



# Troubleshooting

To better help our customers - this HP Laserjet 2400 series troubleshooting page is simply a guide / additional information for your convenience, as you search for assistance in repairing your machine. Although this information is provided for your convenience it is recommended, for the most part, that a technician inspects your office equipment.

It is recommended to consult with a professional when ordering your printer part(s).

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# Troubleshooting tree

Figure 7-1. Basic troubleshooting is a graphical representation of the troubleshooting process.

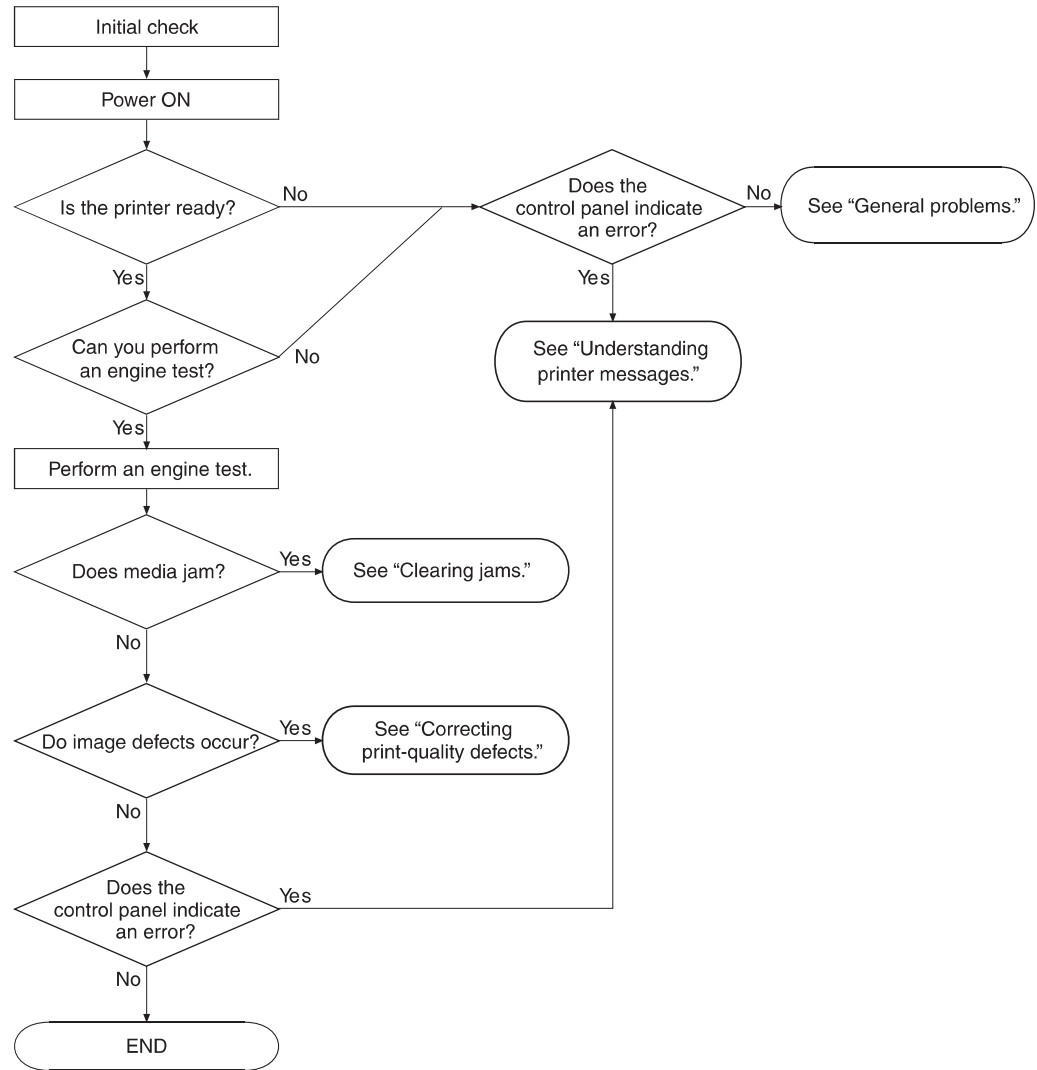


Figure 7-1. Basic troubleshooting

# Troubleshooting flowchart

If the printer is not responding correctly, use the flowchart to determine the problem. If the printer does not pass a step, follow the corresponding troubleshooting suggestions.

## NOTE

**Macintosh users:** For more troubleshooting information, see [Troubleshooting common Macintosh problems](#).

## 1. Does the control-panel display show READY?

YES →	Go to step 2.
NO ↓	
The display is blank, and the printer fan is off.	<ul style="list-style-type: none"><li>• Turn the printer off, and then turn the printer on again.</li><li>• Check the power cord connections and the power switch.</li><li>• Plug the printer into a different outlet.</li><li>• Check that the power supplied to the printer is steady, and meets printer specifications. (See <a href="#">Electrical specifications</a>.)</li></ul>
The display is blank, but the printer fan is on.	<ul style="list-style-type: none"><li>• Press a printer control panel button to see if the printer responds.</li><li>• Turn the printer off, and then turn the printer on again.</li></ul>
The display is in the wrong language.	<ul style="list-style-type: none"><li>• Turn the printer off, and then turn the printer on again. When XXX MB appears on the control-panel display, press and hold down ✓ (SELECT button) until all three lights stay on. This could take up to 10 seconds. Then, release ✓ (SELECT button). Press ▼ (DOWN button) to scroll through the available languages. Press ✓ (SELECT button) to save the appropriate language as the new default.</li></ul>
The display shows garbled or unfamiliar characters.	<ul style="list-style-type: none"><li>• Make sure that the appropriate language is selected at the printer control panel.</li><li>• Turn the printer off, and then turn the printer on again.</li></ul>
A message other than READY appears on the printer control-panel display.	<ul style="list-style-type: none"><li>• Go to <a href="#">Table 7-8. Interpreting control-panel messages</a>.</li></ul>

## 2. Can you print a configuration page?

(See [Configuration page.](#))

YES →	Go to step 3.
NO ↓	
<b>A configuration page does not print.</b>	<ul style="list-style-type: none"><li>• Verify that all trays are correctly loaded, adjusted, and installed in the printer.</li><li>• By using the computer, check the print queue or print spooler to see if the printer has been paused. If problems exist with the current print job, or if the printer is paused, a configuration page will not print. (Press <b>Stop</b> and try step 2 in the troubleshooting flowchart again.)</li></ul>
<b>A blank page prints.</b>	<ul style="list-style-type: none"><li>• Verify that the sealing tape was removed from print cartridge. (See the getting started guide or the instructions that came with the print cartridge.)</li><li>• The print cartridge might be empty. Install a new print cartridge.</li></ul>
<b>A message other than READY or PRINTING CONFIGURATION appears on the printer control-panel display.</b>	<ul style="list-style-type: none"><li>• Go to <a href="#">Table 7-8. Interpreting control-panel messages.</a></li></ul>

### 3. Can you print from a program?

YES →	Go to step 4.
NO ↓	
<p><b>The job will not print.</b></p>	<ul style="list-style-type: none"> <li>• If the job will not print, and a message appears on the control-panel display, see <a href="#">Table 7-8. Interpreting control-panel messages.</a></li> <li>• By using the computer, check to see if the printer has been paused. Press <b>STOP</b> to continue.</li> <li>• If the printer is on a network, check that you are printing to the correct printer. To verify that no network problem exists, connect the computer directly to the printer with a parallel or USB cable, change the port to LPT1, and try to print.</li> <li>• Check the interface cable connections. Disconnect and reconnect the cable at the computer and the printer.</li> <li>• Test the cable by trying it on another computer.</li> <li>• If you are using a parallel connection, make sure that the cable is IEEE-1284 compliant.</li> <li>• If the printer is on a network, print a configuration page. (See <a href="#">Configuration page.</a>) If an HP Jetdirect print server is installed, a Jetdirect page also prints. Check the Jetdirect configuration page to verify that the network protocol status and settings are correct for the printer.</li> <li>• To verify that no computer problem exists, print from another computer (if possible).</li> <li>• Make sure that the print job is being sent to the correct port (LPT1 or network printer port, for example).</li> <li>• Make sure that you are using the correct printer driver. (See the user guide.)</li> <li>• Reinstall the printer driver. (See the getting started guide.)</li> <li>• Check that the computer port is configured and working correctly. (Try connecting another printer to that port and printing.)</li> <li>• If you are using the PS driver to print, set <b>PRINT PS ERRORS=ON</b> on the <b>Printing</b> submenu (on the <b>Configure Device</b> menu), and then print the job again. If an error page prints, see the instructions in the next column.</li> <li>• On the <b>System Setup</b> submenu (on the <b>Configure Device</b> menu) at the printer control panel, make sure that <b>PERSONALITY=AUTO</b>.</li> <li>• You might be missing a printer message that could help you solve the problem. On the <b>System Setup</b> submenu (on the <b>Configure Device</b> menu) at the printer control panel, temporarily turn the Clearable Warnings and Auto Continue settings off. Then, print the job again.</li> </ul>
<p><b>A PS error page or list of commands prints.</b></p>	<ul style="list-style-type: none"> <li>• The printer might have received a nonstandard PS code. On the <b>System Setup</b> submenu (on the <b>Configure Device</b> menu) at the printer control panel, set <b>PERSONALITY=PS</b> for this print job only. After the job has printed, return the setting to AUTO.</li> <li>• Make sure that the print job is a PS job, and that you are using the PS driver.</li> <li>• The printer might have received PS code although it is set to PCL. On the <b>System Setup</b> submenu (on the <b>Configure Device</b> menu), set <b>PERSONALITY=AUTO</b>.</li> </ul>

## 4. Does the job print as expected?

YES →	Go to step 5.
NO ↓	
<b>Print is garbled, or only a portion of the page prints.</b>	<ul style="list-style-type: none"> <li>• Make sure that you are using the correct printer driver. (See the user guide.)</li> <li>• The data file that was sent to the printer might be corrupt. To test, try printing it on another printer (if possible), or try a different file.</li> <li>• Check the interface cable connections. Test the cable by trying it on another computer (if possible).</li> <li>• Replace the interface cable with a high-quality cable (see <a href="#">Parts and diagrams</a>).</li> <li>• Simplify the print job, print at a lower resolution, or install more printer memory.</li> <li>• You might be missing a printer message that could help you solve the problem. On the <b>System Setup</b> submenu (on the <b>Configure Device</b> menu) at the printer control panel, temporarily turn the <b>Clearable Warnings and Auto Continue</b> settings off. Then print the job again.</li> </ul>
<b>Printing stops in the middle of the job.</b>	<ul style="list-style-type: none"> <li>• <b>STOP</b> might have been pressed.</li> <li>• Check that the power supplied to the printer is steady, and that it meets printer specifications. (See <a href="#">Electrical specifications</a>.)</li> </ul>
<b>Print speed is slower than expected.</b>	<ul style="list-style-type: none"> <li>• Simplify the print job.</li> <li>• Add more memory to the printer.</li> <li>• Turn banner pages off. (See the network administrator.)</li> <li>• Note that slower speeds should be expected if you are printing narrow paper, printing from tray 1, using the HIGH 2 fuser mode, or have set Small Paper Speed to SLOW.</li> </ul>
<b>A printer control-panel setting is not taking effect.</b>	<ul style="list-style-type: none"> <li>• Check settings in the printer driver or program. (The printer driver and program settings override printer control-panel settings.)</li> </ul>
<b>The print job is not formatted correctly.</b>	<ul style="list-style-type: none"> <li>• Check that you are using the correct printer driver. (See the user guide.)</li> <li>• Check the program settings. (See the program online Help.)</li> <li>• Try a different font.</li> <li>• Downloaded resources might have been lost. You might need to download them again.</li> </ul>
<b>Media does not feed correctly or is damaged.</b>	<ul style="list-style-type: none"> <li>• Make sure that the media is loaded correctly and that the guides are not too tight or too loose against the stack of media.</li> <li>• If you are having problems printing custom-size paper, see the user guide.</li> <li>• If pages are wrinkled or curled, or if the image is skewed on the page, see <a href="#">Correcting print-quality problems</a>.</li> </ul>
<b>Print-quality problems occur.</b>	<ul style="list-style-type: none"> <li>• Adjust the print resolution. (See the user guide.)</li> <li>• Check that Resolution Enhancement Technology (REt) is on. (See the user guide.)</li> <li>• Go to <a href="#">Correcting print-quality problems</a>.</li> </ul>

## 5. Does the printer select the correct trays?

YES →	For other problems, check the Contents, the Index, or the printer-driver online Help.
NO↓	
<b>The printer pulls media from the wrong tray.</b>	<ul style="list-style-type: none"> <li>• Make sure that you have selected the correct tray. (See the user guide.)</li> <li>• Make sure that trays are correctly configured for size and type. (See the user guide.) Print a configuration page to see current tray settings. (See <a href="#">Configuration page</a>.)</li> <li>• Make sure that the tray selection (Source) or Type in the printer driver or program is set correctly. (The printer driver and program settings override the printer control-panel settings.)</li> <li>• By default, media loaded in tray 1 will be printed first. If you do not want to print from tray 1, remove any media loaded in the tray or change the USE REQUESTED TRAY setting. (See <a href="#">Customizing tray 1 operation</a>.) Change <b>TRAY 1 SIZE</b> and <b>TRAY 1 TYPE</b> to a setting other than <b>ANY</b>.</li> <li>• If you want to print from tray 1, but cannot select the tray in a program, see <a href="#">Customizing tray 1 operation</a>.</li> </ul>
<b>An optional tray is not working correctly.</b>	<ul style="list-style-type: none"> <li>• Print a configuration page to verify that the tray is installed correctly and is functional. (See <a href="#">Configuration page</a>.)</li> <li>• Configure the printer driver to recognize the installed tray. (See the printer driver online Help.)</li> <li>• Turn the printer off, and then turn the printer on again.</li> <li>• Verify that you are using the correct optional tray for the printer.</li> </ul>
<b>A message other than READY appears on the printer control-panel display.</b>	<ul style="list-style-type: none"> <li>• Go to <a href="#">Table 7-8. Interpreting control-panel messages</a>.</li> </ul>

## Troubleshooting tools

Press the **SELECT** (✓) button to open the menus. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll through the menus that appear. The high-level menus appear in the following order:

<ul style="list-style-type: none"><li>• RETRIEVE JOB</li></ul>	<ul style="list-style-type: none"><li>• INFORMATION</li></ul>
<ul style="list-style-type: none"><li>• PAPER HANDLING</li></ul>	<ul style="list-style-type: none"><li>• CONFIGURE DEVICE</li></ul>
<ul style="list-style-type: none"><li>• DIAGNOSTICS</li></ul>	<ul style="list-style-type: none"><li>• SERVICE</li></ul>

### Information pages

1. Press the **SELECT** (✓) button to open the **MENUS**.
2. Press the **DOWN ARROW** ▼ button to scroll to **INFORMATION**.
3. Press the **SELECT** (✓) button to select **INFORMATION**.
4. Press the **DOWN ARROW** (▼) button to scroll to a listed information page. The following pages are available:
  - Menu map
  - Configuration
  - Supplies status
  - File directory
  - Usage page
  - PCL and PS font list

5. Press the **SELECT** (✓) button to select and print the selected information page.

The informational pages for the printer are also available in the embedded Web server. Not all information pages are discussed in detail in this manual. For more information, see the electronic user guide on the device installation CD. The following pages are available:

- **Menu map:** A menu map shows how individual items are configured within the high-level (user-set values) menus. The last page of the menu map series contains instructions about how to use the control-panel buttons. **Print a menu map before changing printer settings or before replacing the formatter assembly.**
- **Configuration page:** The configuration page lists printer configuration information. For example, the printer serial number and tray size settings appear on the configuration page. **Print a configuration page before servicing the printer to help restore values after servicing the printer.**
- **Supplies status:** This page shows the levels of the printer supplies, a calculation of the number of pages that can be printed before the supplies are replaced, and cartridge-usage information.
- **File directory:** This page provides information about files on the RAM disk or on the installed EIO disk drives and flash DIMMs if those memory accessories are installed.
- **Usage page:** The usage page is only available if an optional hard disk is installed. It provides useful accounting information (for example, the number of pages of various paper sizes that have been used and data that can be used to calculate toner usage).
- **PS or PCL font list:** This page lists the fonts that are installed in the printer memory. This page also lists fonts on an optional hard-disk accessory or flash DIMM if those memory accessories are installed.

## Menu map

Use the menu map to help navigate through the printer submenus and select configuration settings. Printing a menu map is very helpful when you are changing numerous printer settings.

1. Press the **SELECT** (✓) button to open the menus.
2. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll to **INFORMATION**, and then press the **SELECT** (✓) button.
3. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll to **MENU MAP**, and then press the **SELECT** (✓) button.



**Figure 7-2.** Sample menu map page

## Configuration page

Use the configuration page to view current printer settings, to help troubleshoot printer problems, or to verify the installation of optional accessories, such as memory (DIMMs), trays, and printer languages. The content of the configuration page varies, depending on the options that are currently installed in the printer. To decode the service identification information on the configuration page, see [Converting the Service ID to an actual date](#).

### NOTE

If an HP Jetdirect print server is installed, an HP Jetdirect configuration page also prints.

1. Press the **SELECT** (✓) button to open the menus.
2. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll to **INFORMATION**, and then press **SELECT** (✓).
3. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll to **PRINT CONFIGURATION**, and then press the **SELECT** (✓) button.

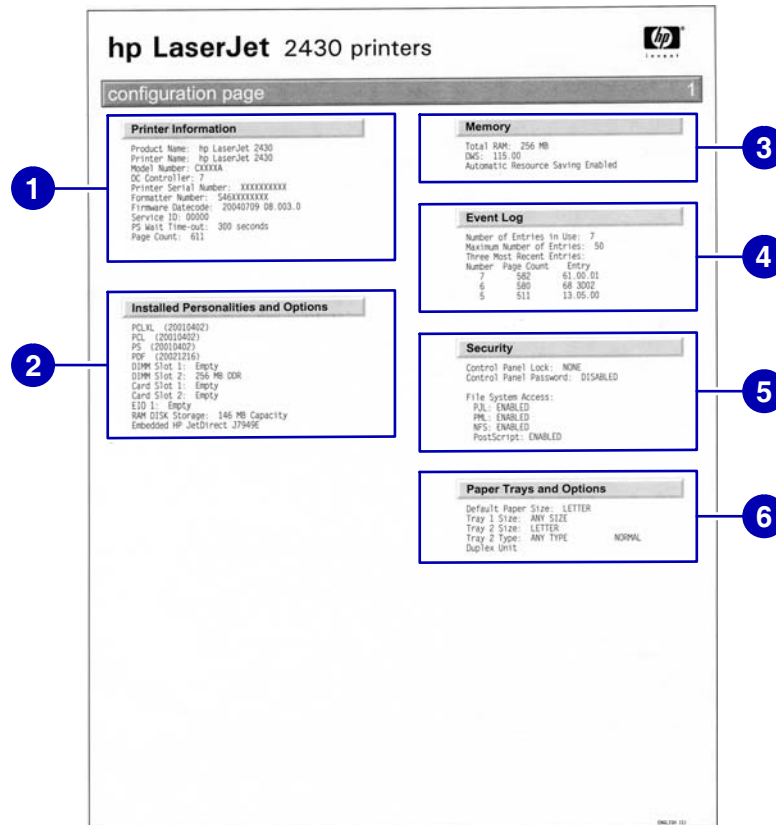


Figure 7-3.

### Sample configuration page

- 1 **Printer Information** Lists the serial number, page counts, printer number (dc controller revision), service ID (see [Service ID](#)), and other printer information.
- 2 **Personalities and options** Lists installed personalities and options (such as PS and PCL languages) and installed optional DIMM(s) or EIO accessories.
- 3 **Memory** Lists the printer memory and I/O buffering and resource saving information.
- 4 **Event log** Lists the three most recent event-log entries (numeric codes for printer events).
- 5 **Security** Lists the status of the control-panel lock, control-panel password, and any disk drives.
- 6 **Paper trays and options** Lists the size and type settings for all trays, and lists any optional paper-handling accessories that are installed.

## Supplies status page

Use the supplies status page to obtain information about the print cartridge that is installed in the printer, the amount of life left in the print cartridge, and the number of pages and jobs that have been processed. The page also lets you know when you should perform the next preventive maintenance.

1. Press the **SELECT** (✓) button to open the menus.
2. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll to **INFORMATION**, and then press the **SELECT** (✓) button.
3. Use the **UP ARROW** (▲) button or the **DOWN ARROW** (▼) button to scroll to **PRINT SUPPLIES STATUS PAGE**, and then press the **SELECT** (✓) button.

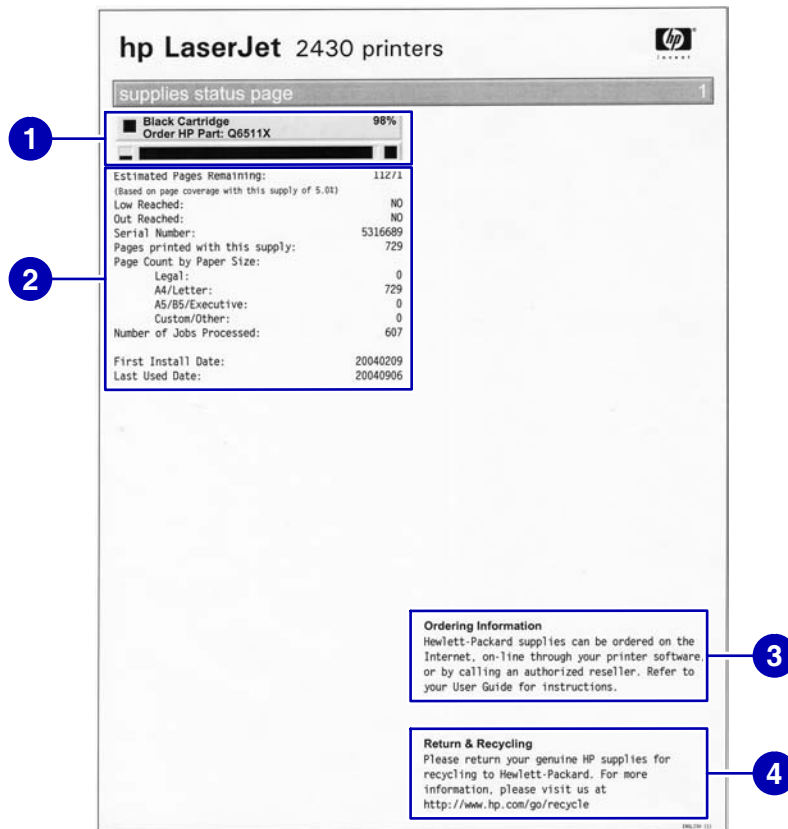


Figure 7-4.

### Supplies status page

- 1 **Cartridge information** Provides information about the amount of toner that is available in the print cartridge, and shows the print-cartridge part number and estimated number of pages that can be printed from the amount of toner in the cartridge
- 2 **Printing statistics** Lists statistics about the total number of pages and jobs that have been processed using this print cartridge, the first and last use date for the cartridge, and the print-cartridge serial number
- 3 **Supplies Web site** Lists the Web site for ordering supplies over the Internet
- 4 **Recycle Web site** Lists the Web site for information about returning used HP print cartridges

## Embedded Web server

When the printer is directly connected to a computer, the embedded Web server is supported for Windows 95 and later. In order to use the embedded Web server with a direct connection, you must select the Custom installation option when you install the printer driver. Select the option to load Printer Status and Alerts. The proxy server is installed as part of the Printer Status and Alerts software.

When the printer is connected to the network (by using a HP Jetdirect print server EIO card), the embedded Web server is automatically available.

Use the embedded Web server to view printer and network status and to manage printing functions from your computer instead of from the printer control panel. The following are examples of what you can do through the embedded Web server:

- View printer status information
- Specify the type of media that is loaded in each tray
- Determine the remaining life for all supplies and order new supplies
- View and change tray configurations
- View and change the printer control panel menu configurations
- View and print internal pages
- Receive notification of printer and supplies events
- View and change the network configuration

To use the embedded Web server, you must have Microsoft Internet Explorer 4 or later, or Netscape Navigator 4 or later. The embedded Web server works when the printer is connected to an IP-based network. The embedded Web server does not support IPX-based printer connections. You do not have to have Internet access to open and use the embedded Web server.

## Gaining access to the embedded Web server

In a supported Web browser on your computer, type the IP address for the printer. (To find the IP address, print a configuration page.)

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### NOTE

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After you navigate to the URL, you can bookmark it so that you can return to it quickly in the future.

The embedded Web server has three tabs that contain settings for and information about the printer: the **Information** tab, the **Settings** tab, and the **Network** tab. Click the tab that you want to view. See the following sections for more information about each tab.

### Information tab

The **Information** tab contains the following pages.

- **Device Status.** Shows the printer status and the life that remains in HP supplies (0% indicates that a supply is empty). This page also shows the type and size of print media that is set for each tray. To change the default settings, click **Change Settings**.
- **Configuration page.** Shows the information that is contained on the printer configuration page.

- **Supplies Status.** Shows the life that remains in HP supplies (0% represents that a supply is empty). This page also provides supplies part numbers. To order new supplies, click **Order Supplies** in the **Other Links** area on the left side of the window. To visit this or any Web site, you must have Internet access.
- **Event log.** Shows a list of all printer events and errors.
- **Usage page.** Shows a summary of the number of pages the printer has printed, grouped by size and type (this page is only available if an optional hard disk is installed).
- **Device Information.** Shows the printer network name, address, and model information. To change these entries, click **Device Information** on the **Settings** tab.

## Settings tab

Use the **Settings** tab to configure the printer from your computer. The **Settings** tab can be password protected. If the printer is on a network, always consult with the network administrator before changing settings on this tab.

The **Settings** tab contains the following pages.

- **Configure Device.** Use this page to configure all of the printer settings. This page contains the traditional printer menus: **Information**, **Paper Handling**, **Configure Device**, and **Diagnostics**.
- **Alerts.** (On networks only.) Use this page to establish e-mail alerts for various printer and supplies events.
- **E-mail.** (On networks only.) Use this page in conjunction with the Alerts page to set up incoming and outgoing e-mail, as well as to establish e-mail alerts.
- **Security.** Use this page to set a password that must be typed to gain access to the **Settings** and **Networking** tabs. Also use it to enable and disable certain features of the embedded Web server.
- **Other Links.** Use this page to add or customize a link to another Web site. The link you establish appears in the **Other Links** area on all embedded Web server pages. The following permanent links always appear in the **Other Links** area: HP Instant Support, Order Supplies, and Product Support.
- **Device Information.** Use this page to name the printer and assign an asset number to it. Use the name and e-mail address for the primary contact who will receive information about the printer.
- **Language.** Use this page to specify the language in which the embedded Web server information appears.

## Networking tab

The network administrator uses this tab to control network-related settings for the printer when it is connected to an IP-based network. This tab does not appear if the printer is directly connected to a computer, or if the printer is connected to a network with anything other than an HP Jetdirect print server.

## Other links

This section of the embedded Web server contains links that connect you to the Internet. You must have Internet access in order to use any of these links. If you use a dial-up connection and did not connect when you first opened the embedded Web server, you must connect before you can visit these Web sites. Connecting to the Internet might require that you close your Web browser and reopen it.

- **HP Instant Support** connects to the HP Web site to help you find solutions. This service analyzes your printer error log and configuration information to provide diagnostic and support information that is specific to your printer.
- **Order Supplies** connects to the HP Web site so that you can order genuine HP supplies, such as print cartridges and paper.
- **Product Support** connects to the support site for the HP LaserJet 2400 printer, where you can search for help.

## Printer Status and Alerts software

Printer Status and Alerts is supported only for Windows 95 and later versions.

The Printer Status and Alerts software is available to users of both networked and directly connected printers. To use Printer Status and Alerts software with a directly connected computer, you must select the Custom installation option when you install the printer driver, and then select the option to install Printer Status and Alerts. For network connections, Printer Status and Alerts is installed automatically with the Typical software installation option.

Use this software to view the embedded Web server information for a particular printer. Printer Status and Alerts also generates messages on the computer that explain the status of the printer and print jobs. Depending on how the printer is connected, you can receive different messages.

- **Networked printers.** You can receive regular job status messages that appear every time a print job is sent to the printer or every time the print job is complete. You can also receive alert messages. These messages appear when you are printing to a particular printer if that printer experiences a problem. In some cases, the printer can continue to print (such as when a tray that is not being used is open, or a print cartridge is low). In other cases, a problem might prevent the printer from printing (such as when paper is out, or a print cartridge is empty).
- **Directly connected printers.** You can receive alert messages that appear when the printer experiences a problem but can continue printing or a problem that prevents it from printing. You can also receive messages that indicate that the print cartridge is low.

You can set alert options for a single printer that supports Printer Status and Alerts, or you can set alert options for all printers that support Printer Status and Alerts. For networked printers, these alerts only appear for your jobs.

Even if you set alert options for all printers, not all of the selected options will apply to all printers. For example, when you select the option to notify you when the print cartridges are low, directly connected printers that support Printer Status and Alerts generate a message when the print cartridges are low. However, none of the networked printers generate this message unless the alert affects a user-specific job.

## To select status messages

1. Open Printer Status and Alerts in one of these ways:
  - Double-click the **Printer Status and Alerts** tray icon, which is near the clock in the Tray Manager.
  - On the **Start** menu, click **Programs**, click **Printer Status and Alerts**, and then click **Printer Status and Alerts**.
2. Click the **Options** icon on the left side of the window.
3. In the **For** field, select the printer driver for this printer, or select **All Printers**.
4. Clear the options for the messages that you do not want to appear, and select the options for the messages that you do want to appear.
5. In **Status check rate**, select how frequently you want the software to update the printer-status information that the software uses to generate the messages. The status check rate might not be available if the network administrator has restricted the rights to this function.

## To view status messages and information

On the left side of the window, select the printer for which you want to see information. The information that is provided includes status messages, supplies status, and printer capabilities. You can also click the job history (clock) icon at the top of the window to view a list of previous jobs that were sent to the printer from the computer.