TYPE	AUTO EN_8023 EN_11 EN_8022 EN_SNAP	The **AUTO** selection automatically sets and limits the frame type to the first one that is detected. Select **AUTO** or one of the other frame type selections for Ethernet networks.
APPLETALK	ENABLE	ON OFF	Enables or disables the Appletalk protocol.
DLC/LLC	ENABLE	ON OFF	Enables or disables the DLC/LLC protocol.
SECURE WEB	HTTPS REQUIRED HTTPS OPTIONAL	None	The **HTTPS REQUIRED** setting requires secure HTTPS access to the embedded Web server. **HTTPS OPTIONAL** allows either HTTP or HTTPS access to the embedded Web server.

Item	Options	Values	Explanation
DIAGNOSTICS	LOOPBACK TEST **CAUTION** This test erases your TCP/IP configuration.	YES NO	Select **YES** to initiate the loopback test. Loopback verifies that TCP/IP is installed and correctly configured on the local device. If a reply is returned then you know that the TCP/IP stack is functioning correctly.
	PING TEST	DEST IP PACKET SIZE TIMEOUT COUNT PRINT RESULTS EXECUTE	Fill in each of the settings before performing the ping test. The ping test verifies end-to-end connectivity by sending an Internet Control Message Protocol packet to see if a destination host is responding. **DEST IP** specifies the IP address of the remote host. **PACKET SIZE** specifies the size of each packet, in bytes, to be sent to the remote host. The minimum (and default) is 64 and the maximum is 2048. **TIMEOUT** specifies the length of time, in seconds, to wait for a response from the remote host. The default is 1 and the maximum is 100. **COUNT** specifies the number of test packets to send for this test. Select a value from 1 to 100. To configure the test to run continuously, select 0. The **PRINT RESULTS** option does not apply to the digital sender. Select **EXECUTE** and then select **YES** to initiate the ping test.

Item	Options	Values	Explanation
DIAGNOSTICS (cont.)	PING RESULTS	PACKETS SENT PACKETS RECEIVED PERCENT LOST RTT MIN RTT MAX RTT AVE PING IN PROCESS REFRESH	These menu items show the results of the ping test. **PACKETS SENT** and **PACKETS RECEIVED** show the number of packets sent to and received from the remote host since the most recent test was initiated or completed. **PERCENT LOST** shows the percent of ping test packets that were sent with no response from the remote host. **RTT MIN**, **MAX** and **AVE** list the minimum, maximum and average round-trip-time (RTT), from 0 to 4096 milliseconds, for packet transmission and response. **PING IN PROGRESS** indicates whether or not a ping test is in progress. Select **REFRESH** to update the ping test data with current results.
RESET SECURITY	NO YES	None	Sets the current security settings back to the factory defaults. Select **YES** to reset the security settings.
LINK SPEED	AUTO 10T HALF 10 T FULL 100TX HALF 100TX FULL	None	Select **AUTO** to automatically configure the device to match the network's link speed. If the Auto setting fails, it is set to 100TX Half. If you would rather select the link speed manually, select one of the four options.

Resets submenu

This menu contains reset commands for some digital-sender settings.

Item	Values	Explanation
RESTORE FACTORY SETTINGS	None	This item resets the parameters and the user-set defaults to their factory defaults. It also clears the input buffer for the active I/O. This reset should be used with caution.
SLEEP MODE	OFF ON	Use this setting to turn Sleep Mode on and off. If Sleep Mode is off the device never enters power save mode. The default setting is **ON**.
LOCK CARRIAGE	None	The Lock Carriage menu item moves the carriage into a position where it can be locked. Select this menu item if you are unable to engage the Scanner Lock. See Parts of the digital sender for the location of the Scanner Lock.
CLEAR ADDRESS BOOK	None	This removes all addresses from the local Address Book.
CLEAR DOCUMENT FEEDER MESSAGE	NO YES	Use this menu item to clear the **Order Document Feeder Kit** and **Replace Document Feeder Kit** warning messages. The **Order Document Feeder Kit** message appears approximately one month before the ADF kit needs to be replaced. The **Replace Document Feeder Kit** appears at end of life (maintenance interval). This menu item only appears when one of the messages has appeared on the control panel. Set it to **YES** to hide the warning message.
RESET SUPPLIES	**NEW DOCUMENT FEEDER KIT**	This menu item resets the Document Feeder Kit maintenance interval after a new kit has been installed. Set this menu item to **YES** after installing a new kit.

Diagnostics menu

The **Diagnostics** menu contains the following items.

Item	Values or submenu items	Explanation
SHOW EVENT LOG	None	Selecting this item shows the most recent events first, up to the last 50 occurrences. The log appears in the control-panel display.
CALIBRATE SCANNER	None	Select this item to begin the scanner calibration process. See Calibrating the scanner for instructions.
SCANNER TESTS	**LOWER LAMP** **SENSORS** **UPPER LAMP** **SHUTTER SOLENOID** **WEIGHT SOLENOID** **ADF OUTPUT MOTOR** **ADF INPUT MOTOR** **ADF INPUT REVERSE** **FLATBED MOTOR** **ADF READ MOTOR** **ADF READ MOTOR REVERSE** **ADF DUPLEX SOLENOID** **ADF LED INDICATOR**	These are tests to make sure that the scanner components are functioning correctly. In most cases, the test turns on the selected scanner component and then asks the user to verify that it is on.
CONTROL PANEL	**LED'S**	This test turns each LED on and off in order to verify functionality.
	DISPLAY	Shows test patterns on the display.
	BUTTONS	Instructs you to press each control-panel button and verify its functionality.
	TOUCHSCREEN	Divides the display into squares of a grid. You are then instructed to touch each square and see if the touch was detected.

Service menu

The **Service** menu is locked and can only be opened by a service technician.

Controlling security

The most basic security feature of the digital sender is its ability to require a network login before a user can gain access to digital sending functions. This prevents unauthorized users from walking up to the device and sending documents. It is highly recommended that you enable authentication when configuring the digital sender. See Authentication tab.

For users who are concerned about e-mail security, the digital sender comes with a secure e-mail option. A number of third-party software vendors offer services for secure e-mail delivery. The Secondary E-mail feature is designed to work with one of these third-party software programs for users who require an extra measure of data security. It differs from the regular e-mail feature in that the data between the device and the HP DSS server is encrypted. An rfc822-compliant e-mail message that includes the scanned data as an attachment is created in a folder on the HP DSS server. The third-party software program, which is monitoring this folder, processes the e-mail message and sends it out in a secure manner.

To restrict software access

In order to keep the digital sender secure, you must also restrict access to the software programs that can be used to configure the device. By default, the digital-sending configuration options in the embedded Web server (EWS) are disabled when the digital sender begins using the HP DSS service. The digital sender can then only be configured by using the HP MFP DSS Configuration Utility. This centralizes configuration tasks and helps control security. You should make sure that the HP DSS is installed on a secure server and that the HP MFP DSS Configuration Utility cannot be used by unauthorized users.

In addition, you can also set a password in EWS to prevent access to the device-settings tabs. After the password has been set, users can only see the EWS **Information** tab. See the information about the **Security** page in the EWS Settings pages section.

The final software program that can be used to control the digital sender is the HP Web Jetadmin program. This program can also be configured to require a password before any changes can be made. It should also be installed on a secure server and should be protected from unauthorized use.

Security lock

The security lock is a mechanical lock that prevents the removal of internal device components. The lock used is a third-party computer lock such as the ones that are used to secure laptop computers. Purchase the lock separately, and then install it on the product in the location shown in this figure.
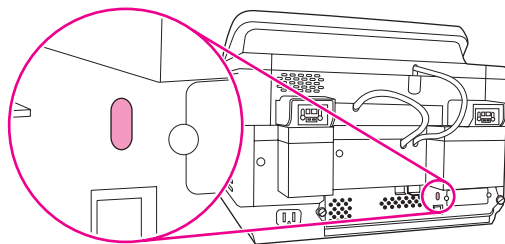
Working with address books

One of the roles of the digital-sender administrator is to maintain the public and private address books on the device.

Clearing HP DSS Address Books

HP DSS uses address books to store e-mail addresses that a user types at the device. If user authentication is enabled on the device, addresses are stored in a user's individual HP DSS address book. Otherwise, the addresses are stored in a public HP DSS address book. HP DSS address books are available to every digital sender or MFP that the HP DSS server supports. If the addresses contained in these address books are no longer needed, you can clear any or all of the HP DSS address books by clicking the **Clear** button on the **Addressing** tab in the HP MFP DSS Configuration utility.

Authentication and address book availability

Addresses entered directly by the user are saved differently depending on whether the user has been authenticated at the control panel.

- Authenticated: Saved to a "Personal" address book.
- Not Authenticated: Saved to a "Guest" address book. All non-authenticated users will see the contents of the "Guest" address book.
- E-mail addresses stored in Outlook contacts are available to the authenticated user.
- E-mail addresses typed directly at the control panel are cached in a private address book.

Personal address books

HP DSS accesses an authenticated user's personal e-mail addresses stored in their Outlook contacts folder. The digital sender displays a list of personal e-mail addresses combined with addresses from other available public address books.

NOTE   Personal address book availability has the following requirements: Windows authentication must be enabled on the digital sender (Novell is not supported), and the HP DSS server must have an MAPI-compliant e-mail client installed.

Local address book preservation

E-mail addresses typed directly at the control panel of a digital sender that is not connected to HP DSS are stored in a local address book. When the digital sender is added to HP DSS, the local address book is imported into a "Guest" address book stored on the HP DSS server. This address book combines all of the address books of the digital senders and MFPs that have been added, making previously cached email addresses available from any digital sender or MFP.

The digital sender control panel provides the user with a choice between two views of the address book: "All" and "Personal." The "Personal" view is provided when the user has been authenticated. Each view presents to the user a single sorted list of e-mail addresses merged from all address books currently active in that view. The following table shows which of the address books are merged in each view.

Dynamic LDAP Enabled	Authentication Enabled	View "Local"	View "Personal"
No	No	Guest, Global (Replicated LDAP/ABM), Public Distribution List	Guest
No	Yes	Private, Personal, Personal Distribution List, Guest, Global (Replicated LDAP/ABM), Public Distribution List	Private, Personal, Personal Distribution List, Guest
Yes	No	Guest, Dynamic LDAP	Guest
Yes	Yes	Private, Personal, Personal Distribution List, Guest, Dynamic LDAP	Private, Personal, Personal Distribution List, Guest

Private

The Private address book is unique to each authenticated user and provides the user a place to store (add and delete) e-mail addresses entered from the digital sender control panel. The Private address book is accessible by the user from any digital sender or MFP that is configured to use authentication for send-to-e-mail.

Personal

The Personal address book is unique to each authenticated user and is a copy of the user's Microsoft Exchange Contact database. The e-mail addresses from the user's contact list are loaded into the Personal address book and the contact lists are loaded into the Personal distribution list. The loading of these addresses and lists are initiated when the user becomes authenticated.

Personal distribution list

Personal distribution lists are named lists of e-mail addresses obtained from the Microsoft Exchange Server as Contact Lists and maintained in the Personal address book.

Guest

The Guest address book provides unauthenticated users a place to store (add and delete) email addresses entered from the digital sender control panel. The Guest address book is accessible by all users from any digital sender or MFP that is configured to use the Digital Send Service.

Global (Replicated LDAP/ABM)

The digital sender can be configured to import address book records from an LDAP server. The Global address book populated from LDAP is commonly referred to as Replicated LDAP.

The HP Address Book Manager software provides functionality to populate the Global address book directly from user input or from files generated from other databases. See the **Address Book Manager** section below.

Public distribution list

A Public distribution list is a named list of e-mail addresses created or imported by the Address Book Manager and maintained in the Global address book.

Address Book Manager

The main purpose of the Address Book Manager is to give the administrator a way to create and change the e-mail address books stored in the HP Digital Sending Software. You must be an administrator to use the Address Book Manager.

Specifically, you can use the Address Book Manager to accomplish the following tasks:

- View, add, change, and delete information in the public address books
- View, add, change, and delete information in the private address books of authenticated users

NOTE   Address Book Manager must be installed separately. Insert the HP DSS program CD, browse to the ABM folder and run SETUP.EXE.

Follow these instructions to open the Address Book Manager:

1. From your computer, click **Start**, and then point to **Programs**. Point to **Hewlett-Packard**, and then click **HP Address Book Manager**. The Address Book Manager window appears.

2. In the Digital Sender name field, type the DNS name or IP address for the HP DSS server, or choose a previously entered DNS name or IP address from the drop-down list.

3. In the **User name** field, type ADMINISTRATOR.

4. In the **User password** field, type your password (if one is required) and click **OK**. If all of the information is valid, the ABM main window appears.

Using the activity log

The device keeps a record of all digital-sending events in an activity log. Up to 1,024 entries are stored in the activity log. New events overwrite the oldest events.

Icons appear in the activity log to identify the type of message:

Information—No action required

⚠ **Warning**—Indicates a failure of some kind that might require action.

❌ **Error**—Indicates a problem that requires administrator intervention and possibly a call to an HP-authorized dealer.

The following events are recorded in the device activity log:

- Each digital sending job (for all types of destinations)
- Success or failure of an activity
- Shutdown and restart
- Deletion of address book contents
- System errors

The following information is recorded about each event:

- User
- Date and time
- Time
- Supplementary details (such as list of destinations, size and number of pages, and format)
- Description of event
- Severity of event (information, warning, error)

Three different activity logs can be viewed:

- **The HP DSS server log**—Open the HP MFP DSS Configuration program and click the **Log** tab to see the HP DSS server log. This shows the activity log for the HP DSS service. Clicking the **Details** button opens a **Details** dialog box that provides additional information about the selected log event. Clicking the **Clear** button clears the log.

- **Digital-sender activity log**—Open the HP MFP DSS Configuration program and click the **MFP Configuration** tab. Select the digital sender in the MFP list, and then click **Configure MFP**. Click the **Log** tab to see the activity log for the selected device. You can click the **Clear** button on the **Log** tab to clear the device activity log. See Digital-sender event log messages for an explanation of event log messages.

- **Control-panel event log**—Press the MENU button on the control panel and then touch the **DIAGNOSTICS** menu. Touch **SHOW EVENT LOG**. This shows the 50 most recent events for this device.

Clearing the log is useful if you are troubleshooting problems. After you clear the log, entries reflect only current conditions. Clearing the log is also useful when you have made major configuration changes.

Upgrading the firmware

The HP 9200C Digital Sender features remote firmware update (RFU) capability. Use the following steps for remotely upgrading digital-sender firmware. These steps are explained in more detail in the following sections.

1. Determine the current level of firmware installed on the device.

2. Go to the Web site and find out whether a new version is available. If it is, download the latest firmware to your computer.

3. Download the new firmware to the device.

Determining the current level of firmware

To determine the current level of firmware, view the configuration page on the digital-sender control panel. To view the configuration page, follow these instructions.

1. On the control panel, press the MENU button to open the menus.

2. Select the **INFORMATION** menu.

3. Select **VIEW CONFIGURATION**.

4. Scroll to the configuration section marked **Device Information** to find the firmware date code. The firmware date code looks something like this: 20030502 05.003.0

Downloading the new firmware from the HP Web site

To find the most recent firmware upgrade for the digital sender, go to http://www.hp.com/go/9200c_firmware. This page also contains instructions for how to download the new firmware version.

Download the new firmware version from the web site and then use one of the following methods to update the digital sender firmware.

Using FTP to upgrade the firmware on a direct network connection

The device must be in a "ready" state to receive an .RFU file update. Any jobs that are ahead of the RFU job in the queue are completed before the update is processed.

The elapsed time for an update depends on the I/O transfer time, as well as the time that it takes for the device to reinitialize. The I/O transfer time depends on a number of things, including the speed of the host computer that is sending the update. If the remote firmware update process is interrupted before the firmware is downloaded (while **Receiving Upgrade** appears on the control-panel display), the firmware file must be sent again. If power is lost during the flash DIMM update (while the **Performing Upgrade** message appears on the control-panel display), the update is interrupted and the message **Resend Upgrade** appears (in English only) on the control-panel display.

Follow these instructions to perform the upgrade by using FTP.

NOTE	The firmware update involves a change in the format of nonvolatile random-access memory (NVRAM). Any menu settings that are changed from the default settings might return to default settings and must be changed again if you want settings that are different from the defaults.

1. If you do not already have it, get the TCP/IP address of the digital sender from the EIO Jetdirect page. The HP Jetdirect page is the second page that you see when viewing the configuration page on the control panel.

NOTE	Before connecting to the digital sender, make sure that it is not in Sleep mode. Also make sure that any error messages are cleared from the control-panel display.

2. Open a command window on your computer.

3. Type: `ftp <TCP/IP ADDRESS>`. For example, if the TCP/IP address is 192.168.0.90, type `ftp 192.168.0.90`.

4. Press Enter on the keyboard.

5. When prompted for the user name, press Enter.

6. When prompted for the password, press Enter.

7. Type `bin` at the command prompt.

8. Press Enter. The message **200 Types set to I, Using binary mode to transfer files** appears in the command window.

9. Type `put <FILENAME>`, where <FILENAME> is the path to the .RFU file that was downloaded from the Web. For example, type `put C:\LJ\3500FW.RFU`, and then press Enter.

NOTE	If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type `put "C:\MY DOCUMENTS\LJ\3500FW.RFU"`

The following series of messages appears in the command window:

200 PORT command successful

150 Opening BINARY mode data connection

226 Ready

226 Processing Job

226 Transfer complete

Then, a message containing transfer-speed information appears.

10. The download process begins and the firmware is updated on the device. This can take about five minutes. Let the process finish without further interaction with the device or computer.

NOTE	The digital sender automatically restarts the firmware after processing the upgrade.

11. At the command prompt, type `bye` to exit the ftp command.

12. At the command prompt, type `exit` to return to the Windows interface.

Using HP Web Jetadmin to upgrade the firmware

This procedure requires that you have HP Web Jetadmin Version 7.0 or later installed (see HP Web Jetadmin). Complete the following steps to update a single device through HP Web Jetadmin after downloading the .RFU file from the HP Web site.

1. Start HP Web Jetadmin.

2. Open the **Device Management** folder in the drop-down list in the **Navigation** panel. Navigate to the **Device Lists** folder.

3. Expand the **Device Lists** folder and select **All Devices**. Locate the digital sender that you want to update in the list of devices, and then click to select it.

4. Locate the drop-down box for **Device Tools** in the upper-right corner of the window. Select **Update Printer Firmware** from the action list.

5. Click **Browse** under **Upload New Firmware Image** and navigate to the location of the .RFU file that you downloaded from the Web at the start of this procedure. Select the file.

6. Click **Upload** to move the .RFU file to the correct location on the HP Web Jetadmin server. After the upload is complete, the browser window refreshes.

7. Select the new .RFU date code from the **Select New Firmware Version** drop-down menu.

8. Click **Update Firmware Now**. HP Web Jetadmin sends the selected .RFU file to the device. The digital-sender control panel shows messages that indicate the progress of the upgrade. At the end of the upgrade process, the digital sender restarts the firmware.

Upgrading the HP Jetdirect Inside firmware

The HP Jetdirect Inside network interface in the device has firmware that can be upgraded separately from the digital-sender firmware. This procedure requires that you have HP Web Jetadmin Version 6.2 or greater installed (see HP Web Jetadmin). Complete the following steps to update the HP Jetdirect firmware with HP Web Jetadmin.

1. Open the Web Jetadmin program.

2. Open the **Device Management** folder in the drop-down list in the **Navigation** panel. Navigate to the **Device Lists** folder.

3. Select the device that you want to update.

4. In the **Device Tools** drop-down list, select **Jetdirect Firmware Update**.

5. Under **Jetdirect firmware version** the Jetdirect model number and current firmware version are listed. Make a note of these.

6. Go to http://www.hp.com/go/wja_firmware.

7. Scroll down to the list of Jetdirect model numbers and find the model number that you wrote down.

8. Look at the current firmware version for the model, and see if it is later than the version that you wrote down. If it is, right-click on the firmware link, following the instructions on the Web page to download the new firmware file. The file must be saved into <drive>: \PROGRAM FILES\HP WEB JETADMIN\DOC\PLUGINS\HPWJA\FIRMWARE \JETDIRECT on the computer that is running the HP Web Jetadmin software.

9. In Web Jetadmin, return to the main device list and select the digital sender again.

10. In the **Device Tools** drop-down list, select **Jetdirect Firmware Update** again.

11. On the Jetdirect firmware page, the new firmware version appears under **Jetdirect Firmware Available on HP Web Jetadmin**. Click the **Update Firmware Now** button to update the Jetdirect firmware.

Maintaining the hardware

Maintaining the digital sender can include cleaning, replacing parts, and calibrating the digital-sender scanner.

Cleaning the digital sender

To maintain the scan quality, clean the device only if the ADF or glass is visibly marked or dirty, or if you are experiencing a decrease in the scan quality (such as streaking). Clean the outside of the device with a water-dampened cloth. Clean the inside with only a dry, lint-free cloth. Observe all warnings and cautions in the following cleaning tasks.

To clean the glass

- Clean the glass only if dirt is visible, or if you see poor scan quality (such as streaking).
- Clean the glass surface by wiping it gently with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner to dampen the cloth.

CAUTION Do not pour or spray liquids directly onto the glass. Do not press hard on the glass surface, as this could break the glass.

To clean the touchscreen

Clean the touchscreen when needed to clear away fingerprints or dust build-up. To clean it, wipe the touchscreen gently with a clean, water-dampened, lint-free cloth.

CAUTION Use water only. Solvents or cleaners can damage the touchscreen. Do not pour or spray water directly onto the touchscreen.

To clean the ADF delivery system

1. Lift the top part of the digital sender.
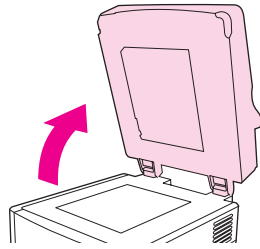
2. Locate the white, vinyl ADF backing.
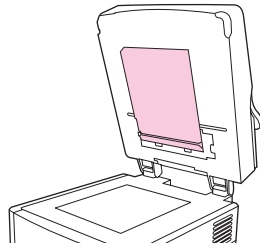
3. Locate the white, vinyl calibration strips.
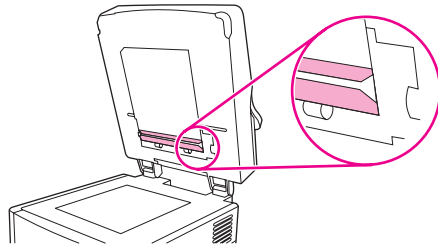
4. Clean the ADF backing and the calibration strips by wiping them with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner to dampen the cloth.
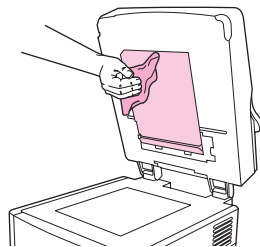
5. Close the top of the digital sender.
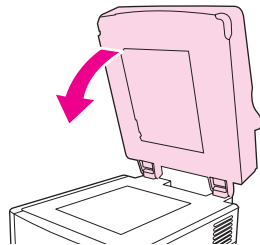
To clean the ADF rollers

You should clean the rollers in the ADF if you are experiencing misfeeds or if your originals show marks as they exit the ADF.

CAUTION   Cleaning the rollers too frequently could introduce dust into the device.

1. Open the ADF.
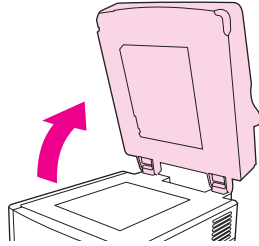
2. Locate the rollers near the vinyl calibration strips.
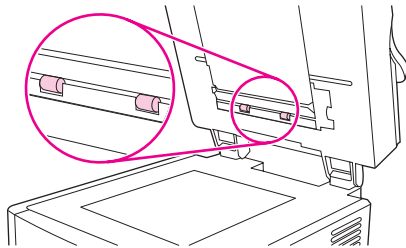
3. Wipe the rollers gently with a clean, water-dampened, lint-free cloth.

CAUTION   Do not pour water directly onto the rollers. Doing so might damage the device.

4. Close the ADF.
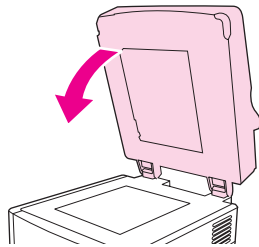
5. Push the release button to open the ADF cover.
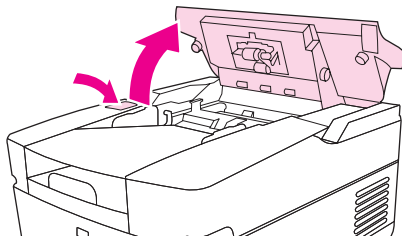
6. Locate the rollers.
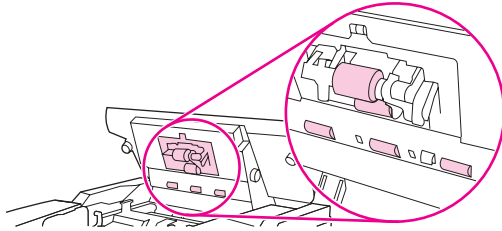
7. Wipe the rollers with a clean, water-dampened, lint-free cloth.

CAUTION   Do not pour water directly onto the rollers. Doing so might damage the device.

8. Locate the separation pad.
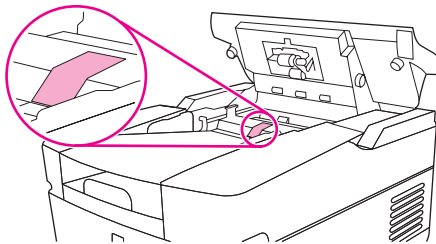
9. Wipe the pad with a clean, water-dampened, lint-free cloth.

10. Close the ADF cover.
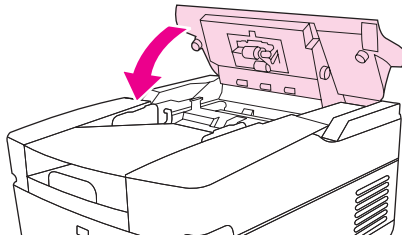
Replacing the mylar sheet

If you start to see vertical streaks on the scanned images, as shown in the figure below, you might need to replace the mylar sheet at the base of the ADF. The device ships with an envelope containing three extra mylar sheets and installation instructions. The envelope is in a pocket behind the ADF vinyl backing, as shown in the following figure.
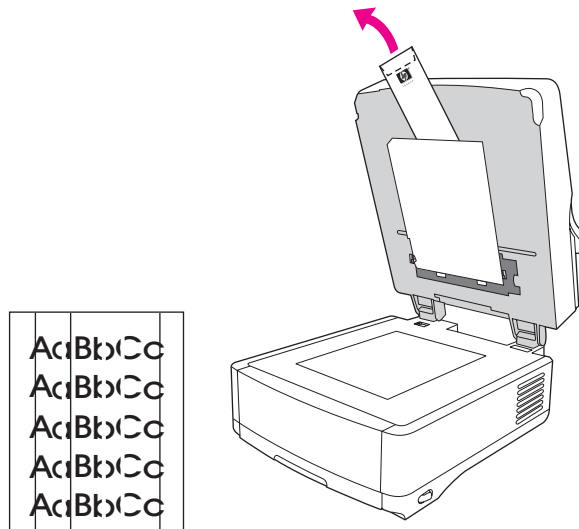
Follow the instructions that come in the envelope to replace the mylar sheet.

If necessary, you can order extra mylar sheet replacement kits from you HP sales representative. The HP part number is Q6496A.

Diagnostics

Diagnostic tests can be run from the control panel to validate the hardware operation.

LED test

Follow these instructions to test the functionality of the control-panel LEDs.

1. Press the MENU button on the control panel and select the **DIAGNOSTICS** menu.

2. Select **CONTROL PANEL**, and then select the **LEDs** test. The LEDs test turns each LED on and off in order to verify its functionality.

Display test

Follow these instructions to test the functionality of the control-panel display.

1. Press the MENU button on the control panel and select the **DIAGNOSTICS** menu.

2. Select **CONTROL PANEL**, and then select the **DISPLAY** test. The display test shows test patterns on the control-panel display.

Buttons test

Follow these instructions to test the functionality of the control-panel buttons.

1. Press the MENU button on the control panel and select the **DIAGNOSTICS** menu.

2. Select **CONTROL PANEL**, and then select the **BUTTONS** test. The buttons test asks you to press each control-panel button to test its functionality.

Touchscreen test

Follow these instructions to test the functionality of the control-panel touchscreen.

1. Press the MENU button on the control panel and touch the **DIAGNOSTICS** menu.

2. Touch **CONTROL PANEL**, and then touch **TOUCHSCREEN**. The touchscreen test divides the screen into a grid and then asks you to touch each section of the grid to test its functionality.

Calibrating the scanner

The purpose of the scanner calibration process is to compensate for offsets in the scanner imaging system (carriage head) for ADF and flatbed scans. Because of mechanical tolerances, the scanner carriage head might not read the position of the image accurately. During the calibration procedure, scanner offset values are calculated and stored. The offset values are subsequently used when producing scans so that the correct portion of the scanned image is obtained by either adding or subtracting the number of pixels that are indicated in the offset from the lines or rows of the image.

Scanner calibration should only be carried out if you notice offset problems with the scanned images. The scanner is calibrated before it leaves the factory and normally should not need to be calibrated again.

Before calibrating the scanner, you must print the calibration target on a printer.

To print the calibration target

1. Go to the http://www.hp.com/go/9200c_scanner_cal Web page and follow the instructions to download the calibration target. The calibration target file is also available on the documentation CD-ROM that came with the device. The file name is CALIBRATION.PDF.

2. Print the target on any HP LaserJet printer or another available, laser-quality printer.

   a. Place letter or A4 paper in tray 1 (or the multipurpose tray) and adjust the side guides.

   b. Print the first pass of the calibration target.

   c. Return the first pass of the calibration target to tray 1 so that the arrows are facing into the printer.

d. Print the second pass. The final calibration target **must** look like the following figure.
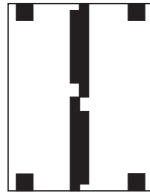
CAUTION If the calibration target does not look like the figure shown here, the calibration process will fail and the quality of the digital-sender scans will be degraded. **The black areas must extend completely to the edges of the page. If they do not, use a black magic marker to extend the black areas to the edges of the page.**

If you have problems printing the calibration target, try using a different printer.

To calibrate the scanner

1. Take the calibration target to the digital sender.

2. Place it into the scanner ADF face-up and adjust the side guides.

3. Press the MENU button and touch **DIAGNOSTICS**, and then touch **CALIBRATE SCANNER**.

4. After the calibration target has passed through the ADF once, reposition it in the ADF in the opposite direction. After the second pass, the calibration is complete.

The ADF Maintenance Kit

The device notifies you when it is time to replace the ADF Maintenance Kit by showing a message on the control-panel display. You can view the remaining life of the Maintenance Kit at any time by pressing the STATUS button on the control panel or visiting the EWS **Supplies Status** page (see Information pages). Order Part Number Q5997A when you need to install a new ADF Maintenance Kit.

The ADF Maintenance Kit includes the following items:

● One pick-up roller assembly

● One separation pad

● One mylar sheet kit

● An instruction booklet

Follow the instructions that come with the kit to install it.

After replacing the kit, set the **NEW DOCUMENT FEEDER KIT** setting in the control-panel **RESETS** menu to **YES**.

4 Troubleshooting

Use the information in the following sections to troubleshoot specific problems with the digital sender.

Sources for information about problems

Source	Description
Control-panel lights	• **Start LED**—The Start LED is green when the device is ready to scan, and amber if an error exists. • **Ready LED**—The green Ready LED is on when the device is online and ready to scan. It flashes when a job is paused. It is off if the device is paused or unable to send data. • **Data LED**—The green Data LED is on when the device is processing a job but has been paused. It is off when no job is available to be processed. It flashes when the device is transmitting data. • **Attention LED**—If the red Attention LED is on, the device has encountered a critical error. If it flashes, the device has encountered an error that requires user attention. If it is off, the device is operating normally. See Parts of the digital sender for the location of these LEDs.
Control-panel messages	Messages appear on the control-panel display when problems exist. See Control-panel error messages for a list of messages and recommended actions.

Source	Description
Activity log	The activity log is a record of digital sender use, and is probably your best tool for troubleshooting. It contains messages (information, warning, or error) that can help you resolve problems. See Using the activity log for information about how to view the activity log and Digital-sender event log messages for information about activity log messages.
HP Web Jetadmin software	This tool can be used to monitor and troubleshoot the digital sender. See HP Web Jetadmin for more information. You can also see the diagnostics and troubleshooting topics in the HP Web Jetadmin software online help for details.
Embedded Web server (EWS)	Use the EWS to view digital-sender status information, determine the remaining life on the ADF Maintenance Kit, view and print internal pages, receive notification of digital-sender events, and view and change the network configuration. See The embedded Web server for more information.
HP MFP DSS Configuration Utility or Windows event log error messages	If an error occurs with the HP DSS software you might see an error message appear in the HP MFP DSS Configuration Utility or in the Windows event log. See HP MFP DSS Configuration Utility error messages or Windows event log error messages for information on these error messages.

Jams

To avoid jams in the ADF, use the following instructions.

Avoiding jams

Use the following information to avoid jams when using the ADF.

● When loading paper into the ADF, ensure that the paper stack is square and straight and the paper guides are adjusted to the width of the page to be scanned

● Do not overload the ADF. The ADF was designed to hold 50 sheets of 75 g/m^2 (20 lb) bond paper.

● If the paper to be scanned using the ADF was previously folded, flatten it to the best of your ability. Try to remove all wrinkles and folds from the paper.

● If the paper to be scanned using the ADF was previously stapled, it might be necessary to "fan" the corner of the page where the staple was inserted. Often, the hole that the staple created makes the pages stick together (that is, interlocks the pages).

- Remove any stick-on notes or labels that are affixed to the pages being scanned. If the labels have deposited excessive residual adhesive to the paper, you might have to clean it off the paper before it is sent through the ADF.

- Paper that has been three-hole punched, been removed from a wire-comb or plastic comb binding, or has perforations might be difficult to send through the ADF.

- If the leading edge of the page to be scanned is excessively worn or frayed, try rotating the paper before scanning.

- Paper can acclimatize to the environment around it. If the operating environment is excessively dry, the paper might become dry and subject to static electricity. Excessively dry sheets of paper tend to stick together, which might lead to difficulty when feeding through the ADF.

Clearing jams

Follow these instructions to clear paper jams in the digital-sender ADF.
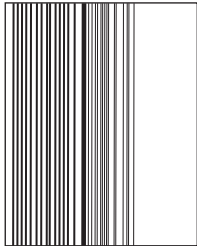
1. Press the release button to open the ADF cover.
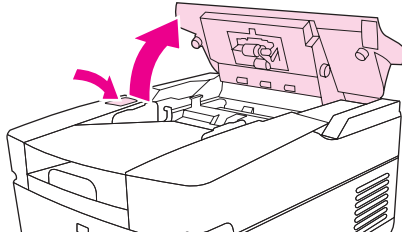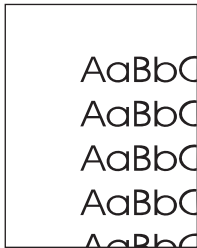
2. Remove any jammed media from this area.

3. Make sure that you have removed all of the pieces of torn media.

4. Close the ADF cover.
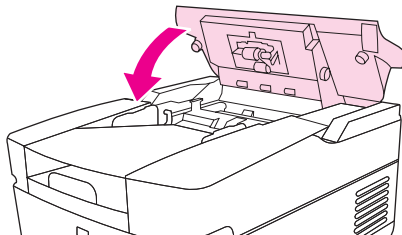
Operational issues

Problem	Action to take
The digital sender is not working.	- Make sure that the power cord is securely connected to the device and that it is plugged into the power outlet. - Make sure that the digital sender is turned on. - Verify that the network cable is securely connected to the device. - Clear any error messages on the control-panel display. - If the digital sender has successfully powered up and completed all of its internal diagnostics, the formatter LED will flash on and off approximately once every second. Verify that the formatter LED and Jetdirect LED appear to be functioning normally. See LED indications.
The digital sender does not accept your password.	- Verify that you are using the correct password. - Passwords are case-sensitive. Make sure that you type your password with the correct combination of uppercase and lowercase letters. - Verify that the settings on the **Authentication** tab of the HP MFP DSS Configuration Utility are correct for your network.
Scanned pages are blank or have repeated patterns when using the ADF. 	Make sure that a page is not already on the glass.

Problem	Action to take
Vertical streaks appear on the scanned image. AaBbCcAa AaBbCcAa AaBbCcAa AaBbCcAa	Clean the ADF and glass. See Cleaning the digital sender. If that does not solve the problem, replace the mylar sheet. See Replacing the mylar sheet.
Placement of the scanned image appears to be wrong, . AaBbC AaBbC AaBbC AaBbC AaBbC	• Make sure that the document you are trying to send is placed correctly in the ADF or on the glass. • The scanner might need to be recalibrated. See Calibrating the scanner for instructions.
The image quality is poor.	• Make sure that the document you are trying to send is placed correctly in the ADF or on the glass. • Make sure that the glass is clean. If the glass is dirty, clean it with a dry, soft cloth. • If you are scanning from the ADF, try scanning from the glass. If the image that was scanned from the glass is better, clean the ADF. See Cleaning the digital sender for complete cleaning procedures. • If possible, try changing some of the scan settings, such as resolution or file type, to improve the image quality.

Problem	Action to take
The ADF feeds multiple sheets, skews papers, or jams frequently.	• Adjust the guides so that they are snug against the stack but do not bend the stack. See Jams for ADF loading instructions. • The maximum number of pages the ADF can hold is 50 or fewer, depending on the type of media that is being loaded. • The maximum number of pages the output tray can hold is 50 or fewer. Make sure that more pages are not stacking up in the output tray. • The type of media that is being loaded might not meet the required specifications. See Paper handling for media specifications. • Clean the separation pad and the rollers. See Cleaning the digital sender. • If the mylar sheet has recently been replaced, verify that it was correctly installed. See the documentation that came with the mylar sheets. • If the roller assembly or separation pad has recently been replaced, verify that it is correctly installed. See the documentation that came with the replacement part. • If users have been feeding unsupported items through the ADF (for example, carbon-copy forms), the rollers might have accumulated a residue or been damaged. You might need to clean the rollers (see Cleaning the digital sender) or replace the rollers (see The ADF Maintenance Kit).
The "Find Servers" process in the HP MFP DSS Configuration Utility was not able to find an SMTP server.	• Verify that there is an active SMTP server on the network. • Click **Add…** on the **E-Mail** tab, and then type in the host name or IP address of the SMTP server. After typing in the address, click the **Test** button to verify that the software can contact the server. • If testing the server is unsuccessful, see Troubleshooting SMTP and LDAP servers.
The "Find Servers" process in the HP MFP DSS Configuration Utility was not able to find an LDAP server.	• Verify that you have a functioning LDAP server on the network. • Type the host name or IP address of the LDAP server into the **LDAP Server** text box on the **Authentication** tab. After typing in the address, click the **Test** button to verify that the software can contact the server. • If testing the server is unsuccessful, see Troubleshooting SMTP and LDAP servers.

Problem	Action to take
An e-mail transmission did not arrive at the destination e-mail address.	• If you typed the e-mail address at the control panel, resend the e-mail message, making sure that you type the address correctly and that it is in the correct format (has no spaces, contains the required @ sign, and contains the required period). • Resend the e-mail. Make sure that you type the name in the correct format in the **From:** field so that the message is not rejected and so that you receive a message back if the e-mail transmission fails. • Check the activity log to see if it reflects a problem. See Using the activity log.
A fax transmission did not arrive at the destination fax machine.	• If you typed the fax number at the control panel, resend the document, making sure that you type the fax number correctly. • The receiving fax machine might be turned off or experiencing an error condition (such as out of paper or toner). Contact the recipient. • The system might be busy sending other digital send jobs. The system might also have reached its maximum limit of pending jobs. Wait and then try again. • For information about the transmission, check any fax notifications that might have been returned (for example, e-mail notifications in your e-mail inbox, if these reports are available with your fax service). • Resend the fax. • If the problem persists, check the log for the fax transport that is being used. Logs often contain information about why a fax transmission was unsuccessful.
A document sent to a folder did not arrive at the destination folder.	• Resend the document. • See if the file name was modified to resolve a duplicate-file-name error. • Check the activity log for error messages. See Using the activity log.
The bottom of a page that you sent is cut off.	If the document was sent from the glass, the document page might be too long. The maximum length for documents scanned from the glass is A4, or 210 x 297 mm (8.27 x 11.69 inches).

Problem	Action to take
The control panel is using the wrong language.	Use the control-panel menu to set the correct language. 1. Push the MENU button. 2. Select **CONFIGURE DEVICE** on the control-panel display (the third menu item). 3. Touch **SYSTEM SETUP** (the fourth menu item). 4. Scroll down and touch **LANGUAGE** (the last menu item). 5. Touch the correct language.

Control-panel error messages

These error messages can appear on the digital-sender control-panel display. Use the instructions to clear the error message, if necessary.

Error message	Explanation or action needed
Address book is full. To add an address, you must first delete an address.	You cannot add another address to the address book because it is full. The address book is limited to 200,000 entries. You can delete addresses by touching the **Edit** button on the control-panel **Address Book** screen and then selecting the **Delete** option.
Access denied	You are trying to use a feature or access a folder that you do not have authorization to use. If you are trying to access a folder, verify that the folder is set up to be shared.
ADF COVER OPEN	Close the ADF cover.
ADF Empty	You must have a document in the ADF or on the glass before you can begin a digital-send operation.
ADF Overfill	Too many sheets have been put into the ADF. Remove some of the sheets. Up to 50 sheets of paper can be put into the ADF, with a maximum height of 5 mm (0.2 inch).
ADF Paper Jam	A jam has occurred in the ADF. See the Jams section at the beginning of this chapter.
ADF Pick Error	Make sure that your original contains no more than 50 pages. See the Jams section at the beginning of this chapter. Check on the status of the rollers and clean them if necessary. See To clean the ADF rollers.
ADF Skew Error	Make sure that the paper guides are aligned on the sides of the originals, and that all of the originals are the same size. Follow the instructions in the onscreen dialog box. See the Jams section at the beginning of this chapter.
Authentication information is incorrect. Please re-enter information.	The user name or password that you used is incorrect. Type the information again. Verify that the settings on the **Authentication** tab of the HP MFP DSS Configuration Utility are correct for your network.
Authentication Required	A username and password are required in order to gain access to the feature you selected.

Error message	Explanation or action needed
Canceling send job	The device is canceling a send job. The message continues while the job is stopped and any remaining data is discarded.
CHECK CABLES. CHECK SCANNER LOCK.	A problem exists with the scanner. Make sure that the scanner lock is in the unlocked position. (See Parts of the digital sender for the location of the scanner lock.) Turn the device off and then on again.
Check the glass and remove any paper, then press "Start"	A document needs to be removed from the scanner glass.
Clearing event log	The device is clearing the event log.
Digital Send server is not responding alternates with **Contact administrator**	The digital sender cannot communicate with the HP DSS server. Check the network connection. Verify that the HP DSS server is running.
E-mail Gateway did not accept the job because the attachment was too large	The scanned documents have exceeded the size limit of the e-mail server. The system administrator sets the size limit. Resend the job with a lower resolution setting, smaller file size setting, or fewer pages.
E-mail Gateway did not respond	An e-mail gateway has exceeded the timeout value. Try resending. If the problem persists, verify that the SMTP server is functional. See Troubleshooting SMTP and LDAP servers.
E-mail Gateway rejected the job because of the addressing information. alternates with **Job failed**	One or more of the e-mail addresses is incorrect. Double check the e-mail addresses and send the job again.
Error executing digital send job. Job failed	An error occurred during an e-mail send job. Verify that you have typed the correct e-mail recipient addresses and try sending again. If this error persists, verify that the SMTP server is functioning correctly. See Troubleshooting SMTP and LDAP servers.
Event Log Empty	The user is attempting to view an empty event log by selecting **Show Event Log** from the control panel.
Flash File System is Full	The flash disk or file system has reached maximum capacity. Wait for all pending jobs to be sent and then try again.

Error message	Explanation or action needed
Flash is Write Protected	The flash file is protected, and no new files can be written to it.
	To enable writing to the flash memory, use HP Web Jetadmin to turn off write protection.
	To remove this message from the display, turn the device off and then on.
Folder list is full. To add a folder you must first delete a folder	The digital sender limits the number of folders that can be established to 512. Delete an unused folder by using the **Remove** button on the **Folders** tab in the HP MFP DSS Configuration Utility.
Found LDAP Gateway:...	This message appears in response to the **FIND SEND GATEWAYS** menu command.
Found SMTP Gateway:...	This message appears in response to the **FIND SEND GATEWAYS** menu command.
Gateways failed	This message appears if you execute the **TEST SEND GATEWAYS** menu item and the test fails. Check the network connection and contact the network administrator. See Troubleshooting SMTP and LDAP servers
Gateways OK	This message appears if you execute the **TEST SEND GATEWAYS** menu item and the test is successful.
HP Digital Sending: Delivery Error	Try sending the job again. If you continue to experience problems, check the network connection and contact the network administrator.
Initializing permanent storage	This message appears momentarily during power-up when the device hard disk is initializing.
Internal disk not functional	The internal hard disk has failed. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)
LDAP failed	This message appears if you execute the **TEST LDAP GATEWAYS** menu item and the test fails. Verify that the network connection is functioning and that the LDAP gateway information is correct. See Troubleshooting SMTP and LDAP servers.
LDAP Gateway OK	This message appears if you execute the **TEST LDAP GATEWAYS** menu item and the test is successful.

Error message	Explanation or action needed
LDAP Server is not responding. Contact Administrator.	The device is unable to communicate with the LDAP server. Verify that the LDAP server is functioning. See Troubleshooting SMTP and LDAP servers.
Name is already added to list	You have tried to add a duplicate name in one of the digital-sender address books.
Network connection required for Digital Sending. Contact administrator.	The device is unable to establish a connection with the network. Contact the network administrator.
Novell Login Required	The device has been configured to require a Novell login in order to use the selected feature.
Password or name is incorrect. Please enter correct login.	The user name or password is incorrect or was mistyped. Retype the user name and password. Verify that the settings on the **Authentication** tab of the HP MFP DSS Configuration Utility are correct for your network.
Phone book is full. To add a phone number you must first delete a phone number.	You cannot add another phone number to the phone book because it is full.
Please refine your search	Your search has returned more results than the device can show. Try to narrow your search.
Replace Document Feeder Kit	The scan count indicates that it is time to replace the ADF Maintenance Kit. See The ADF Maintenance Kit.
Scan carriage locked	Make sure that the scanner lock is in the unlocked position. (See Parts of the digital sender for the location of the scanner lock.)
Sleep mode on	The device is in sleep mode. Press any control-panel key to bring it out of sleep mode.
SMTP Failed	This message appears if you execute the **TEST SMTP GATEWAY** menu item and the test fails. Verify that the network connection is functioning and that the SMTP gateway information is correct. See Troubleshooting SMTP and LDAP servers.
SMTP Gateway Not Responding	The SMTP gateway has exceeded a timeout value. Try sending again. Verify that the SMTP server is functional. See Troubleshooting SMTP and LDAP servers.
SMTP Gateway OK	This message appears if you execute the **TEST SMTP GATEWAY** menu item and the test is successful.
The Digital Sender is currently processing the maximum number of active jobs allowed. Please try to send your job later.	The digital sender is busy sending other jobs. Wait and try your job in a few minutes.

Error message	Explanation or action needed
The folder you have entered is not a valid folder.	The device was unable to validate the path you typed in for the send-to-folder feature. Verify that you have typed the correct path.
Too many addresses were found to display. Please refine your search.	Your search has returned more results than the device can show. Try to narrow your search.
Username or password is incorrect. Please re-enter.	The user name or password is incorrect or was mistyped. Retype the user name and password. Verify that the settings on the **Authentication** tab of the HP MFP DSS Configuration Utility are correct for your network.
Windows Login Required to use this feature	Provide your Windows network credentials to use the digital-sending feature.
11.xx Internal Clock Error	The internal clock is not working. The digital sender can still send, but you are prompted to set the date and time whenever the device is turned off and then turned on. Time stamping for documents and events might be affected. To resolve this issue, contact an HP-authorized service or support provider. (See the HP support flyer, or go to http://www.hp.com/support/9200c.)
20 Insufficient Memory	The the scanned document contains more data than can fit in the device's available memory. Press START to send the available data (some data might be lost), and then try to make the scan job smaller.
22 EIO Buffer Overflow	Too much data was sent to the EIO card in the specified slot. An incorrect communications protocol might be in use. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)
22 Embedded I/O Buffer Overflow	Too much data was sent to the embedded HP Jetdirect network interface. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)

Error message	Explanation or action needed
30.1.yy Scanner Failure	An error exists with the flatbed scanner. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.) A **30.18 Scan Failure** message might indicate that the scanner head is locked. Verify that the scanner lock is in the unlocked position. (See Parts of the digital sender for the location of the scanner lock.)
40 EIO Bad Transmission	The connection between the device and the EIO card has failed. Press Sᴛᴀʀᴛ to clear the error and continue sending.
40 Embedded I/O Bad Transmission	The connection with the embedded HP Jetdirect network interface has failed. Turn the device off and then on.
52.xy Error	The scanner has encountered an error. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)
57.xx Error	The fan motor has encountered an error. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)
64 ERROR alternates with **To continue turn off then on**	A scan buffer error occurred. Turn the device off and then on. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)
68.x Storage Error Settings Changed	An error occurred in the device nonvolatile memory (NVRAM), and one or more device settings have been reset to their factory default. Sending can continue, but some unexpected functions might result because the error occurred in permanent storage. Pressing Sᴛᴀʀᴛ should clear the message. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)

Error message	Explanation or action needed
68.x Permanent Storage Full	The device NVRAM is full. Some settings saved in the NVRAM might have been reset to the factory defaults.
	Sending can continue, but some unexpected functions might result because the error occurred in permanent storage.
	Pressing START should clear the message. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)
68.x Permanent Storage Write Fail	The device NVRAM is failing to write.
	Sending can continue, but there might be some unexpected functions because the error occurred in permanent storage.
	Pressing START should clear the message. If this message persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)

HP MFP DSS Configuration Utility error messages

The following table lists and explains messages that might appear on the screen while you are using the HP MFP DSS Configuration Utility. If the problem persists, contact an authorized HP dealer.

Message	Description and actions
<computer network name> is not responding or is not a valid SMTP gateway server.	The named computer is either not currently running, not available through the network, or not running as an SMTP gateway. ● Make sure the computer is turned on, available through the network, and running as an SMTP gateway.
Access violation. Read access is denied.	The HP MFP DSS Configuration Utility could not read from the specified folder on the specified file server. ● Make sure the folder exists. ● Make sure you have read permission for the folder.
Access violation. Unable to log off from the file server.	The HP MFP DSS Configuration Utility could not logoff from the specified file server. ● Try testing the file server again to make sure that it is still running and available through the network.
Access violation. Unable to log on to the file server.	The HP MFP DSS Configuration Utility could not logon to the specified file server. ● Make sure you entered valid logon credentials to gain access to the file server. ● Make sure the file server is running (if not the local computer). ● Make sure the file server is available through the network (if not the local computer).
Access violation. Write access is denied.	The HP MFP DSS Configuration Utility could not write to the specified folder on the specified file server. ● Make sure the folder exists. ● Make sure you have write permission for the folder.

Message	Description and actions
The account for user <user name> is currently inaccessible.	The named user does not currently have logon privileges—either because the account is locked or the user password has expired. ● Unlock the user account. ● Update the user password.
The domain <domain name> is unknown.	The named domain is not recognized as valid. ● Make sure the named domain is correct. ● Make sure your computer can gain access to the named domain.
The HP Configuration Utility is already being run on <computer network name>.	The HP MFP DSS Configuration Utility is already running remotely on the named computer. More than one instance of the HP MFP DSS Configuration Utility cannot run at the same time. This eliminates the possibility of configuration conflicts. ● Wait until the HP MFP DSS Configuration Utility that is running remotely is closed.
The LDAP server is currently too busy to handle your request.	The LDAP server ended the connection with the HP MFP DSS Configuration Utility because resources were insufficient. ● Test the LDAP settings again later.
The LDAP server or the connection has failed.	The HP MFP DSS Configuration Utility lost its connection with the LDAP server. ● Make sure the LDAP server is working properly. ● Test the LDAP settings again later.
The license <license number> is for a previous version of this product and is not supported in the current version.	You entered a license number that enables the send to e-mail feature. However, that feature is now free in your version of the product.
The specified LDAP server is invalid or is not running LDAP.	An LDAP connection could not be established with the specified server. ● Make sure the specified server is functioning and that it is running the LDAP server. ● Make sure the correct TCP/IP port is specified in **Advanced Settings**. ● Make sure the specified server is available through the network.

Message	Description and actions
Unable to start DSS service. You may need to reinstall the software.	HP DSS must be running before you can start the HP MFP DSS Configuration Utility. However, an attempt to start HP DSS was unsuccessful. ● Manually start the HP DSS service by means of the Windows Control Panel. ● Restart the computer on which HP DSS is installed. ● Uninstall and reinstall HP DSS.
Unexpected failure.	An unspecified error occurred while the connection with the LDAP server was being tested. ● Make sure the LDAP settings are correct. ● Restart HP DSS. ● Restart the computer on which HP DSS is installed.
User has no e-mail address in the LDAP database.	The user record that was located did not contain an e-mail address. ● Make sure that the **Obtain e-mail address from** setting is correct. ● Make sure that the user's LDAP record contains an e-mail address.
User not found in the LDAP database.	No user record matched the search criteria that was entered. ● Make sure the user has a record in the LDAP database. ● Make sure the **Find addresses in address book using** setting is correct. ● Make sure the **Search Root** information is correct. ● Make sure the logon credentials are correct.

Digital-sender event log messages

The following messages are those that you might see in the digital-sender event log.

To view the digital-sender event log, open the HP MFP DSS Configuration program and click the **MFP Configuration** tab. Select the digital sender in the MFP list, and then click **Configure MFP**. Click the **Log** tab to see the activity log for the selected device.

Event	Description	Action to take
Address Book Check	The address book database was checked for corruption.	None
Address Book Clear Event	An address book has been cleared using the Address Book Manager (ABM).	None
Address Book Export	An address book was exported using the ABM.	None
Address Book Import	An address book was imported using the ABM.	None
Authentication Failure	A user was unable to authenticate at the device.	• The user should attempt to log in again. • If the login still fails, verify the settings on the **Authentication** tab of the HP MFP DSS Configuration Utility. Use the **Test** button to test the settings. • Turn the digital-sending device off and then back on. • Restart the HP DSS service.
Communication Protocol Error Protocol Version Error	An error occurred while communicating with the digital sender.	• Turn the device off and then back on. • Verify that you have the latest version of the HP DSS service installed. See http://www.hp.com/support/dss If the problem persists, contact an HP authorized service representative.

Event	Description	Action to take
Database Access Error	A database corruption error has occurred.	• Check the Windows system log for disk errors. • Restart the HP DSS service. • Delete the database directory (the \DB directory within the HP DSS program directory) and restart the HP DSS service.
E-mail Protocol Error E-mail Communication Error E-mail Server Unavailable Error	Cannot connect to the SMTP server	An e-mail message could not be sent due to network or server problems. • Verify that the e-mail server is running. • Test the e-mail settings on the **E-mail** tab of the HP MFP DSS Configuration Utility. • Verify that the correct "From" address is being used in the e-mail. • Restart the HP DSS service. • Check the SMTP server logs for errors. If the problem persists, contact an HP authorized service provider.
Job Tracking Failure	A digital-send job could not be processed due to a Job Recovery Failure.	An error occurred while retrying a previously uncompleted job. • Check to see if there have been any disk errors. • Verify that the disk containing the HP DSS service is not full. • Restart the HP DSS service. If the problem persists, contact an HP authorized dealer.

Event	Description	Action to take
Startup Failure	A digital-sending subsystem did not start successfully.	• Restart the HP DSS service. • Verify that the HP DSS server has enough memory and disk space. • Check the Windows event log for disk errors. • Check the security settings of the temporary files folder. (The temporary files folder is shown on the HP MFP DSS Configuration Utility **Preferences** tab.) • Reinstall the HP DSS program. • Verify that you have the latest version of the HP DSS service installed. See http://www.hp.com/support/dss If the latest version is not installed, upgrade to the latest version. If the problem persists, contact an HP authorized service provider.

Windows event log error messages

The following table lists and explains the Windows event log messages generated by HP DSS running on the Windows server computer. If the problem persists, contact an authorized HP dealer.

The event log, available through Microsoft's Event Viewer, lets you monitor events in the Windows operating system that are related to digital sending. The event log service starts automatically when you start the HP DSS server computer. Follow these instructions to reach the event log.

1. From the HP DSS server, click **Start** and then point to **Settings**.

2. Click **Control Panel**, click **Administrative Tools**.

3. Click **Event Viewer**, then view the system log.

Message	Description and actions
DSS v. x.x - Started with Warnings **DSS v. x.x - Aborted** **DSS v. x.x - Internal Initialization Failed** **DSS v. x.x - TCP/IP Initialization Failed** **DSS v. x.x - IMSP Server Initialization Failed** **DSS v. x.x - Email Server Initialization Failed** **DSS v. x.x - Log Server Initialization Failed** **DSS v. x.x - Downloader Initialization Failed** **DSS v. x.x - Job Manager Initialization Failed** **DSS v. x.x - JetSend Initialization Failed** **DSS v. x.x - Timer Initialization Failed**	HP DSS was unable to start because of missing files or memory limitations. ● Restart HP DSS. ● Restart the computer on which HP DSS is installed. ● Uninstall and reinstall HP DSS. ● Add more memory to the computer.
DSS v. x.x - Error Server Initialization Failed **DSS v. x.x - Pipe Server Initialization Failed** **DSS v. x.x - Unknown Error X, Internal (X, X,X) Mode X, Job ID X, Gravity X**	HP DSS was unable to start because of missing files or memory limitations. ● Restart HP DSS. ● Restart the computer on which HP DSS is installed. ● Uninstall and reinstall HP DSS. ● Add more memory to the computer.
DSS v. x.x - Internal Error IMSP Server,0	Failure initializing address books. ● Restart HP DSS. ● Reset the address books.
DSS v. x.x - Internal Error IMSP Server,50 through IMSP Server,56	Failure initializing address books. ● Restart HP DSS.
DSS v. x.x - Internal Error IMSP Server,57	Internal error in managing address books. ● Restart HP DSS.
DSS v. x.x - Internal Error IMSP Server,58 through IMSP Server,59	Unrecoverable problem with address books. ● Contact an authorized HP dealer.
DSS v. x.x - Internal Error IMSP Server,60	Address book contents lost. ● Restart HP DSS. ● Re-import the addresses into the address books.
DSS v. x.x - Internal Error IMSP Server,100 through IMSP Server,206	Failure loading address books. ● Restart HP DSS.

Message	Description and actions
DSS v. x.x - Internal Error IMSP Server,300 through IMSP Server,304	The network link to the address book is missing. This indicates a possible problem with the network connection. ● Make sure all cabling is securely connected. ● Restart HP DSS.
DSS v. x.x - Internal Error IMSP Server,400 through IMSP Server,403	A problem exists in the address book hard drive (computer), or another internal problem exists. ● Restart HP DSS.
DSS v. x.x - Address Book Error	An internal problem gaining access to address books has occurred. ● Restart HP DSS.

Troubleshooting SMTP and LDAP servers

During the configuration of the HP DSS program, you must locate the SMTP server and LDAP server on your network and test them to make sure they are functional. On most standard networks, using the **Find Servers** and **Test** buttons in the HP MFP DSS Configuration Utility will successfully find and test the servers. (See To add SMTP servers and LDAP Configuration.) However, in some cases, the discovery process might fail to find the SMTP or LDAP server. If this is the case, use the instructions in the following sections to find and test the server.

Finding the LDAP server address

The LDAP "Find Servers" function searches the network by querying DNS servers and MFPs that have been configured for LDAP. Servers that can provide LDAP functionality include e-mail servers and directory servers such as the following:

● Microsoft Exchange 5.5 and Exchange 2000 servers

● Microsoft Active Directory servers

● Novell Directory Services servers.

If you have one of these types of servers on your network and know the address, try typing it into the **LDAP Server** text box on the **Authentication** tab. Then click the **Find Settings** button to retrieve the settings.

Verifying an LDAP address

Use this procedure to verify that the LDAP server address you are using is valid.

1. Open a Web browser.

2. Type `LDAP://[hostname or IP address of LDAP server]` into the browser address box, using the host name or IP address of the LDAP server you are using for digital sending.

3. Press Enter. If the **Find People** dialog box appears, the LDAP server address is valid. If the dialog box does not appear, contact your network administrator to verify that the server is functioning.

Troubleshooting the LDAP Find Settings process

When you click the **Find Settings** button on the **Authentication** tab, the program uses the entries in the **Accessing the LDAP Server** and **Searching the Database** sections of the tab to find the correct settings for your LDAP server. Setting or changing these entries can affect the success of the Find Settings process. Try the following settings:

1. Select **Anonymous** from the **LDAP Server Bind Method** drop-down list, and then delete any data from the **Search Root** text box so that it is blank.

2. Click **Find Settings**.

3. Click **Test** and type a user name and password to test the software's ability to retrieve an e-mail address. If the test succeeds, your LDAP configuration is complete. If the test fails, continue on to Step 4.

4. Select **Simple** or **Windows Negotiated (SPNEGO)** from the **LDAP Server Bind Method** drop-down list. Select **Use MFP user's credentials**.

NOTE   If you are troubleshooting LDAP settings on the **Addressing** tab, or in the Configure MFP Addressing settings, the options displayed are slightly different. If you use the Simple or Windows Negotiated bind method, you must specify a username and password.

5. Click **Find Settings**.

6. Click **Test** and type a user name and password to test the software's ability to retrieve an e-mail address. If the test succeeds, your LDAP configuration is complete. If the test fails, consult with your network administrator.

NOTE   The attributes in the **Find MFP user in database** section of the **Authentication** tab match what the user types in at the device control panel to a unique user record in the LDAP database. You can select **Exchange 5.5 Defaults** or **Active Directory Defaults** from the **MFP user information retrieval** drop-down list to use the default settings for these server types. You must have some knowledge of the LDAP database structure in order to use the **Custom** option. If the **Custom** option is selected, you can either type in or select an entry in the **Using the LDAP attribute of...** field. This must correspond to what is selected in the **match the MFP user login ID...** field below it.

Finding an SMTP server address

The SMTP "Find Servers" function queries the DNS server for the "Mail Exchanger (MX)" record. If the Find Servers process fails, try the following:

1. Verify that the HP DSS server has obtained valid DNS settings by typing `ipconfig / all` at a command prompt.

2. If the ipconfig command returns valid DNS settings, ping the DNS server address to verify communication with the server. For example, type `ping 10.0.0.2` at a command prompt, where 10.0.0.2 is the IP address of the DNS server.

If these two tests succeed, you should have a valid SMTP server. Use the **Add** button on the **E-mail** tab to specify the host name or IP address of the SMTP server, then use the **Test** button to test the server.

If the Test process fails, verify that you have specified the correct SMTP server address. If you have specified the correct address, use a ping command to verify communication with the server. For example, type `ping 10.0.0.2` at a command prompt, where 10.0.0.2 is the IP address of the SMTP server. If the ping command fails, contact your network or mail administrator to verify network and SMTP server functionality.

Verifying an SMTP address

Use this procedure to verify that the SMTP server address you are using is valid.

1. Click **Start** and then **Run** and then type `CMD` into the **Open** text box to open a command prompt.

2. Type `Telnet [hostname or IP address of SMTP server] 25`, using the hostname or IP address of the SMTP server you are using for digital sending.

3. Press Enter. You should see something similar to the following:

   `220 samplemail.hp.com ESMTP Server <Microsoft Exchange Internet Mail Service 5.5> ready.` If you see this, the SMTP server address is valid. If you do not see this message, contact your network or mail administrator to verify that the server is functioning.

LED indications

The LEDs on the digital-sender formatter board and on the HP Jetdirect network port can help troubleshoot problems.
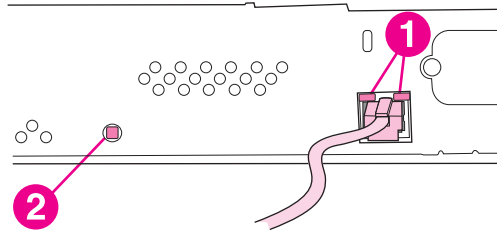
1 Network port LEDs
2 Formatter LED

Use the green LEDs on the network interface card to confirm that the interface card is correctly connected to the network and that the network connection is active. Either the 10 Mbps or 100 Mbps LED should be on.

The formatter LED should blink at a steady rate of one blink per second. If it is not blinking, this indicates a serious error. Turn the device off and then back on again, and look for error messages on the control-panel display. If the problem persists, contact an HP-authorized service or support provider. (See the HP support flyer or go to http://www.hp.com/support/9200c.)

A Service and support

Hewlett-Packard limited warranty statement for hardware

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP 9200C Digital Sender	1 year, Onsite service

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products might be either new or equivalent in performance to new.

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

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

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

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

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province. HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive might vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

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

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

Hewlett-Packard limited warranty statement for software

HP PRODUCT	DURATION OF WARRANTY
HP MFP DIGITAL SENDING SOFTWARE v. 4.0	90 days

1. HP warrants to you that the HP SOFTWARE PRODUCT will not fail to execute its programming instructions for 90 days after the date of purchase due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace SOFTWARE PRODUCT media, which does not execute its programming instructions due to such defects.

2. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to replace the SOFTWARE PRODUCT to a condition as warranted, HP may request that you uninstall the SOFTWARE PRODUCT and return it to HP for a refund.

3. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY SET FORTH ABOVE. Some states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from state to state, or province to province.

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

Note: The limited warranty for this product and accompanying software is located in the product documentation that you received with this product. Please review it at this time.

ATTENTION: USE OF THE SOFTWARE IS SUBJECT TO THE HP SOFTWARE LICENSE TERMS SET FORTH BELOW. USING THE SOFTWARE INDICATES YOUR ACCEPTANCE OF THESE LICENSE TERMS. IF YOU DO NOT ACCEPT THESE LICENSE TERMS, YOU MUST RETURN THE SOFTWARE FOR A FULL REFUND. IF THE SOFTWARE IS SUPPLIED WITH ANOTHER PRODUCT, YOU MAY RETURN THE ENTIRE UNUSED PRODUCT FOR A FULL REFUND.

Availability of support and service

Around the world, HP provides a variety of service and support options for purchase. Availability of these programs will vary depending upon your location.

HP maintenance agreements

HP has several types of maintenance agreements that meet a wide range of support needs. Maintenance agreements are not part of the standard warranty. Support services vary by location. Contact HP Customer Care to determine the services available to you and for more information about maintenance agreements. In general, the digital sender will have the following maintenance agreement:

Next-Day Onsite Service

This agreement provides support by the next working day following a service request. Extended coverage hours and extended travel beyond HP's designated service zones are available on most on-site agreements (for additional charges).

B Specifications

Digital Sender specifications

Physical specifications

Height	Depth	Width	Weight
340.26 mm (13.40 inches)	571.82 mm (22.51 inches)	452.62 mm (17.82 inches)	22.7 kg (50 lbs)

Electrical specifications

Power requirements	100-240V (±10%) 50/60 Hz (±2 Hz)
Minimum recommended circuit capacity	1.0 Amp

WARNING!   Power requirements are based on the country/region where the device is sold. Do not convert operating voltages. This will damage the digital sender and void the product warranty.

Power consumption (average, in watts)[1]

Product Model	Scanning (47 PPM)[2]	Ready	Sleep	Off
HP 9200C Digital Sender	95 W	36 W	13 W	0 W

[1]Values current as of June 22, 2004. Values subject to change. See http://www.hp.com/support/9200C for current information.
[2]Power reported is highest value measured for color and monochrome scanning using all standard voltages.
[3]Default time from Ready Mode to Sleep = 60 minutes.
[5]Heat dissipation in Ready Mode = 123 BTU/Hour.

Environmental specifications

	Recommended[1]	Operating[1]	Storage[1]
Temperature	20° to 27°C (68° to 81°F)	0° to 40°C (32° to 104°F)	-40° to 60°C (-40° to 140°F)
Relative humidity	20 to 70 percent	15 to 80 percent	15 to 90 percent

[1]Values are subject to change. See http://www.hp.com/support/9200C for current information.

Acoustic emissions (HP 9200C Digital Sender)[1]

Sound Power Level	Declared per ISO 9296[1]
Scanning (47 PPM)	L_{WAd} = 6.6 Bels (A) [66 dB (A)]
Ready	L_{WAd} = 5.4 Bels (A) [54 dB (A)]
Sound Pressure Level - Bystander Position	**Declared per ISO 9296[1]**
Scanning (47 PPM)	L_{pAm} = 51 dB(A)
Ready	L_{pAm} = 39 dB(A)

[1]Values current as of April 26, 2004. Values are subject to change. See http://www.hp.com/support/9200C for current information.

[2]Configuration tested: Scanning simplex monochrome using ADF at 47 ppm and letter paper.

C Regulatory information

Introduction

This section contains the following regulatory information:

- FCC regulations
- Environmental Product Stewardship program
- Declaration of conformity
- Canadian DOC statement
- EMI statement (Korea)

FCC regulations

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

- Reorient or relocate the receiving antenna.
- Increase distance between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/television technician.

NOTE Any changes or modifications to the device that are not expressly approved by HP could void the user's authority to operate this equipment.

Environmental Product Stewardship program

Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

Power consumption

Power usage drops significantly while in Sleep mode, which saves natural resources and saves money without affecting the high performance of this product.

Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

Materials and recycling information

Material restrictions

This HP product contains mercury in the fluorescent lamp of the control-panel liquid crystal display that can require special handling at end-of-life.

This HP product contains a lithium battery on the formatter board that can require special handling at end-of-life.

廢電池請回收

For recycling information, you can contact http://www.hp.com/recycle or contact your local authorities or the Electronics Industry Alliance: http://www.eiae.org.

For more information

To obtain information about environmental topics, including:

● the product environmental profile sheet for this and many related HP products

● HP's commitment to the environment

● HP's environmental management system

● HP's end-of-life product return and recycling program

visit http://www.hp.com/go/environment, http://www.hp.com/hpinfo/community/environment/productinfo/safety, or http://www.hp.com/recycle.

Declaration of conformity

Declaration of Conformity
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Hewlett-Packard Company
Manufacturer's Address:	11311 Chinden Boulevard
	Boise, Idaho 83714-1021, USA

declares, that the product

Product Name:	HP Digital Sender 9200C
Regulatory Model Number[3]:	BOISB-0401-00
Product Options:	ALL

conforms to the following Product Specifications:

Safety:	IEC 60950-1:2001 / EN60950-1: 2001
	IEC 60825-1:1993 + A1 + A2 / EN 60825-1:1994 + A2 (Class 1 Laser/LED Product)
	GB4943-2001
EMC:	CISPR 22:1997 / EN 55022:1998 Class B[1]
	EN 61000-3-2:2000
	EN 61000-3-3:1995/ A1
	EN 55024:1998
	FCC Title 47 CFR, Part 15 Class B[2], ICES-003, Issue 4
	GB9254-1998, GB17625.1-1998

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly.

1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems. Compliance testing of product to standard with exception of Clause 9.5, which is not yet in effect.

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

3) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

Boise, Idaho , USA

June 16, 2004

For regulatory topics only:

Australia Contact:	Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street Blackburn, Victoria 3130, Australia
European Contact:	Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards Europe, Herrenberger Strasse 140 , D-71034, Böblingen (FAX: +49-7031-14-3143)
USA Contact:	Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160 Boise, Idaho 83707-0015, (Phone: 208-396-6000)

Country-/region-specific safety statements

Canadian DOC statement

Complies with Canadian EMC Class B requirements.

«Conforme à la classe B des normes canadiennes de compatibilité électromagnétique (CEM).»

EMI statement (Korea)

사용자 안내문 (B 급 기기)

이 기기는 비업무용으로 전자파장해검정을 받은 기기로서, 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

VCCI statement (Japan)

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

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Q5916-90930

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http://www.luxmanual.com

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